TRAFFIC IMPACT STUDY

For

Princeton Nurseries (Plainsboro Tract)
Township of Plainsboro
Middlesex County, New Jersey

Prepared For:

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EXECUTIVE SUMMARY

Langan Engineering and Environmental Services has been retained by WRV Nurseries Plainsboro Owner, LLC to prepare a traffic impact study for the proposed development of the Princeton Nurseries lands located in Plainsboro, New Jersey. The entire Princeton Nurseries site includes lands located in the Townships of Plainsboro and South Brunswick, Middlesex County, New Jersey and is bisected by the town line. This traffic study is to support the site plan application for development of the Princeton Nurseries project located in Plainsboro Township.

Princeton Nurseries in Plainsboro, was approved for a General Development Plan (GDP) supported by a Traffic Impact Study, prepared by Langan and dated May 12, 2020. The GDP consists of a mixed-use development with approximately 310,000 square feet (sf) of retail space, 220,000 sf of office space, a 125 room hotel and 950 residential units (31 single family homes, 200 senior adult attached homes and 719 multi-family homes).

At this time, WRV Nurseries Plainsboro Owner, LLC proposes to develop the site with approximately 155,485 sf of commercial/retail space (excluding a 14,600 sf clubhouse), 80,080 sf of office space, 125 room hotel, and 853 residential units (20 single family homes, 103 senior adult attached homes, and 730 multi-family homes).

The overall Princeton Nurseries development is bounded by U.S. Route 1 on the east, College Road West / Seminary Drive on the south, Mapleton Road on the west, and Ridge Road to the north. The South Brunswick/ Plainsboro Township town line bisects the property from east to west. Access to the Plainsboro Princeton Nurseries development will be via two access streets located along College Road West / Seminary Drive. The first access street, referred to as Nursery Road, is located at a signalized intersection which has already been constructed that intersects College Road West to create the northern leg of a four-leg signalized intersection with Seminary Drive / College Road West. The second access street is a proposed to intersect Seminary Drive to the west of Nursery Road opposite Evergreen Drive. It should be noted that with future completion of Princeton Nurseries in South Brunswick, additional access to Princeton Nurseries will be provided at the existing intersection of Independence Way with U.S. Route 1, where such access and off-site roadway improvements were previously constructed to accommodate the prior Princeton Nurseries in accordance with permits that were issued by NJDOT in 2002. Development of the Nurseries site has been long planned with significant roadway infrastructure previously constructed including College Road and the College Road interchange with U.S. Route 1.

Langan has estimated the number of trips the proposed Plainsboro development will generate based on data compiled for Land Use Code 252 (Senior Adult Housing Attached), Land Use Code 210 (Single-Family Detached Housing), Land Use Code 220 (Multifamily Housing (Low-Rise)), Land Use Code 310 (Hotel), Land Use Code 710 (General Office Building), and Land Use Code 820 (Shopping Center (>150k)) by the Institute of Transportation Engineers (ITE) as contained in the publication Trip Generation, 11th edition. Accordingly, Langan estimated that the Plainsboro proposed development will generate approximately 656 new trips (339 enter, 317 exit) during the weekday morning peak hour, 799 new trips (383 enter, 416 exit) during the weekday evening peak hour, and 1,020 new trips (533 enter, 487 exit) during the Saturday midday peak hour.

Within the Plainsboro portion of the Princeton Nurseries site, the current Plainsboro GDP permits up to 310,000 sf of retail space, 220,000 sf of office space, 125 room hotel, and 950 residential units (31 single family homes, 200 senior adult attached homes, and 719 multi-family homes). In general, the proposed mixed-use development program in Plainsboro Township will generate approximately 326 less (33% less) weekday morning peak hour trips, 379 less (32% less) weekday evening peak hour trips, and 567 less (36% less) Saturday midday peak hour trips on the regional roadways as compared to the current entitled GDP development program in Plainsboro Township.

We determined the directional distribution of the site-generated trips based on existing and expected travel patterns in the study area, demographic journey-to-work data, and census gravity model data. We conducted capacity analyses at the following intersections to determine level of service operating conditions for the Projected and Build conditions, and based upon the analyses we have identified geometric and signal improvements with recommendations for implementation:

- U.S. Route 1 and Ridge Road (located in South Brunswick)
- U.S. Route 1 and Independence Way (located in South Brunswick)
- College Road East and U.S. Route 1 Northbound Ramps
- College Road West and Village Boulevard / Westbound Jughandle
- College Road West and Seminary Drive and Nursery Road
- NJ Route 27 and Academy Street / Church Street (located in South Brunswick)
- NJ Route 27 and Heathcote Road / Laurel Avenue (located in South Brunswick)
- Seminary Drive and Mapleton Road and Barclay Boulevard
- College Road East and Scudders Mill Road (County Road 614)
- College Road East and Research Way
- Seminary Drive and Western Access Street / Evergreen Drive

Langan concludes that the proposed mixed-use development program of the Plainsboro Princeton Nurseries generally results in less traffic impacts and better roadway levels of service

as compared to the approved Plainsboro GDP (May 2020 traffic study). Based on the GDP approval, the site plan triggers several improvements to be constructed consisting of:

1. College Road West and Nursery Road and Seminary Drive
    a. The intersection's geometric improvements are as follows
        i. Modify the southbound Nursery Road approach geometry
            1. Current lane configuration – left, left/thru, thru/right
            2. Proposed lane configuration – left, left, thru, right
        ii. Modify the northbound College Road West approach geometry
            1. Current lane configuration – left, thru/right
            2. Proposed lane configuration – left, left, thru, right
        iii. Modify the westbound College Road West approach geometry
            1. Current lane configuration – left, thru, right
            2. Proposed lane configuration – left, thru, thru, right
        iv. Modify/ reconstruct the traffic signal

2. Scudders Mill Road (CR 614) and College Road East and Crowne Plaza Driveway
    a. Identified improvements include the following at this time based on the enclosed analysis.
        i. Lengthen the southbound, College Road East, left-turn storage lane.
3. Seminary Drive and Western Access Street / Evergreen Drive
    a. The recommended geometry is as follows:
        i. Eastbound left, thru/right; westbound left, thru, right; northbound left/thru/right; southbound left/thru, right.
    b. The intersection should be monitored after initial completion for traffic signal installation in accordance with MUTCD Warrant criteria. If the criteria is not met at that time then the intersection should be monitored with subsequent site plan applications. With construction of the geometric improvements, underground conduit and traffic signal junction boxes should be installed .

The development's access points from College Road West and Seminary Drive are expected to operate safely and efficiently during peak traffic hours.

The prior improvements constructed associated with the development of Princeton Forrestal Center, notably improvements to U.S. Route 1, construction of College Road and the construction of the College Road overpass were designed to accommodate the peak hour traffic demands associated with the prior GDP entitlements. These constructed improvements will continue to provide the capacity needed to accommodate the proposed mixed-use development program. The analyses contained herein considers the NJDOT (New Jersey Department of Transportation) U.S. Route 1 congestion relief program which permits vehicles to use the shoulder as a travel lane from 6:00 AM to 9:00 AM and from 4:00 PM to 7:00 PM between Raymond Road and

Independence Way in South Brunswick Township, which has created additional capacity along U.S. Route 1 during the peak hours improving traffic flow along the corridor. Currently under design improvements by NJDOT along U.S. Route 1 in West Windsor will provide additional capacity improvement through the signalized intersections with Harrison Street, Fisher Place and Washington Road reducing existing peak hour delays along this section of the U.S. Route 1 corridor. We also note that South Brunswick Township has filed an application with NJDOT to widen and improve Ridge Road at its intersection with U.S. Route 1.

In addition to the analyses discussed herein, Langan has also prepared supplemental analyses for planning consideration and sensitivity analyses. Those analyses documented in the Appendices include a modeling assuming Pre-Covid traffic volume data, a preliminary analyses of the potential future site plan applications for Buildings E-1 and E-2, and an analyses of the Nursery Road corridor from and including its intersection with College Road thru the project core area to the South Brunswick municipal line to reflect full buildout of the Nursery Tract in Plainsboro and in South Brunswick. The later analysis has been prepared to confirm the adequacy of the lane arrangements and traffic control at the key internal intersections along Nursery Road being constructed with this Site Plan approval.

With regard to the supplemental analyses, we note the following:

1. Building E-1 and E-2 are not part of the current site plan application. In accordance with the GDP approval, when site plan approval application(s) are submitted for buildings E-1 and or E-2 or both, a new traffic impact study will be required. However, to model the operation of Nursery Road thru the project site reflecting a Buildout Condition, supplemental analyses have been prepared with consideration for future development of Buildings E1 and E2. Based on conceptual planning, Building E-1 could contain 97 age-restricted homes and up to 35,000 sf of retail space and building E-2 could contain up to 40,000 sf of retail space. Overall, the supplemental analyses evaluates up to 223,090 sf of retail space inclusive of the potential to construct an additional 18,000 sf of retail space in Buildings A and B. We have prepared summary tables of the capacity analysis results. Additionally, a revised trip generation table has been prepared that includes E1 and E2. Appendix F includes Figure 15 which show the traffic projections with E-1 and E-2 added. Also included in the Appendix is a trip Generation table, Level of Service (LOS) Summary Table and the capacity Analyses worksheets. In general, the addition of Buildings E-1 and E-2 do not change the findings and recommendations of this study.

2. A supplemental analysis has also been prepared of Nursery Road from and including College Road/ Seminary Drive thru the roundabout to model the buildout of both the

Plainsboro and South Brunswick sites on the roadway infrastructure being built with this site plan application within Plainsboro. The South Brunswick Tract was previously analyzed with a buildout scenario during the GDP Approval to consist of approximately 1,800,000 sf of Office Space. Current planning for South Brunswick, while speculative, consists of generally less intensive traffic generators including a recently approved approximate 342,000 sf Data Center and approximately 1,639,500 sf of future commercial office / life science space, business flex space, and additional data center space. The analyses shows that the intersections of College Road with Nursery Road, Nursery Road / Road A and Road D, Nursery Road and Road P, and Nursery Road and Roads B / Road C Roundabout will accommodate the buildout of the Nursery Tract in Plainsboro and South Brunswick as currently envisioned with ample capacity to accommodate and slight modifications to the South Brunswick development program as it advances in the coming years. The traffic projections, summary tables, figures, and analyses are contained in Appendix H.

3. Supplemental analyses have been prepared utilizing the Pre-Covid volume data with consideration as existing condition (2024 from TIS). We have prepared summary tables of the capacity analysis results. Additionally, we have prepared a table of the traffic counts comparing the pre-covid data used in the GDP study and the current 2024 traffic counts used in the latest traffic impact study. As can be expected there is a variation in traffic patterns with U.S. Route 1 2024 volumes being similar to Pre-Covid conditions and traffic entering the area along College Road between U.S. Route 1 and Scudders Mill Road experiencing a reduction in peak hour traffic flow that is likely related to a combination of factors associated with changed office space demand and workplace policies that have changed days and times employees travel to work. The reduced overall buildout density of the project which is the subject of the site plan application includes approximately 140,000 sf less office space and 155,000 sf less retail space within the project as was envisioned by the GDP potential buildout analyses. Even with future estimated site plan applications for building E-1 and E-2, the total office space and retail space proposed is reduced from the level analyzed in the approved General Development Plan by approximately 226,830 sf of commercial space than the prior planned development of the Princeton Nurseries Tract. Accordingly, the projects impacts are lower than planned for in the GDP analyses and approval. The improvements as identified in this application as triggered in accordance with the GDP Approval remain required. Appendix G includes Figures 2A, 3A, 5A, 7A,14A, and 15A which show the traffic projections based on the Pre-Covid data documented in the GDP Traffic Impact Study. Also included in the Appendix is a level of service (LOS) Summary Table and the capacity analyses worksheets.

INTRODUCTION

Langan Engineering and Environmental Services has been retained by WRV Nurseries Plainsboro Owner, LLC to prepare a traffic impact study for the proposed development of the Princeton Nurseries lands located in Plainsboro, New Jersey. The entire Princeton Nurseries site includes lands located in the Townships of Plainsboro and South Brunswick, Middlesex County, New Jersey and is bisected by the town line. This traffic study is to support the site plan application for development of the Princeton Nurseries project located in Plainsboro Township.

Project Description

At this time, it is proposed to develop the site with 155,485 sf of commercial/retail space (excluding a 14,600 sf clubhouse), 80,080 sf of office space, 125 room hotel, and 853 residential units (20 single family homes, 103 senior adult attached homes, and 730 multi-family homes). Princeton Nurseries in Plainsboro, was approved for a General Development Plan (GDP) supported by a Traffic Impact Study, prepared by Langan and dated May 12, 2020. Within the Plainsboro portion of the Princeton Nurseries site, the Plainsboro GDP permits up to 310,000 square feet (sf) of retail space, 220,000 sf of office space, a 125 room hotel and 950 residential units (31 single family homes, 200 senior adult attached homes and 719 multi-family homes). The Plainsboro Township development site is designated as Block 102, Lots 5 and 6; and Block 106, Lot 1 according to the Township of Plainsboro tax maps. The site location is shown in Figure 1.

The overall Princeton Nurseries development is bounded by U.S. Route 1 on the east, College Road West / Seminary Drive on the south, Mapleton Road on the west, and Ridge Road to the north. The South Brunswick/ Plainsboro Township town line bisects the property from east to west. Access to the Plainsboro Princeton Nurseries development will be via two access streets located along College Road West / Seminary Drive. The first access street, referred to as Nursery Road, is located at a signalized intersection which has already been constructed that intersects College Road West to create the northern leg of a four-leg signalized intersection with Seminary Drive / College Road West. The second access street is a proposed to intersect Seminary Drive to the west of Nursery Road opposite Evergreen Drive. It should be noted that with future completion of Princeton Nurseries in South Brunswick, additional access to Princeton Nurseries will be provided at the existing intersection of Independence Way with U.S. Route 1, where such access and off-site roadway improvements were previously constructed to accommodate the prior Princeton Nurseries in accordance with permits that were issued by NJDOT in 2002. Development of the Nurseries site has been long planned with significant roadway infrastructure

previously constructed including College Road and the College Road interchange with U.S. Route 1.

Study Area

We conducted capacity analyses at the following intersections:

- U.S. Route 1 and Ridge Road (located in South Brunswick)
- U.S. Route 1 and Independence Way (located in South Brunswick)
- College Road East and U.S. Route 1 Northbound Ramps
- College Road West and Village Boulevard / Westbound Jughandle
- College Road West and Seminary Drive and Nursery Road
- NJ Route 27 and Academy Street / Church Street (located in South Brunswick)
- NJ Route 27 and Heathcote Road / Laurel Avenue (located in South Brunswick)
- Seminary Drive and Mapleton Road and Barclay Boulevard
- College Road East and Scudders Mill Road (County Road 614)
- College Road East and Research Way
- Seminary Drive and Western Access Street / Evergreen Drive

An inventory of the physical road conditions is presented in the section "Description of Existing Conditions."

Scope of Study

Langan undertook the following steps to prepare this study in accordance with standard traffic engineering methodologies:

1. Conducted a field examination of the development property and surrounding road network to inventory physical and regulatory conditions including the number of lanes, lane assignments, channelization, traffic-control devices, lateral clearances and other factors that limit traffic capacity.
2. Conducted a series of turning movement traffic counts at the intersections identified in the previous section. We conducted counts on a typical weekdays from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM; and on a typical Saturday from 11:00 AM to 2:00 PM. We then identified the existing weekday morning and evening, and Saturday midday peak hour traffic volumes based on the manual traffic count data.
3. Established "Existing" traffic volumes using the obtained turning movement counts.
4. Established base traffic volumes by applying the applicable New Jersey Department of Transportation (NJDOT) Middlesex County annual growth factor of 2.5 percent to the existing traffic volumes.
5. Identified other developments and vacancies in the study area and established projected traffic volumes.
6. Established Projected traffic volumes with GDP trips, by adding the Plainsboro entitled GDP traffic to the projected traffic volumes.
7. Prepared trip generation estimates for the proposed Plainsboro development based on data documented by the Institute of Transportation Engineers (ITE).
8. Evaluated the mix of uses for internal interaction and pass-by traffic capture opportunities from existing traffic on the adjacent roadways utilizing data documented by the ITE.
9. Developed trip distribution for the development based on existing and expected travel patterns, demographic journey-to-work data, and census gravity model data.
10. Assigned site-generated trips to the development's access streets and the surrounding road network based on the likely travel routes motorists will use to travel to and from the development.
11. Established future Build traffic volumes by adding site-generated trips to the projected traffic volumes (without the GDP trips).
12. Performed intersection capacity analyses for the weekday morning and evening, and Saturday midday peak hours using Synchro Software.
13. Performed supplemental analyses with Buildings E-1 and E-2, with Pre-Covid Traffic data, and with buildout of the South Brunswick Tract per current permitted zoning.

DESCRIPTION OF EXISTING CONDITIONS

This section describes the roads, intersections and traffic volumes in the area of the Princeton Nurseries site located in the Township of Plainsboro, Middlesex County, New Jersey.

Roads

U.S. Route 1

U.S. Route 1 is classified as an urban principal arterial and is under NJDOT (New Jersey Department of Transportation) jurisdiction. The roadway has a general north-south orientation and provides between two and three travel lanes in each direction. The posted speed limit is 55 mph.

NJ Route 27

NJ Route 27 is classified as an urban principal arterial and is under NJDOT (New Jersey Department of Transportation) jurisdiction. The roadway has a general north-south orientation and provides one travel lane in each direction. The posted speed limit varies between 25 and 45 mph.

College Road

College Road is classified as an urban major collector and is under municipal jurisdiction (Plainsboro). A portion of College Road West and the southern slip ramp to U.S. Route 1 southbound are under private jurisdiction and are posted with a 30 mph speed limit. College Road has a general east-west orientation and generally provides two lanes in each direction. The posted speed limit is 40 mph.

Ridge Road

Ridge Road is classified as an urban minor arterial and is under municipal jurisdiction (South Brunswick). The roadway has a general east-west orientation and provides one travel lane in each direction. The posted speed limit varies between 40 and 50 mph.

Mapleton Road

Mapleton Road is classified as a local road and has a general north-south orientation. The roadway provides one travel lane in each direction and has a posted speed limit of 40 mph.

Seminary Drive

Seminary Drive is classified as a local road and has a general east-west orientation. The roadway provides one travel lane in each direction and has a posted speed limit of 35 mph.

Heathcote Road

Heathcote Road is classified as an urban major collector and is under municipal jurisdiction (South Brunswick). The roadway has a general north-south orientation and provides one travel lane in each direction. The posted speed limit is 25 mph.

Academy Street

Academy Street is classified as an urban minor arterial and is under municipal jurisdiction (South Brunswick). The roadway has a general east-west orientation and provides one travel lane in each direction. The posted speed limit is 30 mph.

Laurel Avenue (County Road 603)

Laurel Avenue is classified as an urban major collector and is under Somerset County jurisdiction. The roadway has a general north-south orientation and provides one travel lane in each direction. The posted speed limit is 25 mph.

Scudders Mill Road (County Road 614)

Scudders Mill Road is classified as an urban minor arterial and is under Middlesex County jurisdiction. The roadway has a general east-west orientation and provides two travel lanes in each direction. The posted speed limit is 50 mph in the study area.

Research Way

Research Way is classified as an urban minor collector and is under municipal jurisdiction (Plainsboro). The roadway has a general east-west orientation and provides two travel lanes in each direction. The posted speed limit is 35 mph.

Intersections

U.S. Route 1 and Ridge Road

Ridge Road intersects U.S. Route 1 to form the east and west legs of a four-leg intersection under signal control. The eastbound Ridge Road approach provides one left-turn lane, one thru lane and one right-turn lane. The westbound Ridge Road approach provides one left-turn lane and one shared thru/right-turn lane. The northbound and southbound U.S. Route 1 approaches are striped to provide two thru lanes, however the NJDOT implemented a U.S. Route 1 congestion relief program in June 2017. The program allows commuters to use the shoulder as an extra thru travel lane during the peak commuting times. Cars are allowed to use the shoulder from 6:00 AM to 9:00 AM and from 4:00 PM to 7:00PM. The program converts the shoulder to a travel lane between Raymond Road and Independence Way in both the northbound and southbound directions. The Ridge Road intersection is located along this stretch of road, so

during the weekday morning and evening the intersection was analyzed with three northbound and southbound thru lanes. On both the northbound and southbound U.S. Route 1 approaches left-turns and right-turns are made via nearside jughandles. The signal operates as part of the U.S. Route 1 signal adaptive system with a maximum cycle length of 240 seconds and three phases.

U.S. Route 1 and Independence Way

Independence Way intersects U.S. Route 1 to form the east and west legs of a four-leg intersection under signal control. The eastbound Independence Way approach provides two left-turn lanes and one shared thru/right-turn lane. The westbound Independence Way approach provides one left-turn lane and one channelized right-turn lane, which is stop-controlled. The northbound U.S. Route 1 approach provides two exclusive thru lanes and one shared thru/right-turn lane. The southbound U.S. Route 1 approach provides three thru lanes and all left-turns/U-turns/right-turns are made via a nearside jughandle. The signal operates as part of the U.S. Route 1 signal adaptive system with a maximum cycle length of 240 seconds and three phases. The third northbound and southbound lanes provided at the Independence Way intersection are picked up, to the north, by the NJDOT congestion relief shoulder use program allowing all three lanes in both directions to be used through Raymond Road.

College Road East and U.S. Route 1 Northbound Ramps

The U.S. Route 1 northbound ramps intersect College Road to form a four-leg intersection under signal control. The eastbound College Road approach provides two left-turn lanes and two thru lanes. The westbound College Road approach provides two thru lanes and a channelized right-turn lane, which is yield controlled. The northbound and southbound off-ramp approaches are free movement legs under yield control. The signal operates under three phases, including an all stop pedestrian phase, with a variable cycle length between 36 – 87 seconds.

College Road West and Village Boulevard / Jughandle

Village Boulevard and the jughandle intersect College Road to form the south and north legs, respectively, of a four-leg intersection under signal control. The eastbound College Road approach provides one exclusive thru lane and one shared thru/right-turn lane. The westbound College Road approach provides two thru lanes and all left-turns/U-turns are made via a nearside jughandle. The northbound Village Boulevard approach provides one left-turn lane and one right-turn lane. The southbound jughandle/ramp approach provides one shared left-turn/thru lane, one exclusive thru lane and a channelized right turn lane, which is yield controlled. The signal operates under two phases with a variable cycle length between 34 – 91 seconds.

College Road West and Nursery Road and Seminary Drive

Nursery Road (north leg), College Road West (east and south legs) and Seminary Drive (west leg) intersect to form a four-leg intersection under signal control. The eastbound Seminary Drive approach has been built to accommodate one left-turn lane, one exclusive thru lane and one shared thru/right-turn lane. The westbound College Road West approach provides one left-turn lane, one thru lane and one channelized right-turn lane, which is a free movement. The northbound College Road West approach provides one left-turn lane and one shared thru/channelized right-turn lane, which is stop controlled. The southbound Nursery Road approach has been built to provide one exclusive left-turn lane, one shared left-turn/thru lane and one shared thru/right-turn lane. The signal operates under four phases with a variable cycle length and different time of day programs.

NJ Route 27 and Academy Street / Church Street

Academy Street and Church Street intersect NJ Route 27 to form the south and north legs, respectively, of a four-leg intersection under signal control. The eastbound NJ Route 27 approach provides one shared left-turn/thru lane and one right-turn lane. The westbound NJ Route 27 approach is striped to provide one shared left-turn/thru/right-turn lane, however the approach is wide enough to accommodate two approach lanes and based on observations it is operating as one exclusive left-turn lane and one shared thru/right-turn lane. The northbound Academy Street approach provides one shared left-turn/thru/right-turn lane. The southbound Church Street approach is one-way northbound and provides only a receiving lane. The signal operates under three phases with a 100 second background cycle length.

NJ Route 27 and Heathcote Road / Laurel Avenue

Heathcote Road and Laurel Avenue intersect NJ Route 27 to form the south and north legs, respectively, of a four-leg intersection under signal control. The eastbound NJ Route 27 approach provides one shared left-turn/thru/right-turn lane. The westbound NJ Route 27 approach provides one shared left-turn/thru/right-turn lane. The northbound Heathcote Road approach provides one shared left-turn/thru/right-turn lane. The southbound Laurel Avenue approach provides one shared left-turn/thru/right-turn lane. The signal operates under two phases with a 100 second background cycle length.

Seminary Drive and Mapleton Road and Barclay Boulevard

Barclay Boulevard (east leg), Mapleton Road (west and north legs) and Seminary Drive (south leg) intersect to form a four-leg intersection under signal control. The eastbound Mapleton Road approach provides one shared left-turn/thru/right-turn lane. The westbound Barclay Boulevard approach provides one shared left-turn/thru/right-turn lane. The northbound Seminary Drive

approach provides one left-turn lane and one shared thru/right-turn lane. The southbound Mapleton Road approach provides one left-turn lane and one shared thru/right-turn lane. The signal operates under three phases with a variable cycle length between 74 – 95 seconds.

Scudders Mill Road (CR 614) and College Road East and Crowne Plaza Driveway

College Road East and the Crowne Plaza driveway intersect Scudders Mill Road to form the north and south legs, respectively, of a four-leg intersection under signal control. The eastbound CR 614 approach provides one left-turn lane, two thru lanes and one channelized right-turn lane, which is yield controlled. The westbound CR 614 approach provides one left-turn lane, two thru lanes and one right-turn lane. The northbound driveway approach provides one shared left-turn/thru/right-turn lane. The southbound College Road East approach provides one exclusive left-turn lane, one shared left-turn/thru lane and one right-turn lane. The signal operates under four phases with a variable cycle length between 71 – 111 seconds.

College Road East and Research Way

Research Way intersects College Road East to form the east leg of a T-shaped intersection under stop control. The westbound Research Way approach provides one left-turn lane and one right-turn lane and is "stop" controlled. The northbound College Road East approach provides one exclusive thru lane and one shared thru/right-turn lane. The southbound College Road East approach provides one left-turn lane and two thru lanes.

Traffic Volumes

We arranged for current traffic counts to be conducted during the morning and evening peak hours on a typical weekday and during the midday peak hours on a typical Saturday at the study intersections to examine traffic conditions near the development. Specifically, turning movement counts were conducted on the following days:

- Thursday, 29 February 2024 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM.
- Saturday, 3 February 2024 from 11:00 AM to 2:00 PM.
- Tuesday, 23 April 2024 from 7:00 AM to 6:00 PM.
- Tuesday, 7 May 2024 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM.

Additionally, ATR (Automatic Traffic Recorder) counts were conducted on all the ramps at the College Road and U.S. Route 1 interchange ranging from 1:00 PM on Monday, 6 May 2024, to 3:00 PM on Thursday, 16 May 2024. ATR data was also collected from 4:00 PM on Thursday, 16 May 2024, to 9:00 AM on Friday, 24 May 2024.

The traffic counts identify distinct times during the weekday morning and evening, and Saturday midday periods when traffic experienced its highest levels. According to the traffic count data collected, the weekday morning peak hours generally occurs from 7:30 AM to 8:30 AM, the weekday evening peak hour generally occurs from 4:45 PM to 5:45 PM and the Saturday midday peak hour generally occurs from 11:30 AM to 12:30 PM. Note that the counted traffic volumes were reviewed and adjusted to balance traffic flow gains/ losses between intersections to create a representative base flow condition. Figure 2 illustrates the 2024 existing weekday morning and evening, and Saturday midday peak hour traffic volumes. Summaries of the traffic counts are contained in Appendix B.

ESTIMATE OF FUTURE CONDITIONS

This section of the report covers background traffic growth, other developments, site-generated trips, trip generation comparison, trip distribution, and future traffic volumes. We projected traffic volumes to include existing traffic and new traffic created by background growth to derive the base traffic volumes. We accounted for trips generated by adjacent developments to derive the projected traffic volumes. We then added site-generated trips based on the current GDP for the Plainsboro development to derive the Projected traffic volumes with GDP trips. To derive the Build traffic volumes, we then added the proposed Plainsboro development program site-generated trips to the projected traffic volumes (without GDP trips).

Background Traffic Growth

We increased the existing peak hour traffic volumes by a compounded annual growth rate of 2.5 percent, established by the New Jersey Department of Transportation (NJDOT) for Middlesex County for short term growth projections, to derive the projected traffic volumes. The 2029 base traffic volumes are shown in Figure 3.

Other Developments

In addition to the background growth rate, we also includes the addition of adjacent developments in the project area. Potential developments includes buildout of the 394 residential units that are part of the Forrestal Village located to the west of U.S. Route 1 (west side developments).

We used the estimates consistent with the current Plainsboro GDP traffic study (May 2020), using data contained in the Institute to Transportation Engineers (ITE) publication Trip Generation, 10th edition, we estimated the traffic generation of the above for Princeton Forrestal Village and summarized the generation in Table 1.

Table 1 – Trip Generation Estimates – Princeton Forrestal Center Undeveloped

Use	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
394 Multi-Family Units	40	135	175	126	74	200	111	94	205

We then added the additional adjacent developments using information from prepared studies and shared data from others. The remaining adjacent developments include the following:

- Princeton Forrestal Campus (east side of U.S. Route 1)
- University Medical Center at Princeton (UMCP)
    - Cancer Center – 151,555 sf

- Former Bristol-Myers Squibb (BMS) redevelopment – PF Innovation Park 433,000 sf total

Figure 4 summarized the total adjacent development traffic volumes. We then added the traffic generation, Figure 4, of the total adjacent developments to the base traffic volumes, Figure 3, to derive the projected traffic volumes. The 2029 projected traffic volumes are shown in Figure 5.

Trip Distribution

We determined the directional distributions of the site-generated trips based on demographic journey-to-work data, census gravity model data, existing and expected travel patterns in the study area, and surrounding population locations. The retail distributions were based on a gravity model (5 miles) and the office and residential distributions were determined by using journey-to-work data. Table 2 summarizes the arrival and departure distributions.

Table 2 – Arrival & Departure Trip Distributions

Route (To/From)	Retail	Office	Residential
U.S. Route 1 (North)	7%	20%	28%
U.S. Route 1 (South)	39%	35%	24%
Ridge Road (East)	8%	2%	-
NJ Route 27 (North)	7%	2%	2%
NJ Route 27 (South)	8%	7%	9%
Laurel Avenue (West)	-	4%	5%
Scudders Mill Road (West)	-	-	2%
Dey Road (East)	5%	10%	12%
Plainsboro Road (East)	6%	14%	8%
Schalks Crossing Road (North)	8%	-	-
Schalks Crossing Road (South)	-	4%	8%
College Rd W (South)	6%	1%	2%
Barclay Boulevard	6%	1%	-
Total	**100%**	**100%**	**100%**

Projected Traffic Volumes with GDP Trip Generation

We reviewed the current GDP (General Development Plan) and supporting documents including the May 2020 traffic impact study. We then prepared trip generation estimates consistent with the GPD traffic study using data compiled for Land Use Code 820 (Shopping Center), Land Use Code 710 (General Office Building), Land Use Code 310 (Hotel), Land Use Code 252 (Senior Adult Housing Attached), Land Use Code 210 (Single Family Home) and Land Use Code 220 (Multifamily Housing (Low-Rise)) by the ITE as contained in the publication Trip Generation, 10th edition.

The development of a site with a mix of uses will result in an interaction of traffic between the different uses. ITE has established a methodology for calculating the internal capture between various uses. Using this methodology as documented in the ITE's Trip Generation Handbook estimates of the internal capture adjustments were determined (see Appendix I).

Additionally, a certain percentage of traffic attracted to retail land uses generally relates to the volume of traffic passing by a site. These trips are diverted into a site from the adjacent passing travel stream and continue along their original trip path when exiting a site. These specified trips are known as "pass-by" trips and are not new to an area or the immediate adjacent roadway system. We used the pass-by percentages in accordance with data contained in the ITE's Trip Generation Handbook, 3rd edition documented under LUC 820 and 821. Pass-by credits were applied to the external site-generated trips to determine the new trips the development would have generated. We used the pass-by percentages of 0% for the weekday morning peak hour (no data available), 34% for the weekday evening peak hour and 26% for the Saturday midday peak hour for the retail use.

The trip generation estimates for the May 2020 Plainsboro GDP program is summarized in Table 3.

Table 3 – Trip Generation Estimates – Plainsboro GDP

Use	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
310,000sf Retail	190	117	307	602	653	1,255	787	726	1,513
220,000sf Office	292	40	332	55	252	307	63	54	117
125 room Hotel	34	23	57	35	33	68	51	40	91
Total Residential	***93***	***285***	***378***	***263***	***162***	***425***	***261***	***212***	***473***
200 Senior Adult	14	26	40	27	23	50	42	26	68
31 Single Family	7	20	27	21	12	33	24	20	44
719 Multi-Family	72	239	311	215	127	342	195	166	361
Total	**609**	**465**	**1,074**	**955**	**1,100**	**2,055**	**1,162**	**1,032**	**2,194**
Internal Capture Reduction (approx. 9% AM; 26% PM; 11% SAT)									
310,000sf Retail	- 17	- 14	- 31	- 113	- 140	- 253	- 50	- 73	- 123
220,000sf Office	- 27	- 11	- 38	- 19	- 53	- 72	- 22	- 11	- 33
125 room Hotel	0	- 12	- 12	- 10	- 5	- 15	0	0	0
Total Residential	- 2	- 9	- 11	- 126	- 70	- 196	- 51	- 39	- 90
Total	**- 46**	**- 46**	**- 92**	**- 268**	**- 268**	**- 536**	**- 123**	**- 123**	**- 246**
Pass-By (0% AM; 34% PM; 26% SAT)									
310,000sf Retail	0	0	0	- 166	- 175	- 341	- 191	- 170	- 361
Total New Trips									
310,000sf Retail	173	103	276	323	338	661	546	483	1,029
220,000sf Office	256	29	294	36	199	235	41	43	84
125 room Hotel	34	11	45	25	28	53	51	40	91
Total Residential	91	276	367	137	92	229	210	173	383
Total	**563**	**419**	**982**	**521**	**657**	**1,178**	**848**	**739**	**1,587**

We assigned the trip generation estimates for the GDP shown in Table 3 to the adjacent roadway network using the trip distributions shown in Table 2. The total site-generated trips (pass-by and new trips) for the Plainsboro GDP development are shown on Figure 6. We then added those assigned trips, Figure 6, to the projected traffic volumes, Figure 5, to derive the projected traffic volumes with GDP trips. Figure 7 illustrates the Projected traffic volumes with the Plainsboro GDP trips.

Build Traffic Volumes

We have prepared an estimate of site-generated trips for the proposed new development program that is in the Plainsboro section of the site. The estimates were prepared using data compiled for Land Use Code 820 (Shopping Center (>150k)), Land Use Code 710 (General Office Building), Land Use Code 310 (Hotel), Land Use Code 252 (Senior Adult Housing Attached), Land Use Code 210 (Single Family Home) and Land Use Code 220 (Multifamily Housing (Low-Rise)) by the Institute of Transportation Engineers (ITE) as contained in the publication Trip Generation, 11th edition.

Since the proposed Plainsboro GDP also contains a mix of uses, we used the ITE methodology, discussed in the previous section, to determine the internal interaction estimates, pass-by trips and new trips. Based upon ITE's 11th edition, we used the pass-by percentages of 0% for the weekday morning peak hour, 29% for the weekday evening peak hour and 31% for the Saturday midday peak hour.

Table 4 summarizes the trip generation estimates for the proposed Plainsboro development program for the weekday morning and evening, and Saturday midday peak hours.

Table 4 – Trip Generation Estimates – Proposed Development

Use	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
155,485sf Retail	140	85	225	372	404	776	484	446	930
80,080sf Office	121	17	138	23	115	138	23	19	42
125 room Hotel	31	24	55	33	32	65	52	40	92
Total Residential	***71***	***215***	***286***	***239***	***143***	***382***	***183***	***176***	***359***
103 Senior Adult	7	13	20	15	11	26	18	15	33
20 Single Family	4	13	17	14	8	22	15	12	27
730 Multi-Family	60	189	249	210	124	334	150	149	299
Total	**363**	**341**	**704**	**667**	**694**	**1,361**	**742**	**681**	**1,423**
Internal Capture Reduction (approx. 9% AM; 26% PM; 11% SAT)									
155,485sf Retail	- 10	- 6	- 16	- 65	- 118	- 183	- 28	- 40	- 68
80,080sf Office	- 13	- 5	- 18	- 13	- 25	- 38	- 9	- 4	- 13
125 room Hotel	0	- 7	- 7	- 10	- 5	- 15	0	0	0
Total Residential	- 1	- 6	- 7	- 107	- 47	- 154	- 31	- 24	- 55
Total	**- 24**	**- 24**	**- 48**	**- 195**	**- 195**	**- 390**	**- 68**	**- 68**	**- 136**
Pass-By (0% AM; 29% PM; 31% SAT)									
155,485sf Retail	0	0	0	- 89	- 83	- 172	- 141	- 126	- 267
Total New Trips									
155,485sf Retail	130	79	209	218	203	421	315	280	595
80,080sf Office	108	12	120	10	90	100	14	15	29
125 room Hotel	31	17	48	23	27	50	52	40	92
Total Residential	70	209	279	132	96	228	152	152	304
Total	**339**	**317**	**656**	**383**	**416**	**799**	**533**	**487**	**1,020**
Comparison to May 2020GDP Approval New Trips									
May 2020 GDP Trips	563	419	982	521	657	1,178	848	739	1,587
Difference	**- 224**	**- 102**	**- 326**	**- 138**	**- 241**	**- 379**	**- 315**	**- 252**	**- 567**

We assigned the trip generation estimates shown in Tables 4 for the proposed Plainsboro new development program to the adjacent roadway network using the trip distributions shown in Table 2. The arrival and departure distributions for the proposed Plainsboro development are shown in Figures 8 – 12, respectively, for the hotel, office, residential, retail and pass-by uses. The total site-generated trips (pass-by and new trips) for the proposed Plainsboro development are shown on Figure 13. The Build traffic volumes were derived by adding the total site-generated trips, Figure 13, to the projected traffic volumes, Figure 5. Figure 14 illustrates the Build weekday morning and evening, and Saturday midday peak hour traffic volumes for the proposed Plainsboro development program.

ANALYSIS OF TRAFFIC OPERATIONS

This section describes the capacity analysis we conducted to assess traffic operations for the Projected and Build conditions for the Plainsboro development. Capacity analysis provides an indication of the adequacy of road facilities to serve traffic demand.

Level of Service Criteria

Level of Service (LOS) is the term used to denote different operating conditions that occur on a given road segment under various traffic volume demands. LOS is a qualitative measure that considers a number of factors including road geometry, speed, travel delay and freedom to maneuver. LOS designations range from A to F and provide an index of operational qualities of a road segment or an intersection. LOS A represents the best operating conditions; LOS F represents the worst.

LOS designations are reported differently for signalized and unsignalized intersections. For signalized intersections, the analysis considers the operation of all traffic entering the intersection. For unsignalized intersections, the analysis considers the operation of all movements that conflict with other movements, such as main-line left turns and traffic exiting a side street. The evaluation criteria used to analyze the study area intersections are based on the Highway Capacity Manual (HCM), published by the Transportation Research Board and the Synchro Software.

The HCM defines LOS for signalized intersections as follows:

LOS	Control Delay per Vehicle
A	≤10 sec
B	>10 and ≤20 sec
C	>20 and ≤35 sec
D	>35 and ≤55 sec
E	>55 and ≤80 sec
F	>80 sec

The HCM defines LOS for unsignalized intersections as follows:

LOS	Delay Range (sec/veh)
A	≤10 sec
B	>10 and ≤15 sec
C	>15 and ≤25 sec
D	>25 and ≤35 sec
E	>35 and ≤50 sec
F	>50 sec

Capacity Analysis

We conducted capacity analyses for the intersections in the study area and found that the proposed new development will generally have less of an impact on the study area during peak hours then the prior GDP for the Plainsboro section. Table 5 summarizes the Projected and Build levels of service (LOS) at each relevant study intersection during the weekday morning and evening, and Saturday midday peak hours. The following are discussions pertaining to each of the intersections analyzed. It is noted that for the Plainsboro development access to the site is provided via the College Road West and Seminary Drive intersections without access to the internal roadway connections to Independence Way / U.S. Route 1 intersection, which will be constructed with the buildout of the South Brunswick development. The timing directives are included in Appendix C. The capacity analyses worksheets are included in Appendix D.

Table 5 – Intersection Capacity Analysis Summary

Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ GDP Mit	2029 Projected						2029 Projected with GDP						2029 Build						2029 Build with GDP Mitigation					
				AM		PM		SAT		AM		PM		SAT		AM		PM		SAT		AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
SIGNALIZED INTERSECTIONS																											
U.S. Rt 1 and Ridge Rd	**Overall**	**Overall**	**Overall**	**D**	**41.3**	**D**	**36.9**	**C**	**22.7**	**D**	**46.1**	**D**	**38.4**	**C**	**24.3**	**D**	**43.6**	**D**	**37.7**	**C**	**23.6**	-	-	-	-	-	-
	EB-L	EB-L	EB-L	E	66.0	E	59.8	D	40.0	E	60.1	E	62.3	D	39.8	E	60.2	E	61.4	D	40.0	-	-	-	-	-	-
	EB-T	EB-T	EB-T	F	94.4	F	83.0	E	69.4	F	109.3	F	83.8	E	79.6	F	105.2	F	83.4	E	75.8	-	-	-	-	-	-
	EB-R	EB-R	EB-R	C	23.0	B	11.2	B	10.4	C	20.3	A	4.6	A	4.5	C	20.2	A	4.6	A	4.4	-	-	-	-	-	-
	WB-L	WB-L	WB-L	E	61.1	F	83.4	D	41.7	E	67.6	F	103.8	D	47.5	E	65.7	F	86.4	D	44.6	-	-	-	-	-	-
	WB-TR	WB-TR	WB-TR	F	86.5	F	146.3	E	69.7	F	94.1	F	132.4	E	67.6	F	94.1	F	130.6	E	68.8	-	-	-	-	-	-
	NB-TTT*	NB-TTT*	NB-TTT*	B	16.0	C	20.9	B	15.3	B	15.6	C	25.4	B	16.9	B	15.4	C	25.3	B	16.4	-	-	-	-	-	-
	SB-TTT*	SB-TTT*	SB-TTT*	D	45.0	B	15.4	B	15.1	D	52.7	B	16.3	B	16.7	D	48.2	B	16.3	B	16.1	-	-	-	-	-	-
U.S. Rt 1 and Independence Way	**Overall**	**Overall**	**Overall**	**A**	**6.2**	**A**	**8.7**	**A**	**2.1**	**A**	**5.9**	**A**	**9.3**	**A**	**2.3**	**A**	**5.7**	**A**	**9.2**	**A**	**2.2**	-	-	-	-	-	-
	EB-LL	EB-LL	EB-LL	D	50.5	E	62.5	D	45.1	D	43.3	E	60.1	D	47.3	D	43.5	E	61.7	D	46.0	-	-	-	-	-	-
	EB-TR	EB-TR	EB-TR	E	73.7	E	71.6	D	53.0	E	63.6	E	64.6	D	52.0	E	64.7	E	65.9	D	51.0	-	-	-	-	-	-
	WB-L	WB-L	WB-L	E	79.0	F	82.8	E	65.1	E	72.9	F	85.0	E	65.1	E	72.9	F	85.0	E	65.1	-	-	-	-	-	-
	WB-R	WB-R	WB-R	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	-	-	-	-	-	-
	NB-TTTR	NB-TTTR	NB-TTTR	A	4.3	A	6.7	A	2.0	A	4.5	A	7.0	A	2.1	A	4.4	A	6.8	A	2.1	-	-	-	-	-	-
	SB-TTT	SB-TTT	SB-TTT	A	5.8	A	7.6	A	1.6	A	5.5	A	8.8	A	1.8	A	5.2	A	8.8	A	1.6	-	-	-	-	-	-
U.S. Rt 1 NB Ramps and College Rd E	**Overall**	**Overall**	**Overall**	**A**	**2.0**	**A**	**3.0**	**A**	**1.6**	**A**	**2.5**	**A**	**3.5**	**A**	**2.3**	**A**	**2.3**	**A**	**3.5**	**A**	**2.1**	-	-	-	-	-	-
	EB-LL	EB-LL	EB-LL	A	0.6	A	0.6	A	0.5	A	0.8	A	1.0	A	0.8	A	0.7	A	0.8	A	0.7	-	-	-	-	-	-
	EB-TT	EB-TT	EB-TT	A	0.1	A	0.0	A	0.0	A	0.1	A	0.1	A	0.0	A	0.1	A	0.1	A	0.0	-	-	-	-	-	-
	WB-TT	WB-TT	WB-TT	A	5.4	A	5.8	A	4.3	A	6.7	A	7.7	A	6.0	A	6.3	A	7.2	A	5.7	-	-	-	-	-	-
	WB-R	WB-R	WB-R	A	0.0	A	0.1	A	0.0	A	0.0	A	0.1	A	0.0	A	0.0	A	0.1	A	0.0	-	-	-	-	-	-
	NEB-R	NEB-R	NEB-R	A	0.2	A	0.1	A	0.0	A	0.2	A	0.1	A	0.0	A	0.2	A	0.1	A	0.0	-	-	-	-	-	-
Village Blvd / Jug and College Rd W	**Overall**	**Overall**	**Overall**	**A**	**7.0**	**A**	**7.9**	**A**	**5.7**	**A**	**7.8**	**A**	**9.8**	**A**	**7.1**	**A**	**7.6**	**A**	**8.9**	**A**	**5.9**	-	-	-	-	-	-
	EB-TTR	EB-TTR	EB-TTR	A	6.6	A	6.6	A	4.8	A	7.5	A	9.7	A	7.1	A	7.3	A	8.6	A	5.7	-	-	-	-	-	-
	WB-TT	WB-TT	WB-TT	A	6.5	A	7.2	A	4.9	A	7.3	A	8.5	A	6.5	A	6.9	A	8.5	A	5.4	-	-	-	-	-	-
	NB-L	NB-L	NB-L	B	11.5	B	11.8	B	11.0	B	13.7	B	14.8	B	13.8	B	12.9	B	12.3	B	11.3	-	-	-	-	-	-
	NB-R	NB-R	NB-R	A	5.3	A	5.1	A	5.6	A	7.0	A	9.2	A	7.0	A	5.9	A	5.3	A	5.7	-	-	-	-	-	-
	SB-LTT	SB-LTT	SB-LTT	B	12.1	B	12.7	B	11.5	B	13.9	B	15.0	B	14.2	B	13.2	B	13.0	B	11.8	-	-	-	-	-	-
College Rd W and Seminary Dr and Nursey Rd	**Overall**	**Overall**	**Overall**	**B**	**10.6**	**B**	**11.2**	**A**	**9.2**	**B**	**17.9**	**C**	**20.5**	**B**	**17.2**	**C**	**20.5**	**C**	**22.4**	**B**	**19.1**	**B**	**17.6**	**B**	**17.6**	**B**	**16.3**
	EB-L	EB-L	EB-L	A	5.0	A	5.0	A	5.0	A	8.5	B	14.1	B	13.8	A	8.8	B	10.8	B	10.3	A	7.9	A	9.7	B	10.7
	EB-TTR	EB-TTR	EB-TTR	B	10.1	B	10.2	A	7.9	C	22.6	C	20.5	B	19.0	B	17.4	B	19.3	B	15.5	C	21.3	B	16.1	B	15.6
	WB-L	WB-L	WB-L	A	9.9	A	4.8	A	4.4	B	15.3	B	15.9	B	14.1	C	26.6	B	11.6	B	10.9	B	13.3	B	11.4	B	11.3
	WB-T	WB-TT	WB-TT	A	9.6	A	9.7	A	7.6	B	15.7	C	22.4	C	20.6	C	21.9	C	24.4	C	20.3	B	13.8	B	16.7	B	17.2
	WB-R	WB-R	WB-R	A	0.0	A	0.0	A	0.0	A	0.5	A	0.5	A	1.2	A	0.2	A	0.3	A	0.6	A	0.2	A	0.3	A	0.6
	NB-L	NB-LL	NB-LL	C	31.1	C	33.3	C	29.6	D	38.9	D	41.8	D	39.3	D	42.5	D	53.7	D	39.5	D	38.1	D	36.7	D	37.0
	NB-TR	NB-T	NB-T	B	13.4	B	11.5	B	12.5	D	40.2	D	41.0	D	43.3	C	20.5	C	20.0	C	21.1	D	38.4	D	35.2	D	38.5
	-	NB-R	NB-R	-	-	-	-	-	-	A	9.2	B	14.7	A	8.0	-	-	-	-	-	-	A	9.1	B	13.6	A	8.0
	SB-L	SB-LL	SB-LL	C	29.0	C	29.0	C	27.0	D	38.7	D	35.7	C	33.2	D	44.7	D	45.9	D	46.8	D	37.7	D	35.4	C	33.6
	SB-LTTR	SB-T	SB-T	C	29.0	C	28.3	C	26.5	C	31.9	C	24.4	C	24.7	C	33.1	C	32.1	C	30.1	C	31.7	C	27.0	C	25.6
	-	SB-R	SB-R	-	-	-	-	-	-	A	0.3	A	4.0	A	3.1	-	-	-	-	-	-	A	0.3	A	0.7	A	0.6
Academy St / Church St and NJ Rt 27	**Overall**	**Overall**	**Overall**	**D**	**54.5**	**C**	**32.1**	**B**	**14.2**	**E**	**77.7**	**D**	**53.6**	**C**	**21.8**	**E**	**71.6**	**D**	**44.6**	**B**	**18.2**	-	-	-	-	-	-
	EB-LT	EB-LT	EB-LT	B	11.7	C	23.6	B	12.8	B	11.7	C	23.6	B	13.3	B	11.7	C	23.6	B	13.3	-	-	-	-	-	-
	EB-R	EB-R	EB-R	A	2.8	A	2.7	A	1.8	A	3.0	A	2.8	A	1.7	A	2.9	A	2.8	A	1.7	-	-	-	-	-	-
	WB-L	WB-L	WB-L	A	4.7	B	12.8	A	3.8	A	5.1	B	18.5	A	5.3	A	4.9	B	16.7	A	4.8	-	-	-	-	-	-
	WB-TR	WB-TR	WB-TR	A	4.1	A	6.3	A	3.9	A	4.1	A	6.2	A	4.7	A	4.1	A	6.3	A	4.6	-	-	-	-	-	-
	NB-LTR	NB-LTR	NB-LTR	F	233.5	F	100.3	E	59.0	F	318.9	F	176.9	F	87.0	F	295.7	F	146.0	E	72.0	-	-	-	-	-	-
HeathcoteRd/ Laurel Ave and NJ Rt 27	**Overall**	**Overall**	**Overall**	**D**	**46.5**	**D**	**48.6**	**C**	**27.0**	**D**	**51.0**	**D**	**50.1**	**C**	**27.9**	**D**	**48.6**	**D**	**50.1**	**C**	**27.6**	-	-	-	-	-	-
	EB-LTR	EB-LTR	EB-LTR	A	7.0	A	8.3	A	7.9	A	7.3	A	8.5	A	8.6	A	7.2	A	8.4	A	8.3	-	-	-	-	-	-
	WB-LTR	WB-LTR	WB-LTR	B	15.0	B	14.4	B	15.3	B	15.4	B	15.0	B	16.5	B	15.3	B	14.7	B	16.0	-	-	-	-	-	-
	NB-LTR	NB-LTR	NB-LTR	D	39.2	D	50.1	D	36.5	D	39.5	D	50.5	D	36.2	D	39.4	D	50.5	D	36.3	-	-	-	-	-	-
	SB-LTR	SB-LTR	SB-LTR	F	126.7	F	164.1	E	70.6	F	142.2	F	172.7	E	73.1	F	134.3	F	171.6	E	72.5	-	-	-	-	-	-

Table 5 cont'd – Intersection Capacity Analysis Summary

Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ Imp	2029 Projected						2029 Projected with GDP						2029 Build						2029 Build with GDP Mitigation					
				AM		PM		SAT		AM		PM		SAT		AM		PM		SAT		AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
SIGNALIZED INTERSECTIONS																											
Seminary Dr and Mapleton Rd/ Barclay Blvd	**Overall**	**Overall**	**-**	**B**	**19.8**	**A**	**7.3**	**A**	**5.1**	**C**	**23.2**	**A**	**8.6**	**A**	**7.9**	**C**	**21.7**	**A**	**8.1**	**A**	**7.0**	-	-	-	-	-	-
	EB-LTR	EB-LTR	-	D	40.7	C	25.7	C	23.8	D	42.1	C	25.7	C	25.0	D	41.5	C	25.8	C	25.5	-	-	-	-	-	-
	WB-LTR	WB-LTR	-	C	27.8	C	27.2	C	22.8	C	32.0	C	30.1	C	30.0	C	30.7	C	29.1	C	28.1	-	-	-	-	-	-
	NB-L	NB-L	-	A	4.3	A	2.7	A	2.0	A	4.4	A	3.0	A	3.0	A	4.4	A	2.9	A	2.5	-	-	-	-	-	-
	NB-TR	NB-TR	-	A	8.2	A	6.2	A	3.9	A	8.8	A	7.6	A	5.9	A	8.7	A	7.0	A	5.4	-	-	-	-	-	-
	SB-L	SB-L	-	A	4.2	A	2.7	A	2.1	A	4.1	A	3.0	A	3.0	A	4.1	A	2.9	A	2.7	-	-	-	-	-	-
	SB-TR	SB-TR	-	C	20.0	A	5.6	A	3.9	C	25.6	A	6.7	A	6.4	C	23.2	A	6.3	A	5.7	-	-	-	-	-	-
Crowne Plaza/ College Rd E and Scudders Mill Rd	**Overall**	**Overall**	**-**	**B**	**14.3**	**B**	**18.0**	**B**	**10.6**	**B**	**17.4**	**C**	**20.0**	**B**	**14.1**	**B**	**15.8**	**B**	**19.3**	**B**	**12.6**	-	-	-	-	-	-
	EB-L	EB-L	-	C	30.0	D	36.7	C	29.0	C	32.8	D	39.2	C	31.6	C	31.2	D	38.3	C	30.3	-	-	-	-	-	-
	EB-TT	EB-TT	-	A	8.5	B	14.4	A	9.5	A	9.4	B	16.4	B	12.6	A	9.4	B	15.7	B	10.9	-	-	-	-	-	-
	EB-R	EB-R	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	-	-	-	-	-	-
	WB-L	WB-L	-	C	30.0	D	36.2	C	28.9	C	33.0	D	38.3	C	31.7	C	32.0	D	37.7	C	30.3	-	-	-	-	-	-
	WB-TT	WB-TT	-	B	17.0	B	17.0	A	9.3	C	21.3	B	19.0	B	12.4	B	18.7	B	18.3	B	10.7	-	-	-	-	-	-
	WB-R	WB-R	-	A	5.2	A	4.4	A	1.4	A	6.8	A	4.2	A	3.2	A	6.0	A	4.2	A	3.2	-	-	-	-	-	-
	NB-LTR	NB-LTR	-	C	27.4	C	26.8	C	23.8	C	29.7	C	28.1	C	26.1	C	28.6	C	28.0	C	25.0	-	-	-	-	-	-
	SB-L	SB-L	-	C	31.2	D	36.2	C	29.3	C	34.9	D	37.4	C	33.3	C	32.3	D	37.2	C	31.6	-	-	-	-	-	-
	SB-LT	SB-LT	-	C	31.2	D	36.5	C	29.3	C	34.9	D	37.8	C	33.5	C	32.3	D	37.4	C	31.3	-	-	-	-	-	-
	SB-R	SB-R	-	A	5.8	A	0.8	A	0.3	A	5.9	A	0.7	A	0.3	A	5.6	A	0.7	A	0.3	-	-	-	-	-	-
PROPOSED SIGNALIZED INTERSECTIONS																											
Nursery Road and Road D	-	-	**Overall**	-	-	-	-	-	-	-	-	-	-	-	-	**A**	**7.7**	**A**	**10.9**	**B**	**11.7**	-	-	-	-	-	-
	-	-	EB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	7.0	A	8.0	A	10.0	-	-	-	-	-	-
	-	-	EB-TR	-	-	-	-	-	-	-	-	-	-	-	-	A	7.9	B	10.3	B	10.8	-	-	-	-	-	-
	-	-	WB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	7.9	B	11.4	B	13.7	-	-	-	-	-	-
	-	-	WB-TR	-	-	-	-	-	-	-	-	-	-	-	-	B	12.0	B	12.5	B	14.0	-	-	-	-	-	-
	-	-	NB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	7.6	A	9.6	A	9.9	-	-	-	-	-	-
	-	-	NB-T	-	-	-	-	-	-	-	-	-	-	-	-	B	12.2	B	14.8	B	14.4	-	-	-	-	-	-
	-	-	NB-R	-	-	-	-	-	-	-	-	-	-	-	-	A	3.8	A	4.8	A	4.3	-	-	-	-	-	-
	-	-	SB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	8.0	A	9.0	A	9.0	-	-	-	-	-	-
	-	-	SB-TR	-	-	-	-	-	-	-	-	-	-	-	-	B	14.7	C	20.1	C	23.2	-	-	-	-	-	-
UNSIGNALIZED INTERSECTIONS																											
College Rd E and Research Way	WB-L	-	-	C	15.3	C	20.0	B	10.1	C	20.8	D	28.8	B	13.7	C	18.5	D	25.6	B	12.2	-	-	-	-	-	-
	WB-R	-	-	B	10.6	A	9.8	A	8.8	B	11.8	B	10.5	A	9.6	B	11.3	B	10.3	A	9.2	-	-	-	-	-	-
	SB-L	-	-	A	8.0	A	8.6	A	7.5	A	8.5	A	9.1	A	8.0	A	8.3	A	9.0	A	7.8	-	-	-	-	-	-
Evergreen Dr/ Western Dr and Seminary Dr	-	EB-LT	-	-	-	-	-	-	-	A	8.8	A	9.3	A	8.4	A	8.7	A	9.1	A	8.2	-	-	-	-	-	-
	-	WB-LT	-	-	-	-	-	-	-	A	9.3	A	8.2	A	8.0	A	9.2	A	8.1	A	7.9	-	-	-	-	-	-
	-	NB-LTR	-	-	-	-	-	-	-	D	34.1	C	23.7	C	20.9	D	30.0	C	20.6	C	16.7	-	-	-	-	-	-
	-	SB-LT	-	-	-	-	-	-	-	F	79.1	D	34.1	C	24.1	E	45.0	D	28.1	C	18.1	-	-	-	-	-	-
	-	SB-R	-	-	-	-	-	-	-	B	12.8	B	13.9	B	10.8	B	12.5	B	13.2	B	10.4	-	-	-	-	-	-
Nursery Road and Road P	-	-	EB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	8.5	A	8.6	A	8.7	-	-	-	-	-	-
	-	-	WB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	9.3	B	10.1	B	11.1	-	-	-	-	-	-
	-	-	NB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	7.3	A	7.3	A	7.4	-	-	-	-	-	-
	-	-	SB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	7.3	A	7.4	A	7.4	-	-	-	-	-	-
ROUNDABOUT INTERSECTIONS																											
Nursery Road and Road B / Road C	-	-	**Overall**	-	-	-	-	-	-	-	-	-	-	-	-	**A**	**2.7**	**A**	**2.8**	**A**	**2.9**	-	-	-	-	-	-
	-	-	EB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.8	A	2.8	-	-	-	-	-	-
	-	-	WB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.8	A	2.9	-	-	-	-	-	-
	-	-	NB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.9	A	2.9	-	-	-	-	-	-
			SB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.7	A	2.8	-	-	-	-	-	-

**Based on Synchro Software [Level of Service (Average vehicle delay [seconds per vehicle])]

* Third thru land analyzed during the AM and PM peak hours based on NJDOT congestion relief program

U.S. Route 1 and Ridge Road

The signalized intersection is expected to operate at an overall LOS D during both the weekday morning and evening peak hours, and an overall LOS C during the Saturday midday peak hour under the Projected condition. Under the Projected condition with GDP trips, the intersection is expected to operate at an overall LOS D during both the weekday morning and evening peak hours, and an overall LOS C during the Saturday midday peak hour. Under the Build condition, the intersection is expected to operate at an overall LOS D during both the weekday morning and evening peak hours, and an overall LOS C during the Saturday midday peak hour.

The intersection operates as an adaptive system and the coordinated U.S. Route 1 signal system can adapt cycle length and phase length depending on traffic demands through the network. To analyze the U.S. Route 1 intersection we used the phase minimums and maximum adaptive mode cycle length (240 second) specified on the timing directive for the Adaptive Mode plan and found the optimized peak hour cycle length for each time period and analysis condition. The above analyses provide for a reasonable representation of the operational characteristics of these traffic signals in the adaptive system. It is anticipated more of a benefit is realized in real-world applications of the adaptive mode then what the analysis suggests.

U.S. Route 1 and Independence Way

The signalized intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours under the Projected condition. Under the Projected condition with GDP trips, the intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours. Under the Build condition, the intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours.

The intersection operates as an adaptive system and the coordinated U.S. Route 1 signal system can adapt cycle length and phase length depending on traffic demands through the network. To analyze the U.S. Route 1 intersection we used the phase minimums and maximum adaptive mode cycle length (240 second) specified on the timing directive for the Adaptive Mode plan and found the optimized peak hour cycle length for each time period and analysis condition. The above analyses provide for a reasonable representation of the operational characteristics of these traffic signals in the adaptive system. It is anticipated more of a benefit is realized in real-world applications of the adaptive mode then what the analysis suggests.

College Road East and U.S. Route 1 Northbound Ramps

The signalized intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours under the Projected condition. Under the Projected condition with GDP trips, the intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours. Under the Build condition, the intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours.

College Road West and Village Boulevard / Jughandle

The signalized intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours under the Projected condition. Under the Projected condition with GDP trips, the intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours. Under the Build condition, the intersection is expected to operate at an overall LOS A during the weekday morning and evening, and Saturday midday peak hours.

College Road West and Nursery Road and Seminary Drive

The signalized intersection is expected to operate at an overall LOS B during both the weekday morning and evening peak hours, and an overall LOS A during the Saturday midday peak hour under the Projected condition based upon the intersection geometry and signal operation constructed in accordance with prior approvals. Under the Build condition, with the same intersection geometry and signal operation, the intersection is expected to operate at an overall LOS C during both the weekday morning and evening peak hours, and an overall LOS B during the Saturday midday peak hour.

Under the Projected condition with GDP trips and the Build condition, adjustments to the intersection geometry, as part of the approved GDP, will be phased in as the project proceeds in order to accommodate the future traffic projections. These geometric and signal improvements at full development would include:

- Modify the southbound Nursery Road approach geometry
  - Current lane configuration – left, left/thru, thru/right
  - Proposed lane configuration – left, left, thru, right
  - The exclusive double left turn lanes would improve queuing and allow for more flexibility in reallocating green time to other movements such as the WB advance in the AM peak hours and to the NB phase in the PM peak hours.
- Modify the northbound College Road West approach geometry
  - Current lane configuration – left, thru/right
  - Proposed lane configuration – left, left, thru, right
- Modify the westbound College Road West approach geometry

        - Current lane configuration – left, thru, right
        - Proposed lane configuration – left, thru, thru, right
    - AM peak hour – Add a third timing program for the AM peak hours. Timing adjustment to allocate more green time to the WB College Road West advance phase.
        - Additional 12 seconds to the WB/EB left advance phase.
            - 6 seconds from the NB College Road West R.O.W. phase.
            - 6 seconds from the EB/WB E College Road West/Seminary Drive R.O.W. phase.
    - PM peak hour – Timing adjustment to allocate more green time to the NB College Road West phase.
        - Additional 3 seconds to the NB College Road West R.O.W. phase. Additional 5 seconds to EB/WB College Road West/Seminary Road R.O.W. phase.
            - 2 seconds from the SB Nursery Road R.O.W. phase.
            - 6 seconds from the EB/WB left advance phase.
    - Saturday peak hour – Timing adjustment to allocate more green time to the SB Nursery Road phase.
        - Additional 8 seconds to the SB Nursery Road R.O.W. phase.
            - 2 seconds from the NB College Road West R.O.W. phase.
            - 6 seconds from the EB/WB College Road West/Seminary Road R.O.W. phase.

With the above recommendations implemented, the signalized intersection is expected to operate at an overall LOS B during both the weekday morning and Saturday midday peak hours, and an overall LOS C during the weekday evening peak hour under the Projected condition with GDP trips. Under the Build condition, with the above implemented, the signalized intersection is expected to operate at an overall LOS B during all three peak hours.

<u>NJ Route 27 and Academy Street / Church Street</u>

The signalized intersection is expected to operate at an overall LOS D during the weekday morning peak hour, an overall LOS C during the weekday evening peak hour, and an overall LOS B during the Saturday midday peak hour under the Projected condition. Under the Projected condition with GDP trips, the intersection is expected to operate at an overall LOS E during the weekday morning peak hour, an overall LOS D during the weekday evening peak hour, and an overall LOS C during the Saturday midday peak hour. Under the Build condition, the intersection is expected to operate at an overall LOS E during the weekday morning peak hour, an overall LOS D during the weekday evening peak hour, and an overall LOS B during the Saturday midday peak hour

<u>NJ Route 27 and Heathcote Road / Laurel Avenue</u>

The signalized intersection is expected to operate at an overall LOS D during both the weekday morning and evening peak hours, and an overall LOS C during the Saturday midday peak hour under the Projected condition. Under the Projected condition with GDP trips, the intersection is

expected to operate at an overall LOS D during both the weekday morning and evening peak hours, and an overall LOS C during the Saturday midday peak hour. Under the Build condition, the intersection is expected to operate at an overall LOS D during both the weekday morning and evening peak hours, and an overall LOS C during the Saturday midday peak hour.

Seminary Drive and Mapleton Road and Barclay Boulevard

The signalized intersection is expected to operate at an overall LOS B during the weekday morning peak hour, and LOS A during both the weekday evening and Saturday midday peak hours under the Projected condition. Under the Projected condition with GDP trips, the intersection is expected to operate at an overall LOS C during the weekday morning peak hour, and LOS A during both the weekday evening and Saturday midday peak hours. Under the Build condition, the intersection is expected to operate at an overall LOS C during the weekday morning peak hour, and LOS A during both the weekday evening and Saturday midday peak hours.

Scudders Mill Road (CR 614) and College Road East and Crowne Plaza Driveway

The signalized intersection is expected to operate at an overall LOS B during the weekday morning and evening, and Saturday midday peak hours under the Projected condition. Under the Projected condition with GDP trips, the intersection is expected to operate at an overall LOS B during both the weekday morning and Saturday midday peak hours, and LOS C during the weekday evening peak hour. Under the Build condition, the intersection is expected to operate at an overall LOS B during the weekday morning and evening, and Saturday midday peak hours.

Based on the results of the analyses the following is recommended to improve operations at the intersection. The need for the proposed improvements results from regional growth, traffic associated with other area projects as well as the project development.

- Lengthen the southbound, College Road East, left-turn storage lane.

With the above recommendations implemented, the signalized intersection is expected to operate at an overall LOS B during all three peak hours.

College Road East and Research Way

All movements at the unsignalized intersection are expected to operate at LOS C or better during the weekday morning and evening, and Saturday midday peak hours under the Projected condition. Under the Projected condition with GDP trip, all movements are expected to operate at LOS D or better during all three peak hours. Under the Build condition, all movements are expected to operate at an LOS D or better during all three peak hours.

Signal Warrant Analysis

We performed a traffic signal warrant analysis for the intersection using the Manual on Uniform Traffic Control Devices (MUTCD) standards. There are nine warrants described in the MUTCD. We only evaluated the traffic volume based warrants.

We evaluated the 2029 Projected (without GDP trips) and 2029 Build traffic volumes to determine if they meet any of the traffic volume based warrants. We used the 11 hours of data collected in the April 2024 turning movement traffic count (TMC) for the intersection to conduct the warrant analysis. We used the same methodology described previously in the Estimate of Future Conditions section to derive the weekday hourly 2029 Projected and Build traffic volumes.

Appendix E contains the warrant summary reports and a summary of the crash data. The traffic volume based warrant analysis results are as follows:

Warrant 1 (Eight-Hour Vehicular Volume)
- Projected – Not Met: 3 hours met (8 required)
- Build – Not Met: 3 hours met (8 required)

Warrant 2 (Four-Hour Vehicular Volume)
- Projected – Not Met: 1 hours met (4 required)
- Build – Not Met: 2 hours met (4 required)

Warrant 3 (Peak Hour)
- Projected – Not Met: 0 hours met (1 required)
- Build – Not Met: 0 hours met (1 required)

Warrant 4 (Pedestrian Volume)
- Not Applicable

Warrant 5 (School Crossing)
- Not Applicable

Warrant 6 (coordinated Signal System)
- Not Applicable

Warrant 7 (Crash Experience)
- Not Met

Warrant 8 (Roadway Network)
- Not Met

Warrant 9 (Intersection near a Grade Crossing)
- Not Applicable

Based on the results of the warrant analysis, it is not recommended the intersection be signalized with the current development program. The intersection should continue to be monitored for signalization in the future, if necessary. This analysis is in accordance with the requirements of the existing PFC Traffic Agreement, which with regards to Princeton Nurseries' development requires the submission of a Warrant Analysis "upon the submission of the first preliminary site plan application for a non-residential development in Princeton Nurseries".

Seminary Drive and Western Access Street / Evergreen Drive

Geometry

The western street is proposed to intersect the existing T-shaped intersection of Seminary Drive and Evergreen Drive to form the north leg of a four-leg intersection. The eastbound Seminary Drive approach will provide one left-turn lane and one shared thru/right-turn lane. The westbound Seminary Drive approach will provide one left-turn lane, one thru lane and one right-turn lane. The northbound Evergreen Drive approach will provide one shared left-turn/thru/right-turn lane. The southbound access street approach is recommended to provide one shared left-turn/thru lane and one right-turn lane. It is recommended that the intersection be monitored for future signalization.

Analysis

All movements at the stop-controlled intersection are expected to operate at LOS E or better during all three peak hours, under the Projected condition with GDP trips, with the exception of the southbound left-turn/thru movement during the weekday morning peak hour, which is expected to operate at an LOS F. Under the Build condition, all movements at the stop-controlled intersection are expected to operate at LOS E or better during all three peak hours. The prior GDP analyses indicates that future traffic signalization may be required with further development beyond this application.

The traffic signal underground conduits and junction boxes should be installed when the intersection is constructed. The intersection should be monitored for traffic signal installation in accordance with MUTCD (Manual on Uniform Traffic Control Devices) Traffic Signal Warrant criteria.

Signal Warrant Analysis

We performed a traffic signal warrant analysis for the intersection using the Manual on Uniform Traffic Control Devices (MUTCD) standards. There are nine warrants described in the MUTCD. We only evaluated the traffic volume based warrants. We evaluated the 2029 Build peak hour traffic volumes to determine if the weekday morning and evening peak hours met the criteria for any of the traffic volume based warrants. Appendix E contains the warrant summary reports and a summary of the crash data. The traffic volume based warrant analysis results are as follows:

Warrant 1 (Eight-Hour Vehicular Volume)
- Build – Not Met

Warrant 2 (Four-Hour Vehicular Volume)
- Build – Not Met

Warrant 3 (Peak Hour)
- Build – Not Met

Warrant 4 (Pedestrian Volume)
- Not Applicable

Warrant 5 (School Crossing)
- Not Applicable

Warrant 6 (coordinated Signal System)
- Not Applicable

Warrant 7 (Crash Experience)
- Not Met

Warrant 8 (Roadway Network
- Not Met

Warrant 9 (Intersection near a Grade Crossing)
- Not Applicable

Based on the results of the warrant analysis, it is not recommended the intersection be signalized with the current development program. The intersection should continue to be monitored for signalization in the future, if necessary.

Nursery Road and Road D

Geometry

Road D is proposed to intersect Nursery Road to form a four-leg intersection under signal control. The eastbound Road D approach will provide one left-turn lane and one shared thru/right-turn lane. The westbound Road D approach will provide one left-turn lane and one shared thru/right-turn lane. The northbound Nursery Road approach will provide one left-turn lane, one thru lane, and one right-turn lane. The southbound Nursery Road approach will provide one left-turn lane and one shared thru/right-turn lane. It is recommended the intersection be signalized.

Analysis

The signalized intersection is expected to operate at an overall LOS A during the weekday morning and evening peak hours, and an overall LOS B during the Saturday midday peak hours under the Build condition.

Nursery Road and Road P

Geometry

Road P is proposed to intersect Nursery Road to form a four-leg intersection under stop control. The eastbound and westbound Road P approaches will provide one shared left-turn/thru/right-turn lane and will be "stop" controlled. The northbound and southbound Nursery Road approaches will provide one shared left-turn/thru/right-turn lane.

Analysis

All movements at the stop-controlled intersection are expected to operate at LOS B or better during the weekday morning and evening, and Saturday midday peak hours.

Nursery Road and Road B / Road C

Geometry

Road B and Road C are proposed to intersect Nursery Road to form the west and east legs, respectively, of a four-leg roundabout. The eastbound, Road B, and westbound, Road C, approaches will provide one shared left-turn/thru/right-turn lane. The northbound and southbound Nursery Road approaches will provide one shared left-turn/thru/right-turn lane. All approaches on the roundabout will be "yield" controlled.

Analysis

All movements at the stop-controlled intersection are expected to operate at LOS A during the weekday morning and evening, and Saturday midday peak hours.

CONCLUSIONS AND RECOMMENDATIONS

Langan finds that the proposed mixed-use development of the Princeton Nurseries in Plainsboro Township generally results in less traffic generation and better roadway levels of service as compared to the Plainsboro Princeton Nurseries envisioned by the Plainsboro GDP as previously analyzed in the May 2020 traffic impact study.

In general, the proposed mixed-use development program in Plainsboro Township will generate approximately 326 less (33% less) weekday morning peak hour trips, 379 less (32% less) weekday evening peak hour trips, and 567 less (36% less) Saturday midday peak hour trips on the regional roadways as compared to the current entitled GDP development program in Plainsboro Township.

The prior improvements privately funded and constructed by Princeton Forrestal Center, notably improvements to U.S. Route 1, construction of College Road and the construction of the College Road overpass were designed to accommodate the peak hour traffic demands associated with the prior GDP entitlements. These constructed improvements will continue to provide the capacity needed to accommodate the proposed mixed-use development program. The NJDOT U.S. Route 1 congestion relief program which permits vehicles to use the shoulder as a travel lane from 6:00 AM to 9:00 AM and from 4:00 PM to 7:00 PM between Raymond Road and Independence Way in South Brunswick Township has created additional capacity along U.S. Route 1 during the peak hours improving traffic flow along the corridor. Currently under design improvements by NJDOT along U.S. Route 1 in West Windsor will provide additional capacity improvement through the signalized intersections with Harrison Street, Fisher Place and Washington Road reducing existing peak hour delays along this section of the U.S. Route 1 corridor.

Based upon the analysis documented herein, the following is recommended:

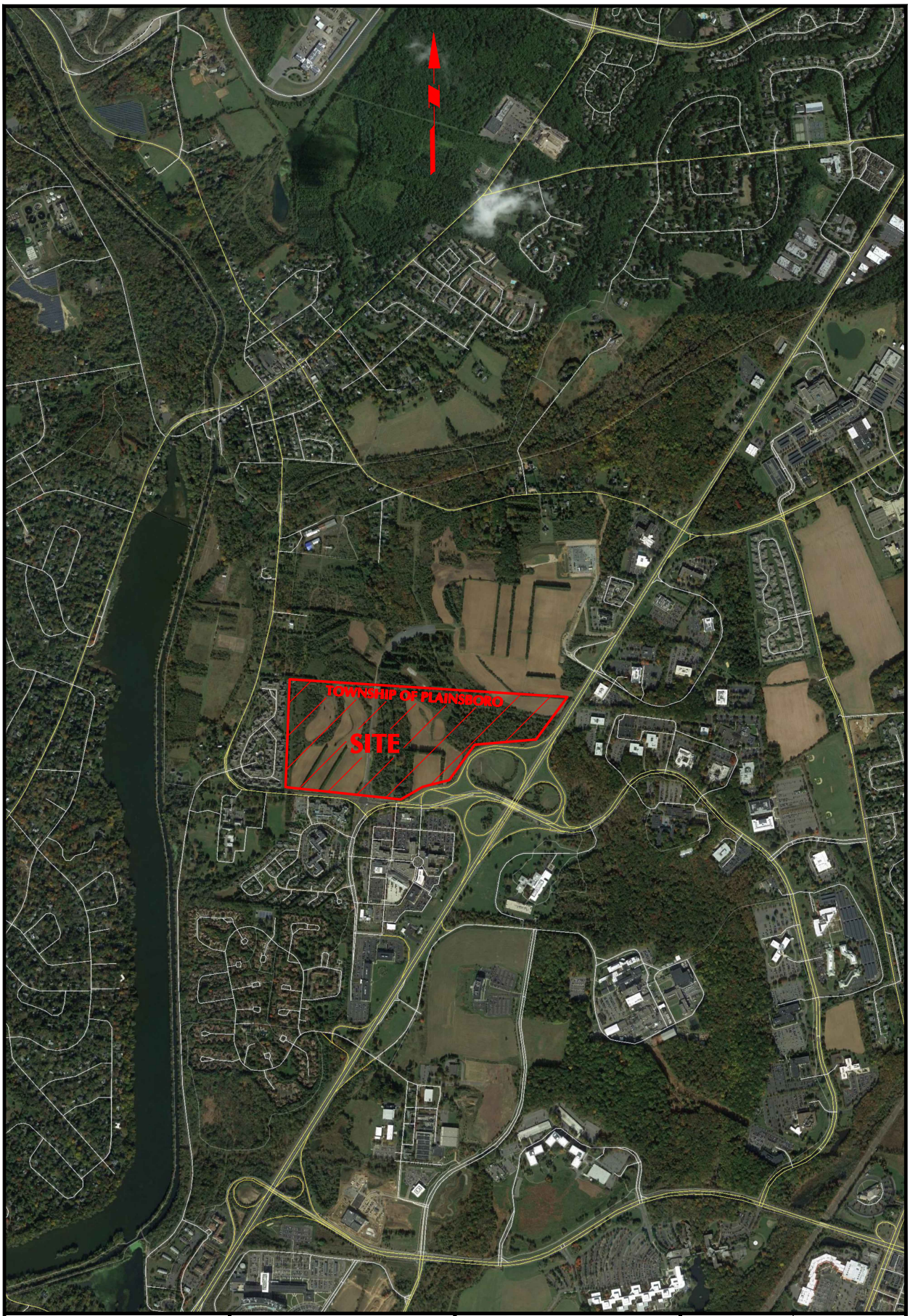
4. College Road West and Nursery Road and Seminary Drive
    a. Initial development will be accommodated by the currently constructed intersection geometry and the proposed signal timing adjustments contained herein, which includes the addition of a weekday morning timing program and signal timing adjustments to the weekday evening and Saturday peak hour timing programs.
    b. The intersection's geometric improvements are as follows
        i. Modify the southbound Nursery Road approach geometry
            1. Current lane configuration – left, left/thru, thru/right
            2. Proposed lane configuration – left, left, thru, right

ii. Modify the northbound College Road West approach geometry
    1. Current lane configuration – left, thru/right
    2. Proposed lane configuration – left, left, thru, right
iii. Modify the westbound College Road West approach geometry
    1. Current lane configuration – left, thru, right
    2. Proposed lane configuration – left, thru, thru, right

5. Scudders Mill Road (CR 614) and College Road East and Crowne Plaza Driveway
    a. Identified improvements include the following at this time based on the enclosed analysis.
        i. Lengthen the southbound, College Road East, left-turn storage lane.
6. Seminary Drive and Western Access Street / Evergreen Drive
    a. The recommended geometry is as follows:
        i. Eastbound left, thru/right; westbound left, thru, right; northbound left/thru/right; southbound left/thru, right.
    b. The intersection should be monitored after initial completion for traffic signal installation in accordance with MUTCD Warrant criteria. If the criteria is not met at that time then the intersection should be monitored with subsequent site plan applications.

The development's access points from College Road West plus Seminary Drive, with the recommended roadway and traffic control discussed herein, are expected to operate safely and efficiently during peak traffic hours.

APPENDIX A
FIGURES



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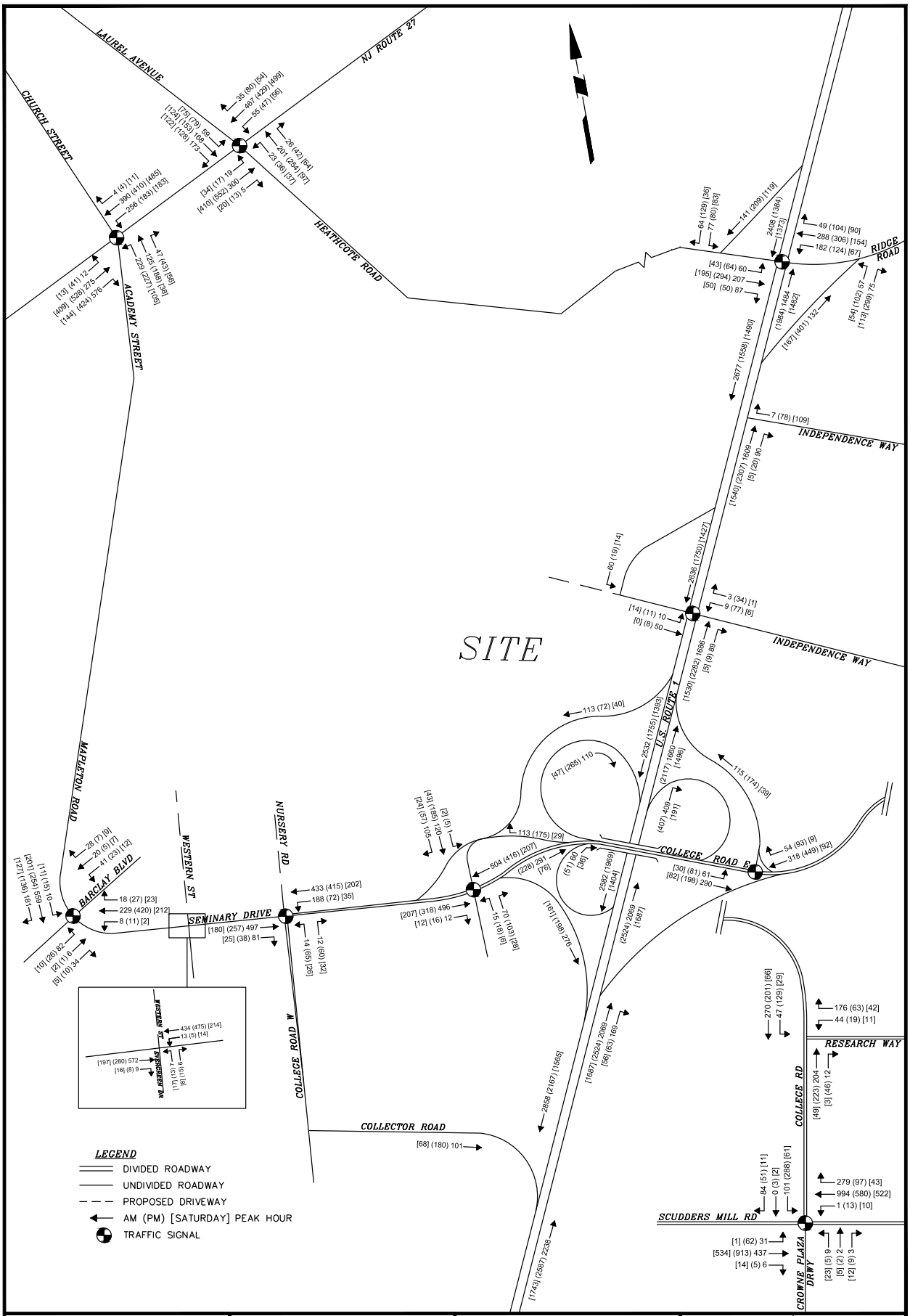
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Drawing Title
SITE LOCATION MAP

Project No. 130091505	Drawing No. FIGURE 1
Date 5/23/2025	
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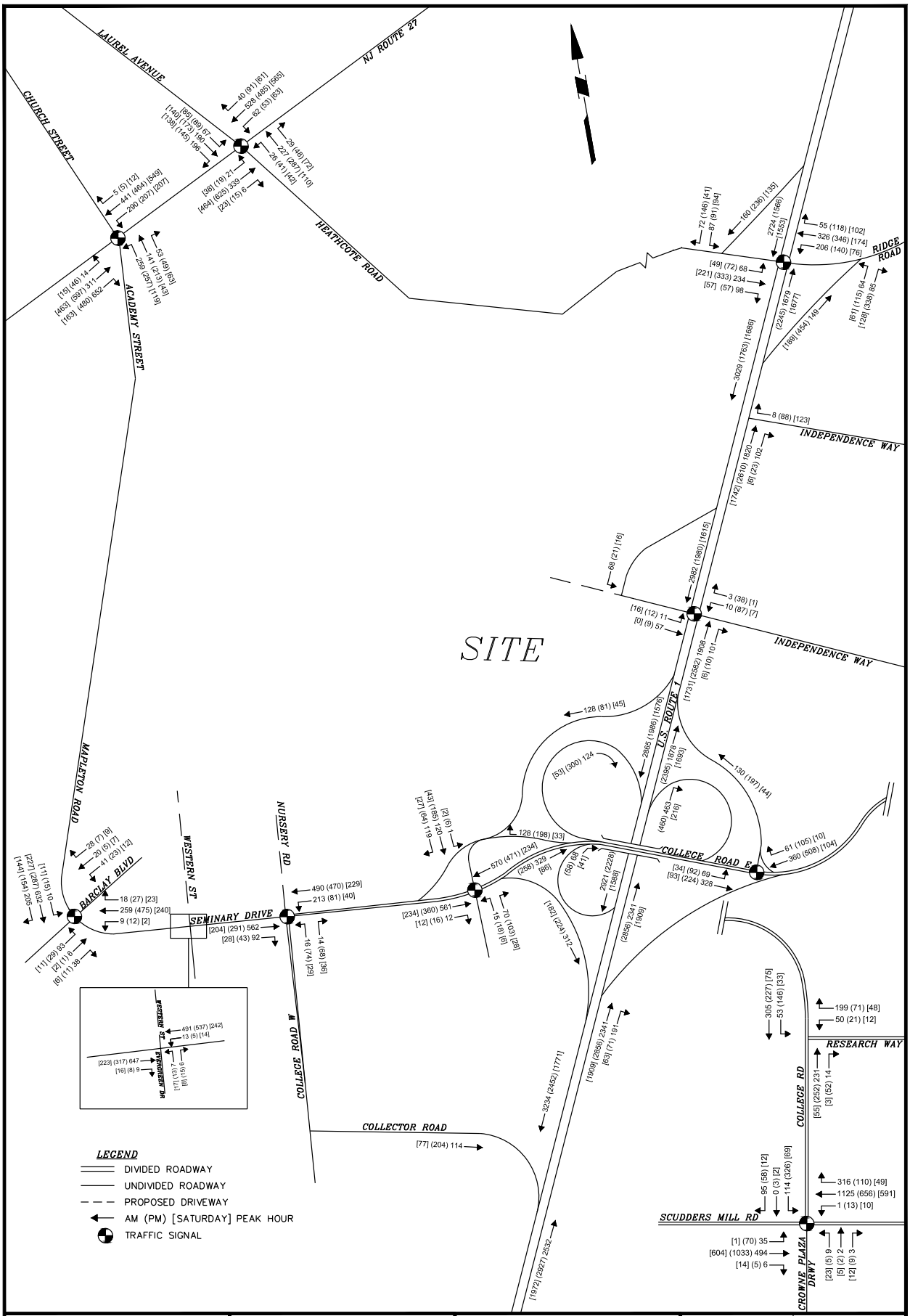


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Project	PRINCETON NURSERIES PLAINSBORO MIDDLESEX COUNTY NEW JERSEY
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Project No.	130091505
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Drawing No.	FIGURE 2
Sheet	2 of 23

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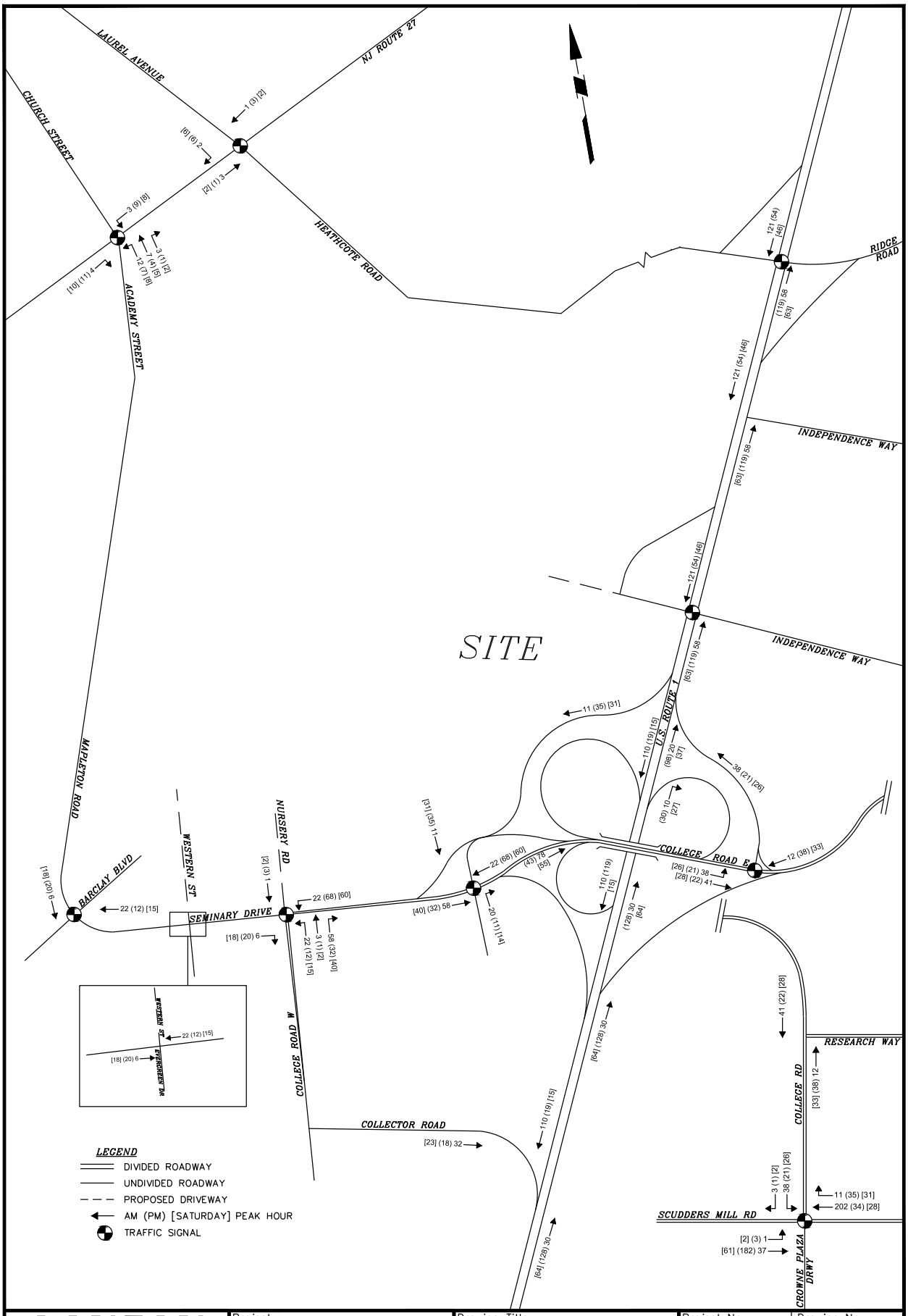


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Drawn By / Checked By	KAMP
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Drawing No.	FIGURE 3
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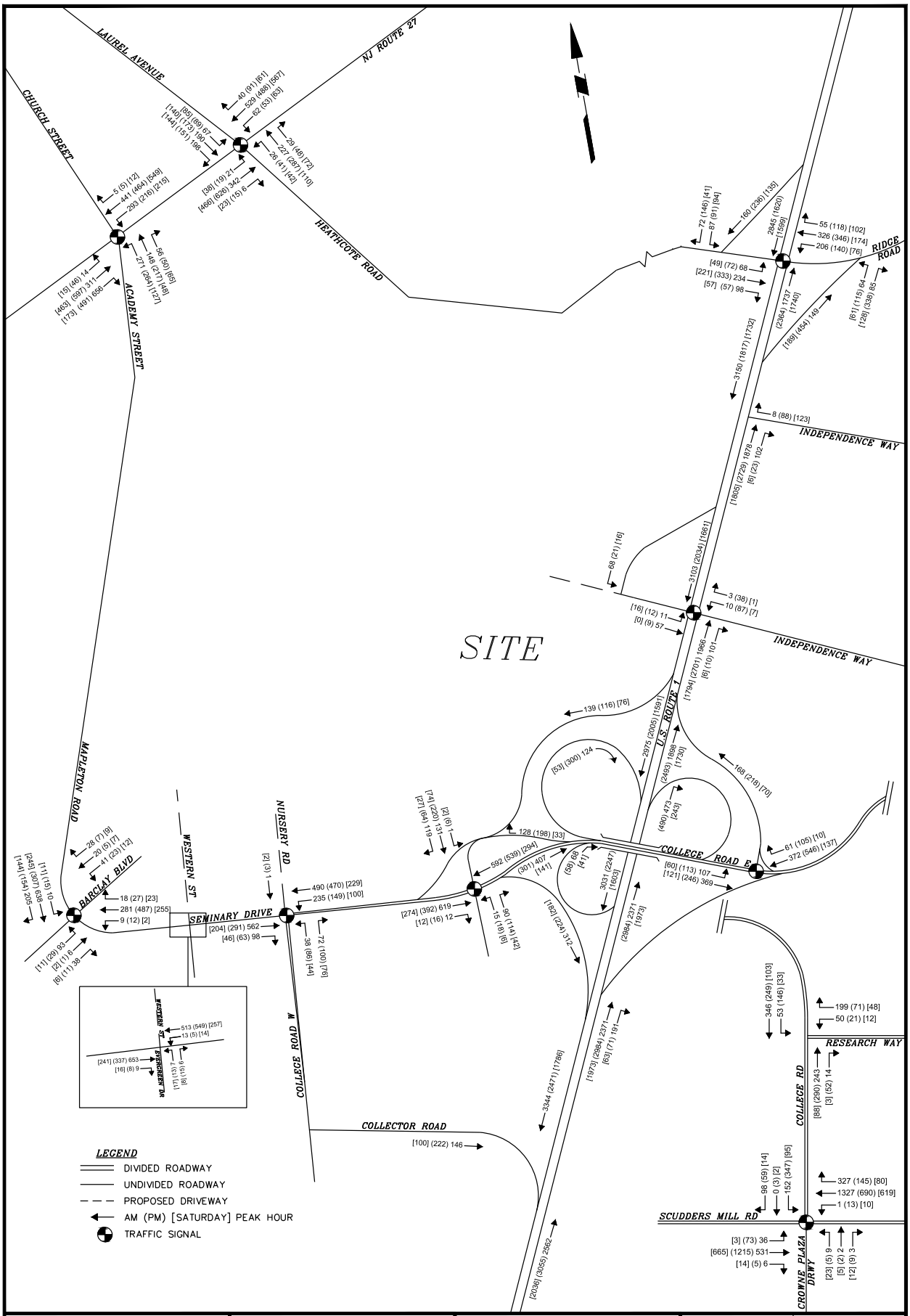
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TOTAL ADJACENT DEVELOPMENT TRAFFIC VOLUMES

Project No. 130091505	Drawing No. FIGURE 4
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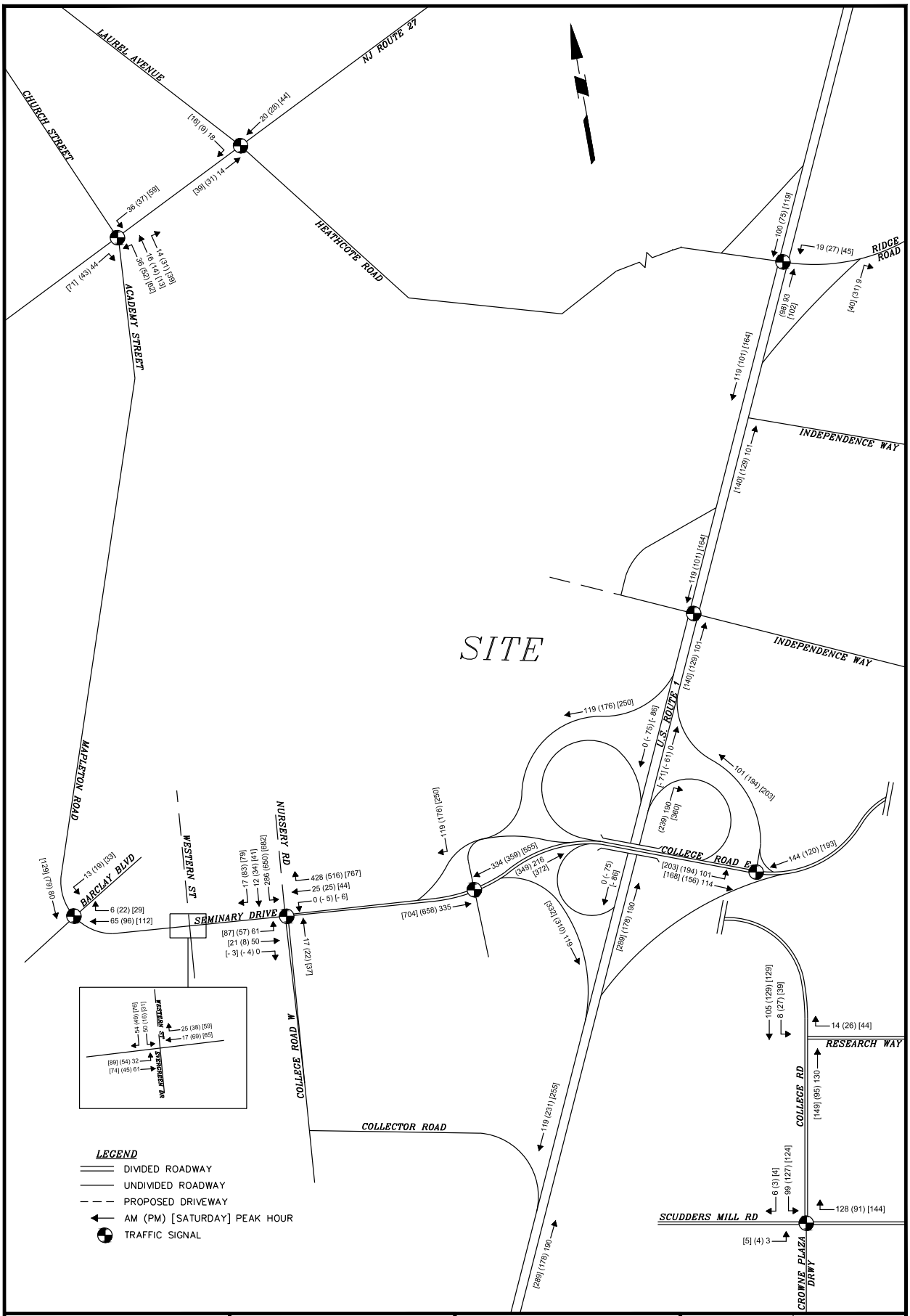
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2029 PROJECTED TRAFFIC VOLUMES

Project No. 130091505	Drawing No. FIGURE 5
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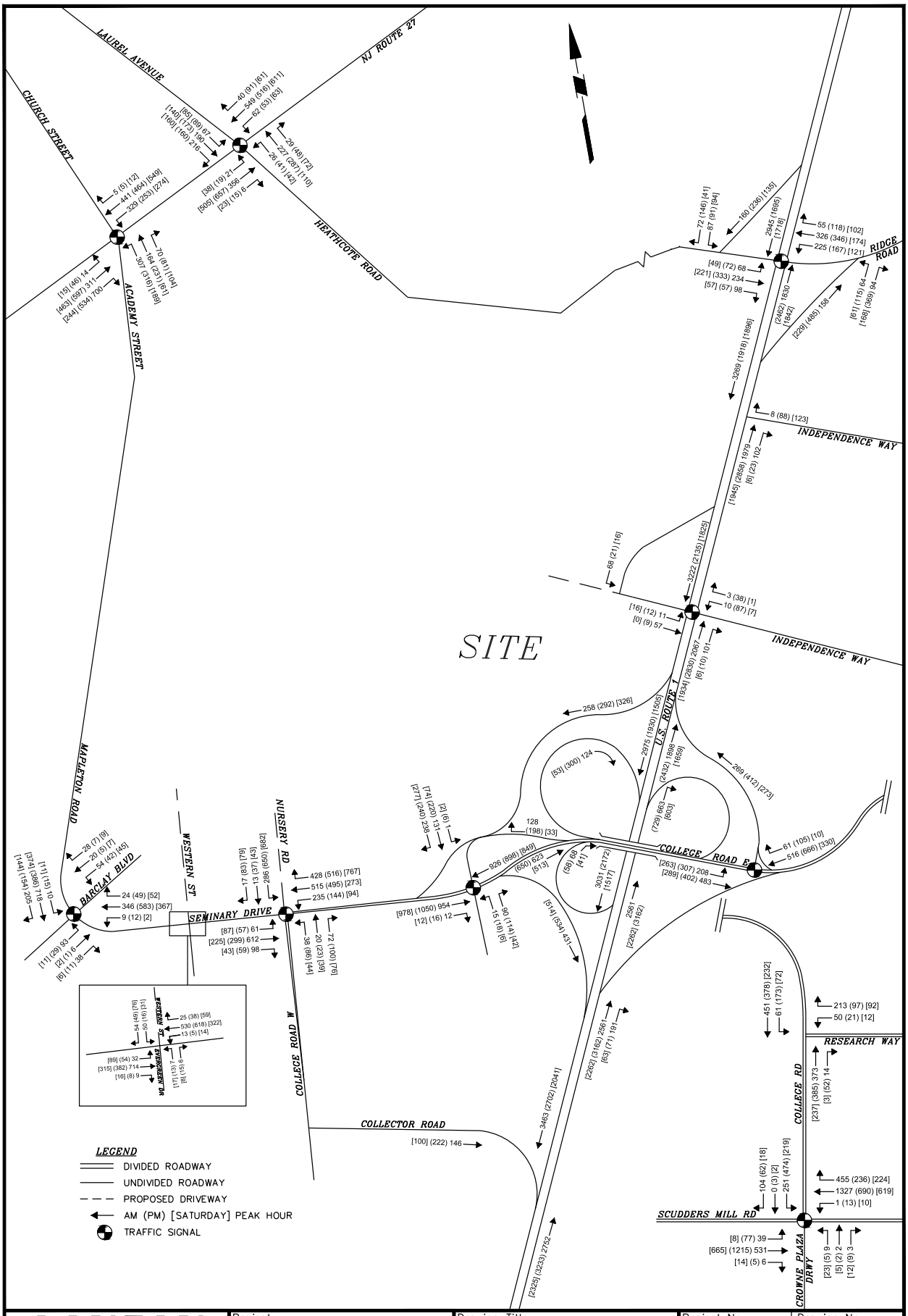


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Drawing Title	TOTAL SITE-GENERATED TRIPS - GDP PLAINSBORO
Project No.	130091505
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Drawn By / Checked By	KAMP
Submission Date	MAY 2025
Drawing No.	FIGURE 6
Sheet	6 of 23

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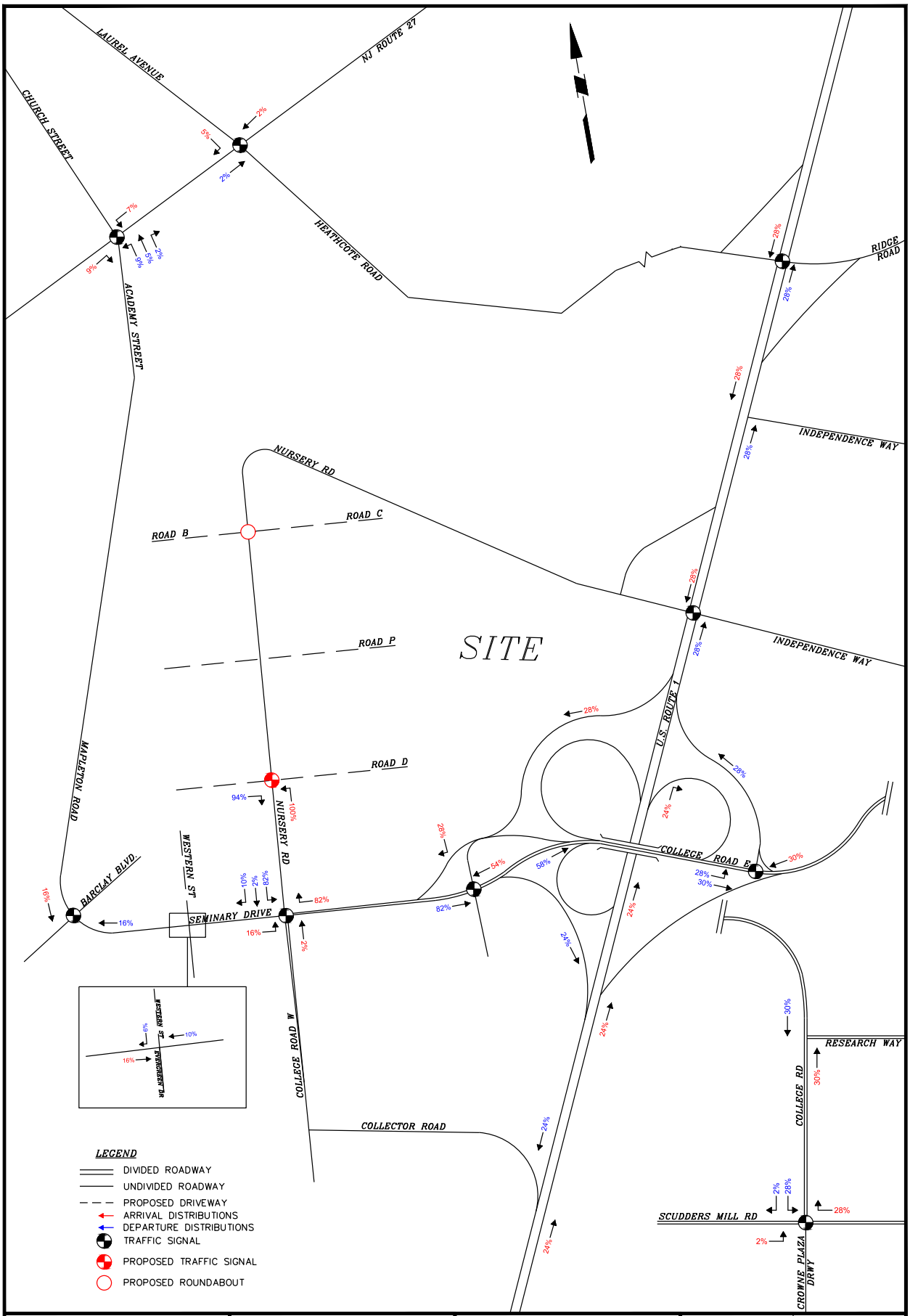
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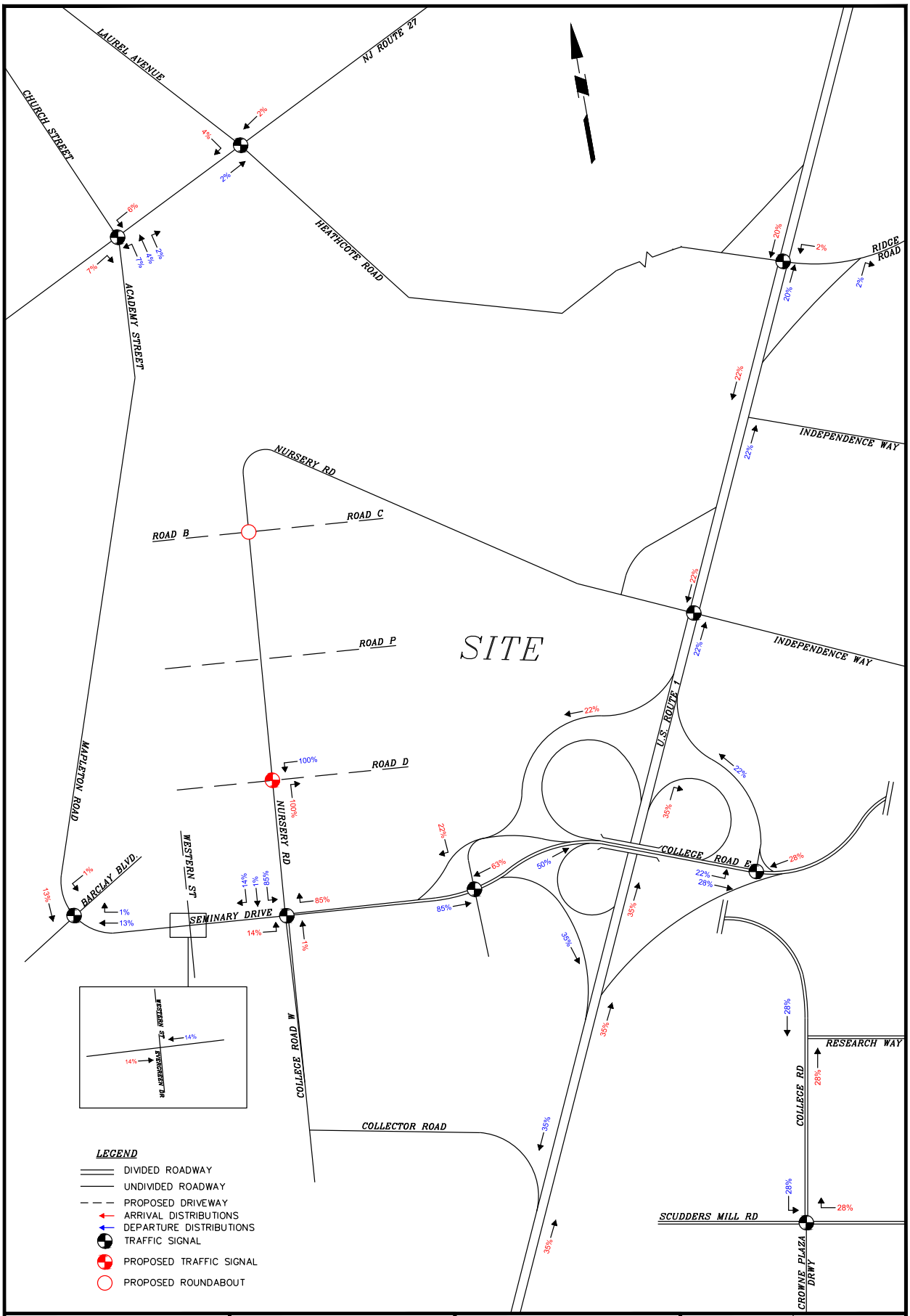
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ARRIVAL & DEPARTURE DISTRIBUTIONS HOTEL - PROPOSED PLAINSBORO

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FIGURE 8
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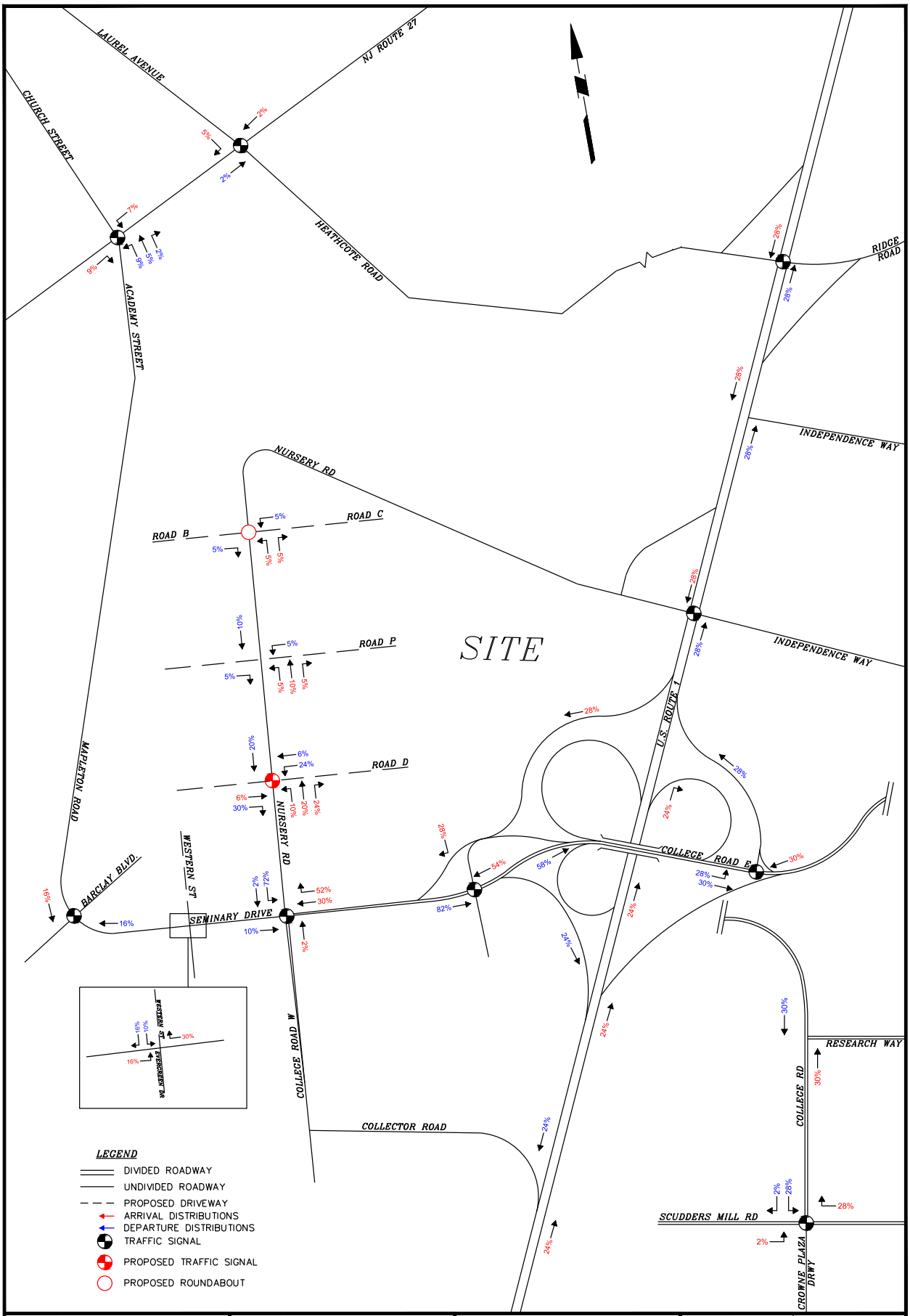
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Drawing Title
ARRIVAL & DEPARTURE DISTRIBUTIONS OFFICE - PROPOSED PLAINSBORO

Project No. 130091505	Drawing No. FIGURE 9
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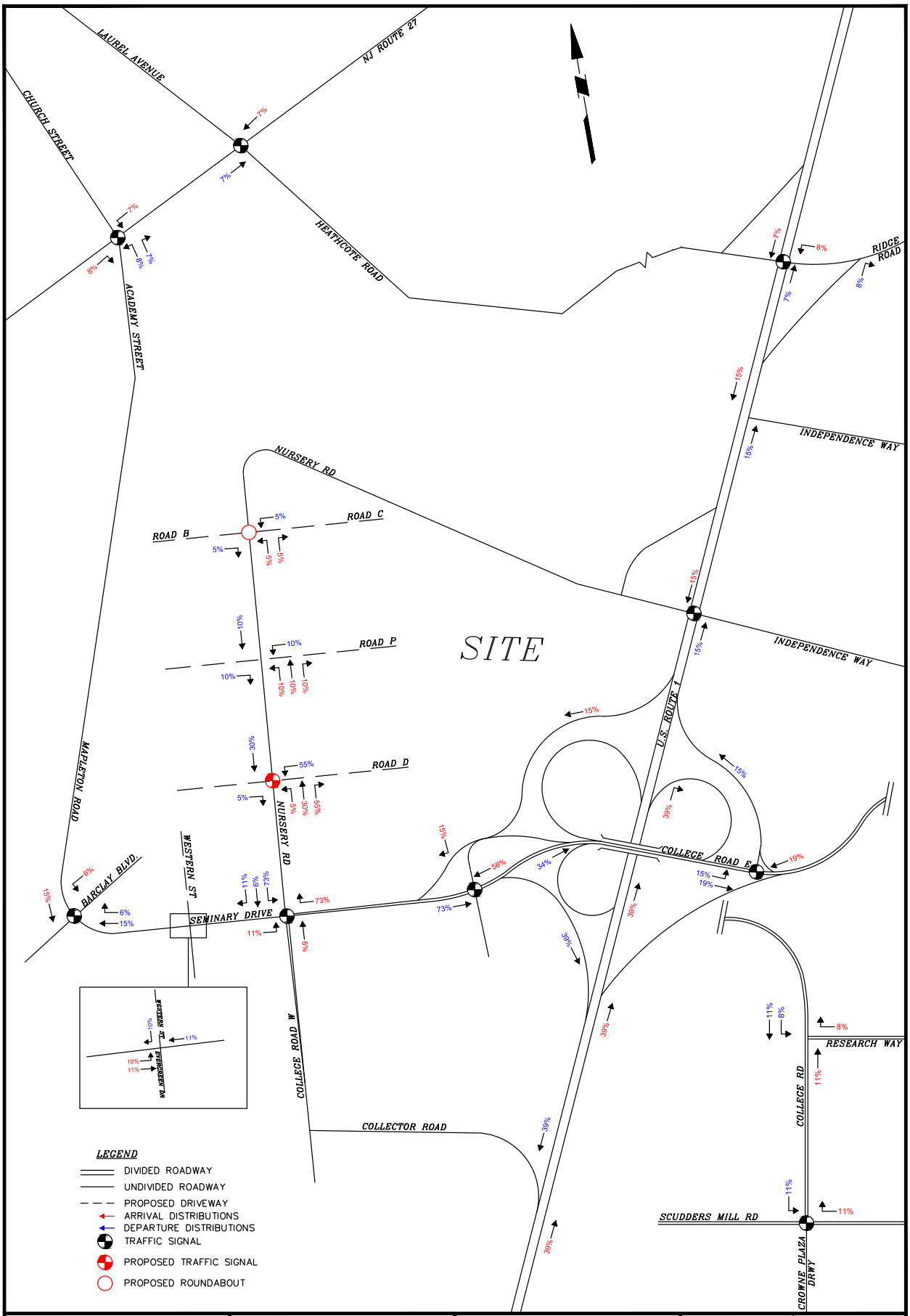
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Drawing Title
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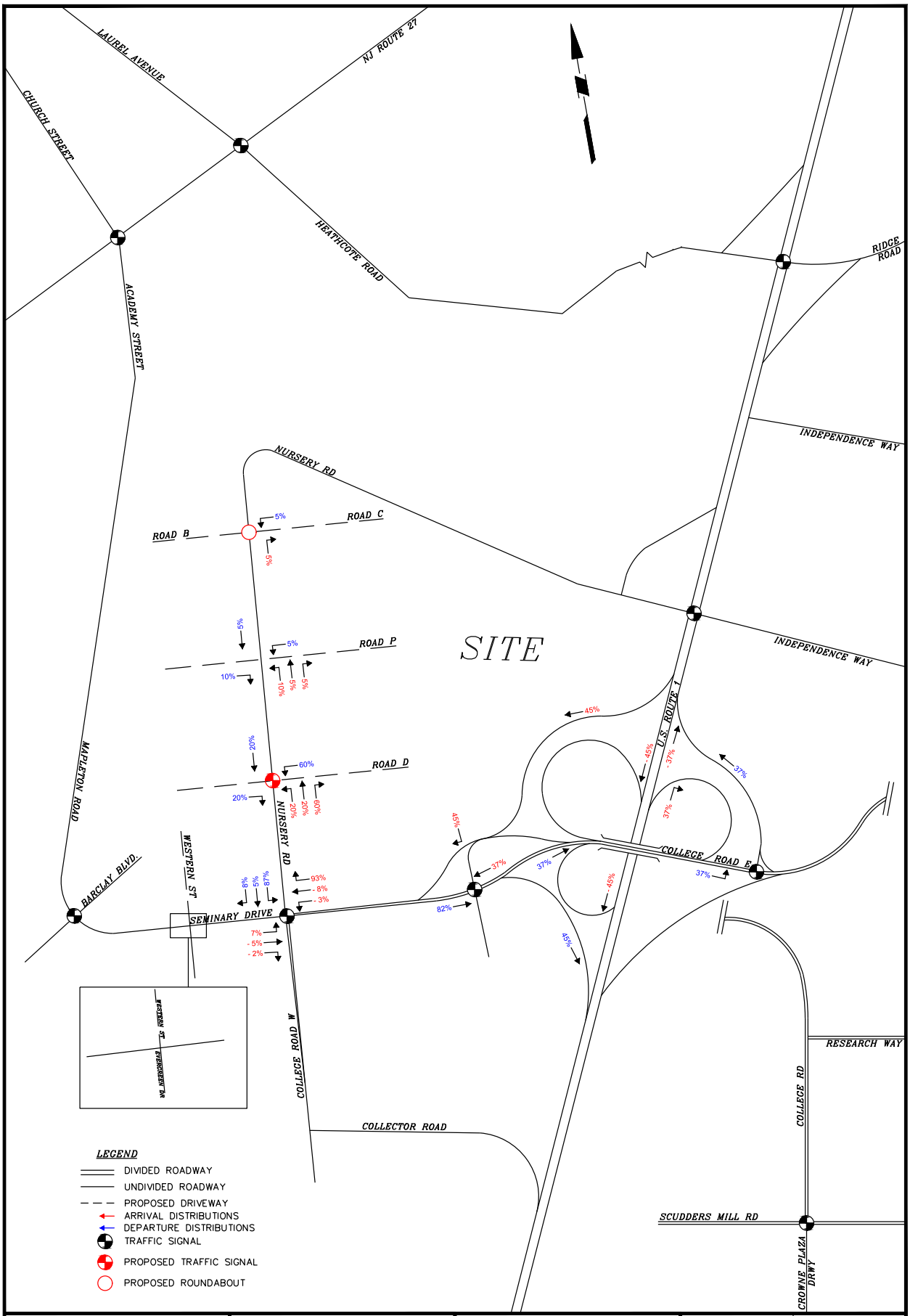
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Project	PRINCETON NURSERIES PLAINSBORO MIDDLESEX COUNTY NEW JERSEY
Drawing Title	ARRIVAL & DEPARTURE DISTRIBUTIONS RETAIL - PROPOSED PLAINSBORO
Project No.	130091505
Date	5/23/2025
Scale	1" = 1'
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Submission Date	MAY 2025
Drawing No.	FIGURE 11
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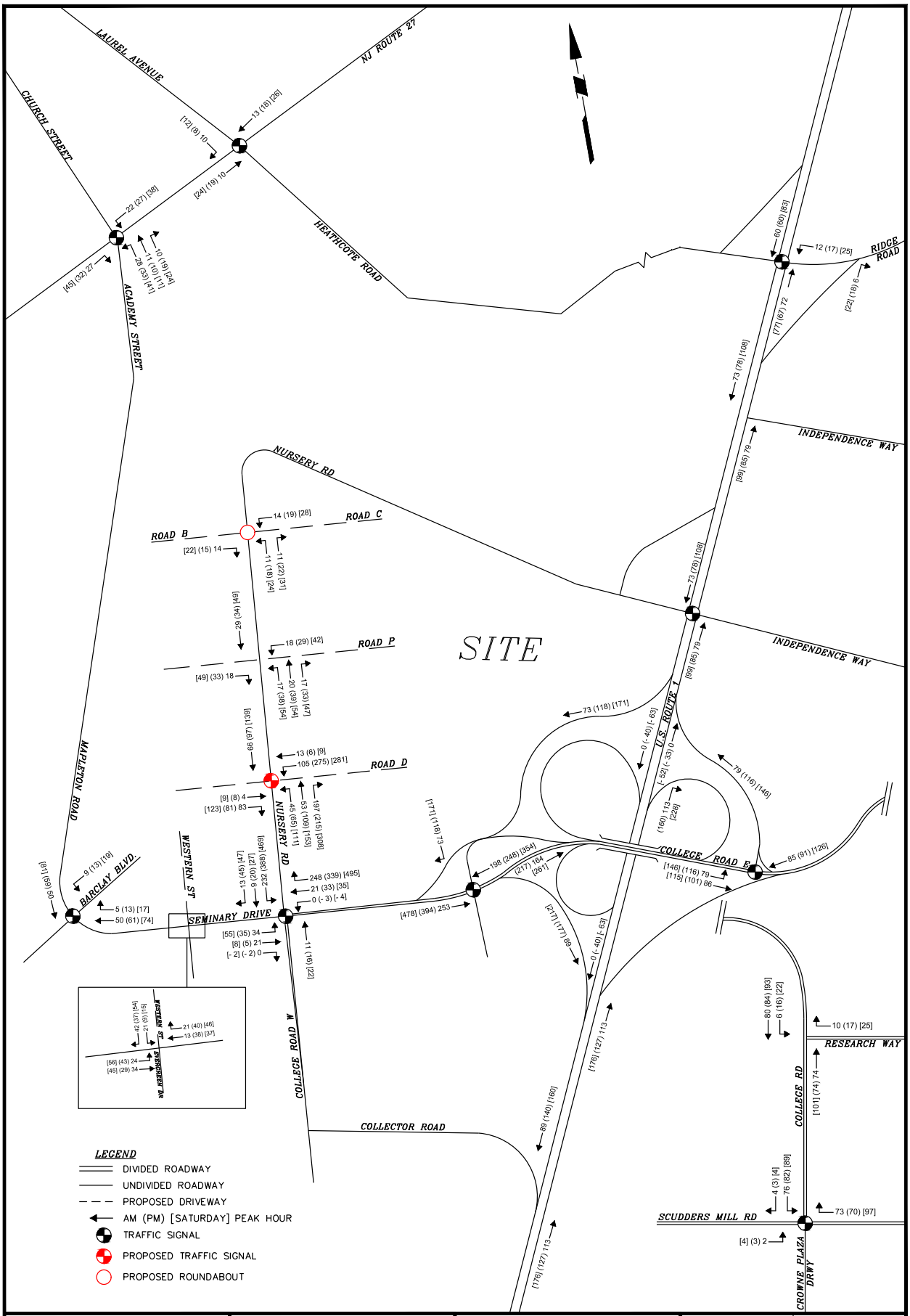
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ARRIVAL & DEPARTURE DISTRIBUTIONS PASS-BY - PROPOSED PLAINSBORO

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Drawing Title
TOTAL SITE-GENERATED TRIPS - PROPOSED PLAINSBORO

Project No. 130091505	Drawing No. FIGURE 13
Date 5/23/2025	
Scale 1" = 1'	
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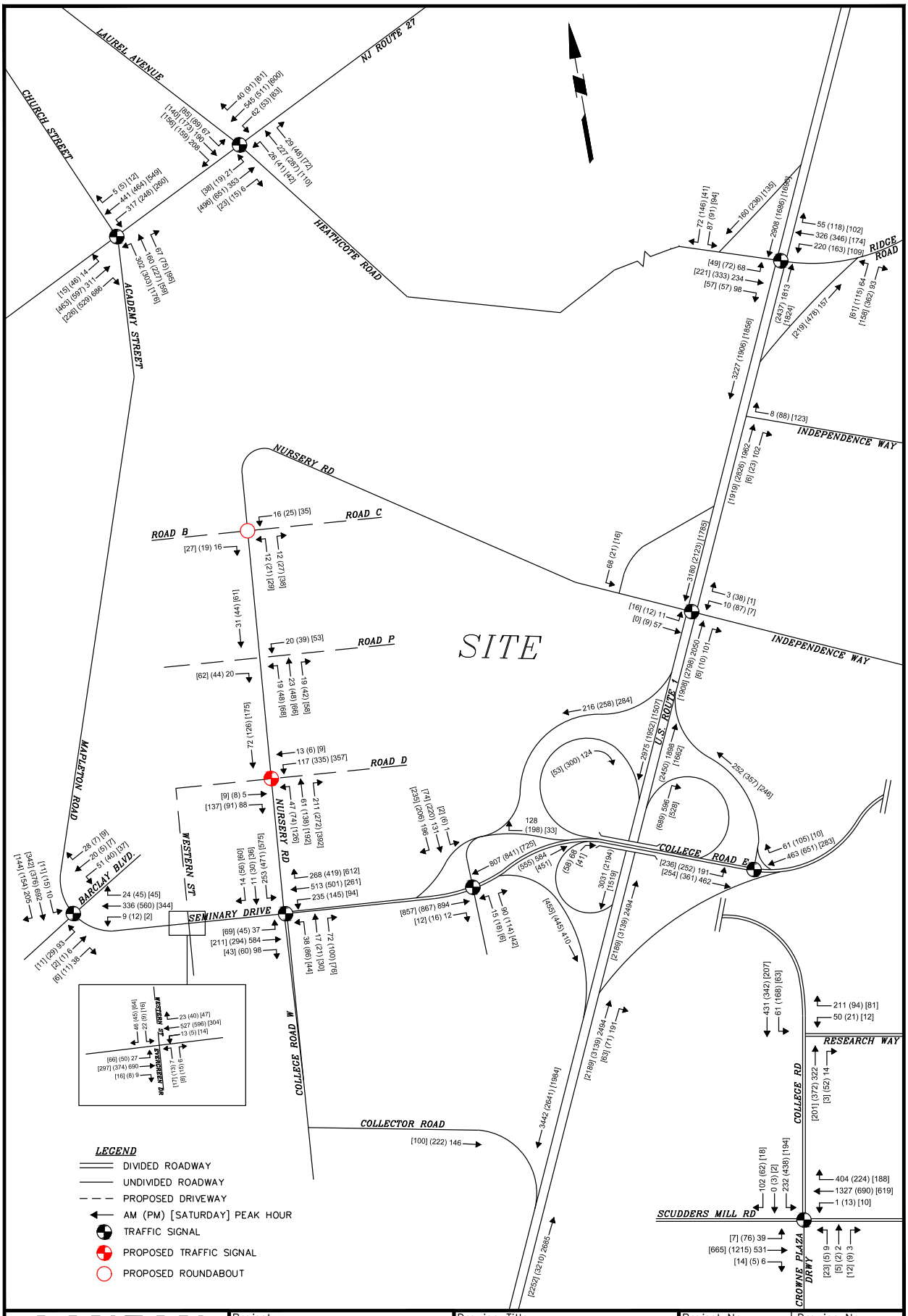
Project
PRINCETON NURSERIES
PLAINSBORO
MIDDLESEX COUNTY NEW JERSEY

Drawing Title
2029 BUILD TRAFFIC VOLUMES - PROPOSED PLAINSBORO

Project No. 130091505	Drawing No. FIGURE 14
Date 5/23/2025	
Scale 1" = 1'	
Drawn By KAMP / Checked By	
Submission Date MAY 2025	Sheet 14 of 23

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Filename: \\langan.com\data\LAW\data5\130091505\Project Data_Discipline\Traffic\Figures & Tables\2025-05 Figures - Revised for E1&E2 changes\2025-05 Princeton Nurseries - Plainsboro TIS - E1&E2 Updates.dwg Date: 5/23/2025 Time: 08:52 User: psabolchick
Style Table: Langan_OCE.stb Layout: 14-BuildPrPl



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Langan Engineering and Environmental Services, Inc.
Langan CT, Inc.
Langan International LLC
Collectively known as Langan
NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project	PRINCETON NURSERIES PLAINSBORO MIDDLESEX COUNTY NEW JERSEY
Drawing Title	2029 BUILD TRAFFIC VOLUMES - PROPOSED PLAINSBORO (WITH E1 & E2)
Project No.	130091505
Date	5/23/2025
Scale	1" = 1'
Drawn By / Checked By	KAMP
Submission Date	MAY 2025
Drawing No.	FIGURE 15
Sheet	15 of 23

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Filename: \\langan.com\data\LAW\data5\130091505\Project Data_Discipline\Traffic\Figures & Tables\2025-05 Figures - Revised for E1&E2 changes\2025-05 Princeton Nurseries - Plainsboro TIS - E1&E2 Updates.dwg Date: 5/23/2025 Time: 08:52 User: psabolchick
Style Table: Langan_OCE.stb Layout: 15-BuildPrPl-E1E2

APPENDIX B
TRAFFIC COUNTS

Route 1 & Ridge Rd (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Ridge Rd							Ridge Rd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*
2024-02-29 7:00AM	10	40	10	0	10	**70**	0	25	51	18	0	1	**95**	0
7:15AM	11	32	8	0	9	**60**	0	32	66	15	0	0	**113**	0
7:30AM	13	38	7	0	21	**79**	0	41	63	20	0	0	**124**	0
7:45AM	16	65	13	0	12	**106**	0	49	92	10	0	0	**151**	0
Hourly Total	50	175	38	0	52	**315**	0	147	272	63	0	1	**483**	0
8:00AM	9	55	3	0	11	**78**	0	47	68	5	0	0	**120**	0
8:15AM	22	49	9	0	11	**91**	0	45	65	13	0	1	**124**	0
8:30AM	16	57	4	0	6	**83**	0	47	66	25	0	0	**138**	0
8:45AM	17	56	3	0	18	**94**	0	58	50	32	0	4	**144**	0
Hourly Total	64	217	19	0	46	**346**	0	197	249	75	0	5	**526**	0
9:00AM	16	51	6	0	2	**75**	0	27	40	22	0	5	**94**	0
9:15AM	8	53	10	0	3	**74**	0	23	50	24	0	0	**97**	0
Hourly Total	24	104	16	0	5	**149**	0	50	90	46	0	5	**191**	0
4:00PM	16	70	17	0	3	**106**	0	27	55	23	0	0	**105**	0
4:15PM	12	73	1	0	10	**96**	0	18	98	26	0	1	**143**	0
4:30PM	14	73	13	0	6	**106**	0	24	88	25	0	1	**138**	0
4:45PM	21	76	8	0	5	**110**	0	23	69	27	0	2	**121**	0
Hourly Total	63	292	39	0	24	**418**	0	92	310	101	0	4	**507**	0
5:00PM	19	66	2	0	5	**92**	0	39	84	24	0	2	**149**	0
5:15PM	19	76	9	0	9	**113**	0	38	85	21	0	0	**144**	0
5:30PM	5	76	9	0	3	**93**	0	24	68	26	0	2	**120**	0
5:45PM	22	72	8	0	9	**111**	0	22	46	16	0	0	**84**	0
Hourly Total	65	290	28	0	26	**409**	0	123	283	87	0	4	**497**	0
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Total	266	1078	140	0	153	**1637**	0	609	1204	372	0	19	**2204**	0
% Approach	16.2%	65.9%	8.6%	0%	9.3%	**-**	-	27.6%	54.6%	16.9%	0%	0.9%	**-**	-
% Total	1.3%	5.3%	0.7%	0%	0.8%	**8.0%**	-	3.0%	5.9%	1.8%	0%	0.1%	**10.8%**	-
Lights	260	1062	137	0	148	**1607**	-	600	1172	364	0	18	**2154**	-
% Lights	97.7%	98.5%	97.9%	0%	96.7%	**98.2%**	-	98.5%	97.3%	97.8%	0%	94.7%	**97.7%**	-
Articulated Trucks and Single-Unit Trucks	3	12	1	0	2	**18**	-	4	24	5	0	1	**34**	-
% Articulated Trucks and Single-Unit Trucks	1.1%	1.1%	0.7%	0%	1.3%	**1.1%**	-	0.7%	2.0%	1.3%	0%	5.3%	**1.5%**	-
Buses	3	4	2	0	3	**12**	-	5	8	3	0	0	**16**	-
% Buses	1.1%	0.4%	1.4%	0%	2.0%	**0.7%**	-	0.8%	0.7%	0.8%	0%	0%	**0.7%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Ridge Rd (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616

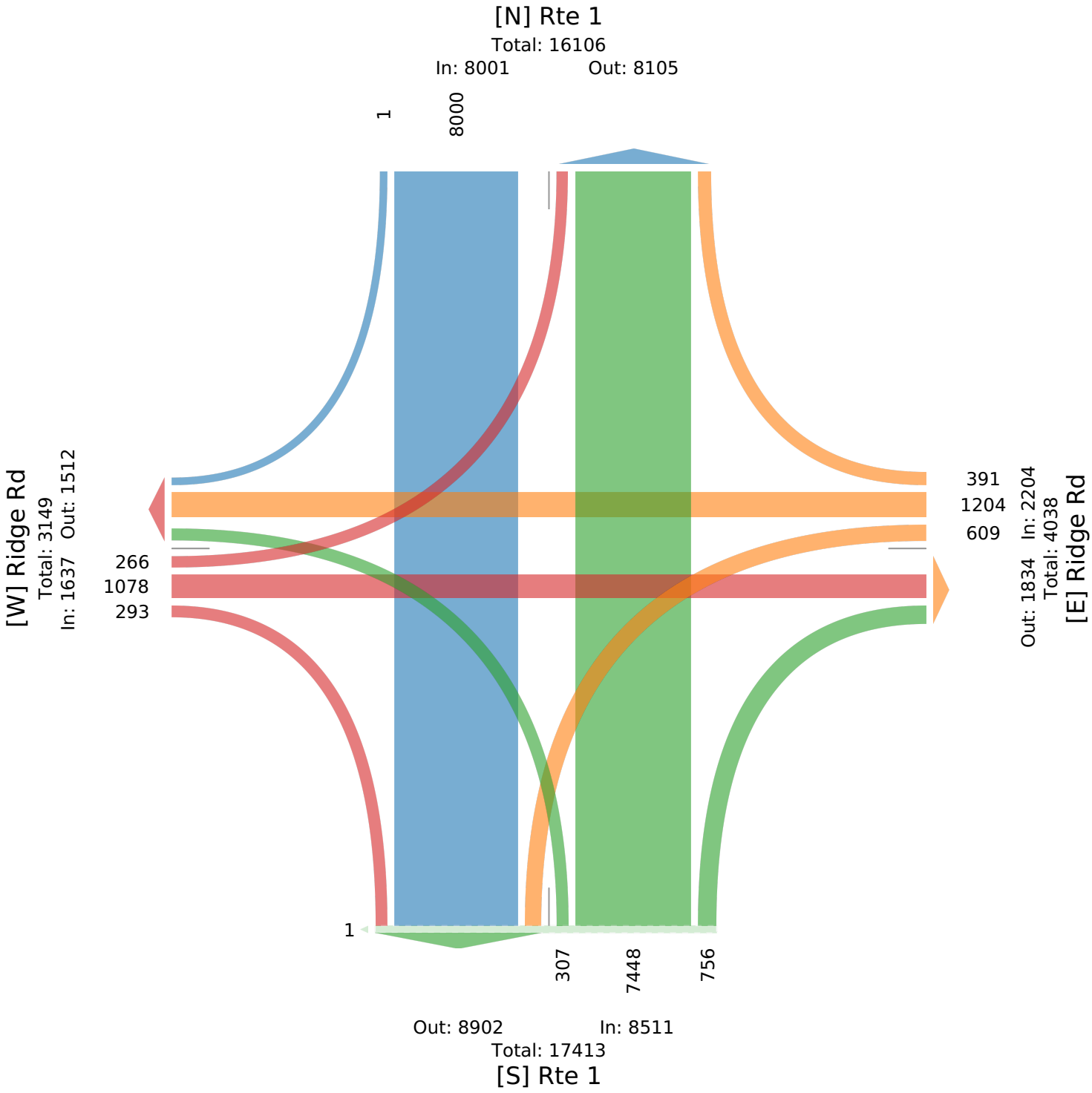
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Rte 1							Rte 1						
Direction	Northbound							Southbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-02-29 7:00AM	10	373	28	0	8	**419**	0	0	390	0	0	**390**	0	**974**
7:15AM	14	374	35	0	8	**431**	0	0	494	0	0	**494**	0	**1098**
7:30AM	8	423	16	0	6	**453**	1	0	710	0	0	**710**	0	**1366**
7:45AM	22	352	13	0	5	**392**	0	0	591	0	0	**591**	0	**1240**
Hourly Total	54	1522	92	0	27	**1695**	1	0	2185	0	0	**2185**	0	**4678**
8:00AM	13	354	13	0	3	**383**	0	0	554	0	0	**554**	0	**1135**
8:15AM	14	355	13	0	6	**388**	0	0	553	0	0	**553**	0	**1156**
8:30AM	13	340	23	0	13	**389**	0	0	497	0	0	**497**	0	**1107**
8:45AM	13	307	21	0	3	**344**	0	0	503	0	0	**503**	0	**1085**
Hourly Total	53	1356	70	0	25	**1504**	0	0	2107	0	0	**2107**	0	**4483**
9:00AM	4	374	17	0	1	**396**	0	0	460	0	0	**460**	0	**1025**
9:15AM	8	397	13	0	4	**422**	0	0	470	0	0	**470**	0	**1063**
Hourly Total	12	771	30	0	5	**818**	0	0	930	0	0	**930**	0	**2088**
4:00PM	25	411	34	0	14	**484**	0	0	357	0	0	**357**	0	**1052**
4:15PM	21	420	32	0	27	**500**	0	0	378	0	0	**378**	0	**1117**
4:30PM	23	479	41	0	17	**560**	0	0	351	0	0	**351**	0	**1155**
4:45PM	23	421	65	0	21	**530**	0	0	283	1	0	**284**	0	**1045**
Hourly Total	92	1731	172	0	79	**2074**	0	0	1369	1	0	**1370**	0	**4369**
5:00PM	24	538	53	0	21	**636**	0	0	391	0	0	**391**	0	**1268**
5:15PM	26	504	60	0	22	**612**	0	0	387	0	0	**387**	0	**1256**
5:30PM	29	521	48	0	9	**607**	0	0	323	0	0	**323**	0	**1143**
5:45PM	17	505	40	0	3	**565**	0	0	308	0	0	**308**	0	**1068**
Hourly Total	96	2068	201	0	55	**2420**	0	0	1409	0	0	**1409**	0	**4735**
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Total	307	7448	565	0	191	**8511**	1	0	8000	1	0	**8001**	0	**20353**
% Approach	3.6%	87.5%	6.6%	0%	2.2%	**-**	-	0%	100.0%	0%	0%	**-**	-	-
% Total	1.5%	36.6%	2.8%	0%	0.9%	**41.8%**	-	0%	39.3%	0%	0%	**39.3%**	-	-
Lights	293	7047	553	0	189	**8082**	-	0	7580	1	0	**7581**	-	19424
% Lights	95.4%	94.6%	97.9%	0%	99.0%	**95.0%**	-	0%	94.8%	100%	0%	**94.8%**	-	95.4%
Articulated Trucks and Single-Unit Trucks	11	370	4	0	1	**386**	-	0	367	0	0	**367**	-	805
% Articulated Trucks and Single-Unit Trucks	3.6%	5.0%	0.7%	0%	0.5%	**4.5%**	-	0%	4.6%	0%	0%	**4.6%**	-	4.0%
Buses	3	31	8	0	1	**43**	-	0	53	0	0	**53**	-	124
% Buses	1.0%	0.4%	1.4%	0%	0.5%	**0.5%**	-	0%	0.7%	0%	0%	**0.7%**	-	0.6%
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Ridge Rd (2/29) - TMC
Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Route 1 & Ridge Rd (2/29) - TMC

Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616



Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Ridge Rd							Ridge Rd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-02-29 7:30AM	13	38	7	0	21	**79**	0	41	63	20	0	0	**124**	0
7:45AM	16	65	13	0	12	**106**	0	49	92	10	0	0	**151**	0
8:00AM	9	55	3	0	11	**78**	0	47	68	5	0	0	**120**	0
8:15AM	22	49	9	0	11	**91**	0	45	65	13	0	1	**124**	0
Total	60	207	32	0	55	**354**	0	182	288	48	0	1	**519**	0
% Approach	16.9%	58.5%	9.0%	0%	15.5%	**-**	-	35.1%	55.5%	9.2%	0%	0.2%	**-**	-
% Total	1.2%	4.2%	0.7%	0%	1.1%	**7.2%**	-	3.7%	5.9%	1.0%	0%	0%	**10.6%**	-
PHF	0.682	0.796	0.615	-	0.655	**0.835**	-	0.929	0.783	0.600	-	0.250	**0.859**	-
Lights	59	203	30	0	52	**344**	-	179	276	48	0	0	**503**	-
% Lights	98.3%	98.1%	93.8%	0%	94.5%	**97.2%**	-	98.4%	95.8%	100%	0%	0%	**96.9%**	-
Articulated Trucks and Single-Unit Trucks	1	3	1	0	1	**6**	-	0	8	0	0	1	**9**	-
% Articulated Trucks and Single-Unit Trucks	1.7%	1.4%	3.1%	0%	1.8%	**1.7%**	-	0%	2.8%	0%	0%	100%	**1.7%**	-
Buses	0	1	1	0	2	**4**	-	3	4	0	0	0	**7**	-
% Buses	0%	0.5%	3.1%	0%	3.6%	**1.1%**	-	1.6%	1.4%	0%	0%	0%	**1.3%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Ridge Rd (2/29) - TMC

Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616



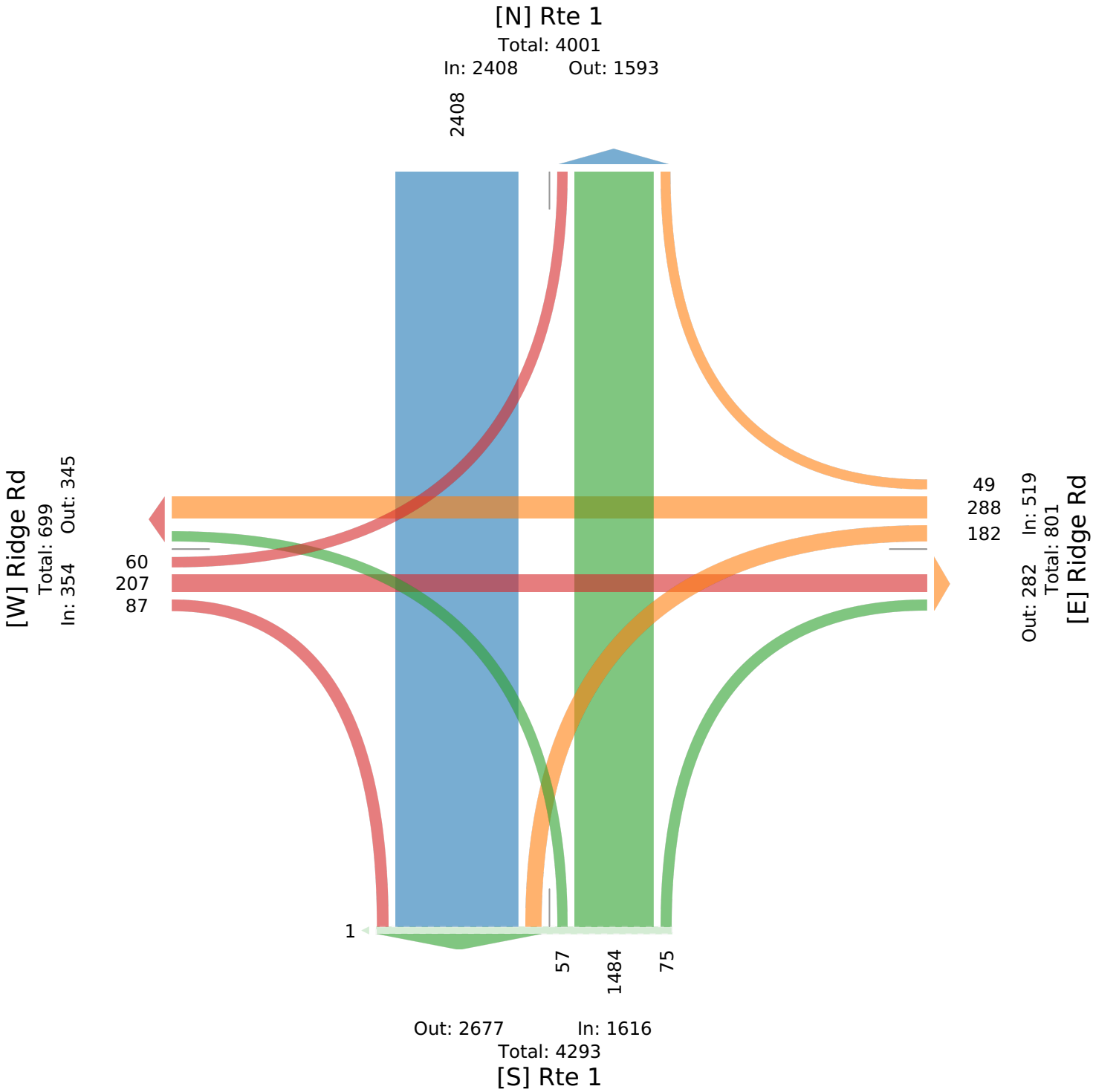
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Rte 1 Northbound							Rte 1 Southbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-02-29 7:30AM	8	423	16	0	6	**453**	1	0	710	0	0	**710**	0	**1366**
7:45AM	22	352	13	0	5	**392**	0	0	591	0	0	**591**	0	**1240**
8:00AM	13	354	13	0	3	**383**	0	0	554	0	0	**554**	0	**1135**
8:15AM	14	355	13	0	6	**388**	0	0	553	0	0	**553**	0	**1156**
Total	57	1484	55	0	20	**1616**	1	0	2408	0	0	**2408**	0	**4897**
% Approach	3.5%	91.8%	3.4%	0%	1.2%	**-**	-	0%	100%	0%	0%	**-**	-	**-**
% Total	1.2%	30.3%	1.1%	0%	0.4%	**33.0%**	-	0%	49.2%	0%	0%	**49.2%**	-	**-**
PHF	0.648	0.877	0.859	-	0.833	**0.892**	-	-	0.848	-	-	**0.848**	-	0.896
Lights	53	1374	51	0	20	**1498**	-	0	2272	0	0	**2272**	-	4617
% Lights	93.0%	92.6%	92.7%	0%	100%	**92.7%**	-	0%	94.4%	0%	0%	**94.4%**	-	94.3%
Articulated Trucks and Single-Unit Trucks	2	104	0	0	0	**106**	-	0	112	0	0	**112**	-	233
% Articulated Trucks and Single-Unit Trucks	3.5%	7.0%	0%	0%	0%	**6.6%**	-	0%	4.7%	0%	0%	**4.7%**	-	4.8%
Buses	2	6	4	0	0	**12**	-	0	24	0	0	**24**	-	47
% Buses	3.5%	0.4%	7.3%	0%	0%	**0.7%**	-	0%	1.0%	0%	0%	**1.0%**	-	1.0%
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Ridge Rd (2/29) - TMC
Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Route 1 & Ridge Rd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Ridge Rd							Ridge Rd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-02-29 4:45PM	21	76	8	0	5	**110**	0	23	69	27	0	2	**121**	0
5:00PM	19	66	2	0	5	**92**	0	39	84	24	0	2	**149**	0
5:15PM	19	76	9	0	9	**113**	0	38	85	21	0	0	**144**	0
5:30PM	5	76	9	0	3	**93**	0	24	68	26	0	2	**120**	0
Total	64	294	28	0	22	**408**	0	124	306	98	0	6	**534**	0
% Approach	15.7%	72.1%	6.9%	0%	5.4%	**-**	-	23.2%	57.3%	18.4%	0%	1.1%	**-**	-
% Total	1.4%	6.2%	0.6%	0%	0.5%	**8.7%**	-	2.6%	6.5%	2.1%	0%	0.1%	**11.3%**	-
PHF	0.762	0.967	0.778	-	0.611	**0.903**	-	0.795	0.900	0.907	-	0.750	**0.896**	-
Lights	62	293	28	0	22	**405**	-	123	301	98	0	6	**528**	-
% Lights	96.9%	99.7%	100%	0%	100%	**99.3%**	-	99.2%	98.4%	100%	0%	100%	**98.9%**	-
Articulated Trucks and Single-Unit Trucks	2	0	0	0	0	**2**	-	0	4	0	0	0	**4**	-
% Articulated Trucks and Single-Unit Trucks	3.1%	0%	0%	0%	0%	**0.5%**	-	0%	1.3%	0%	0%	0%	**0.7%**	-
Buses	0	1	0	0	0	**1**	-	1	1	0	0	0	**2**	-
% Buses	0%	0.3%	0%	0%	0%	**0.2%**	-	0.8%	0.3%	0%	0%	0%	**0.4%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Ridge Rd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616

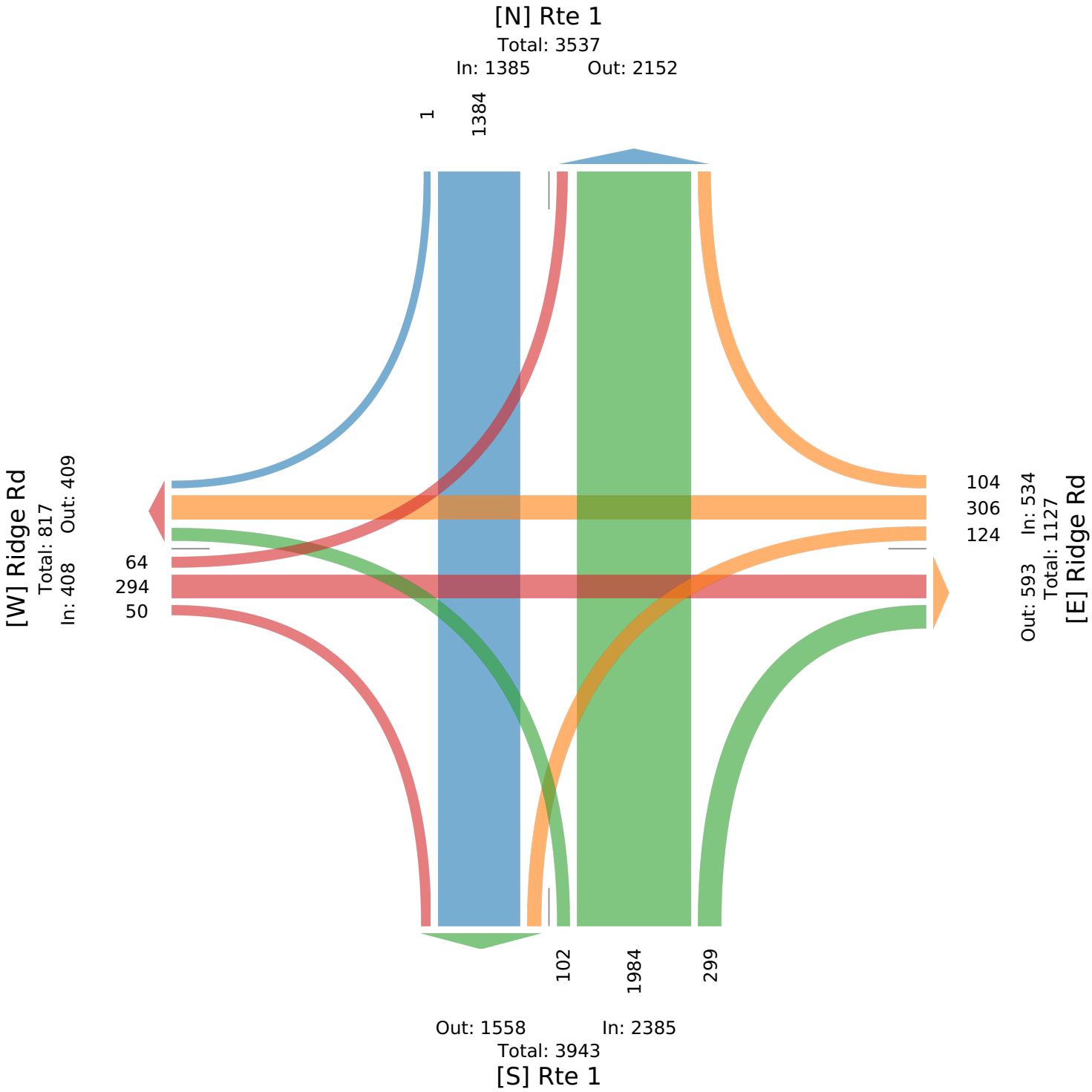
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Rte 1 Northbound							Rte 1 Southbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-02-29 4:45PM	23	421	65	0	21	**530**	0	0	283	1	0	**284**	0	**1045**
5:00PM	24	538	53	0	21	**636**	0	0	391	0	0	**391**	0	**1268**
5:15PM	26	504	60	0	22	**612**	0	0	387	0	0	**387**	0	**1256**
5:30PM	29	521	48	0	9	**607**	0	0	323	0	0	**323**	0	**1143**
Total	102	1984	226	0	73	**2385**	0	0	1384	1	0	**1385**	0	**4712**
% Approach	4.3%	83.2%	9.5%	0%	3.1%	**-**	-	0%	99.9%	0.1%	0%	**-**	-	**-**
% Total	2.2%	42.1%	4.8%	0%	1.5%	**50.6%**	-	0%	29.4%	0%	0%	**29.4%**	-	**-**
PHF	0.879	0.922	0.869	-	0.830	**0.938**	-	-	0.885	0.250	-	**0.886**	-	0.929
Lights	100	1934	224	0	73	**2331**	-	0	1359	1	0	**1360**	-	4624
% Lights	98.0%	97.5%	99.1%	0%	100%	**97.7%**	-	0%	98.2%	100%	0%	**98.2%**	-	98.1%
Articulated Trucks and Single-Unit Trucks	2	48	1	0	0	**51**	-	0	25	0	0	**25**	-	82
% Articulated Trucks and Single-Unit Trucks	2.0%	2.4%	0.4%	0%	0%	**2.1%**	-	0%	1.8%	0%	0%	**1.8%**	-	1.7%
Buses	0	2	1	0	0	**3**	-	0	0	0	0	**0**	-	6
% Buses	0%	0.1%	0.4%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Ridge Rd (2/29) - TMC
Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160858, Location: 40.366382, -74.595616

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



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Plainsboro, NJ
Route 1 & NB Jughandle
Saturday, February 3, 2024
Location: 40.366382, -74.595616

Count Name: Route 1 & Ridge Rd (3/2)
Site Code:
Start Date: 03/02/2024

Turning Movement Data

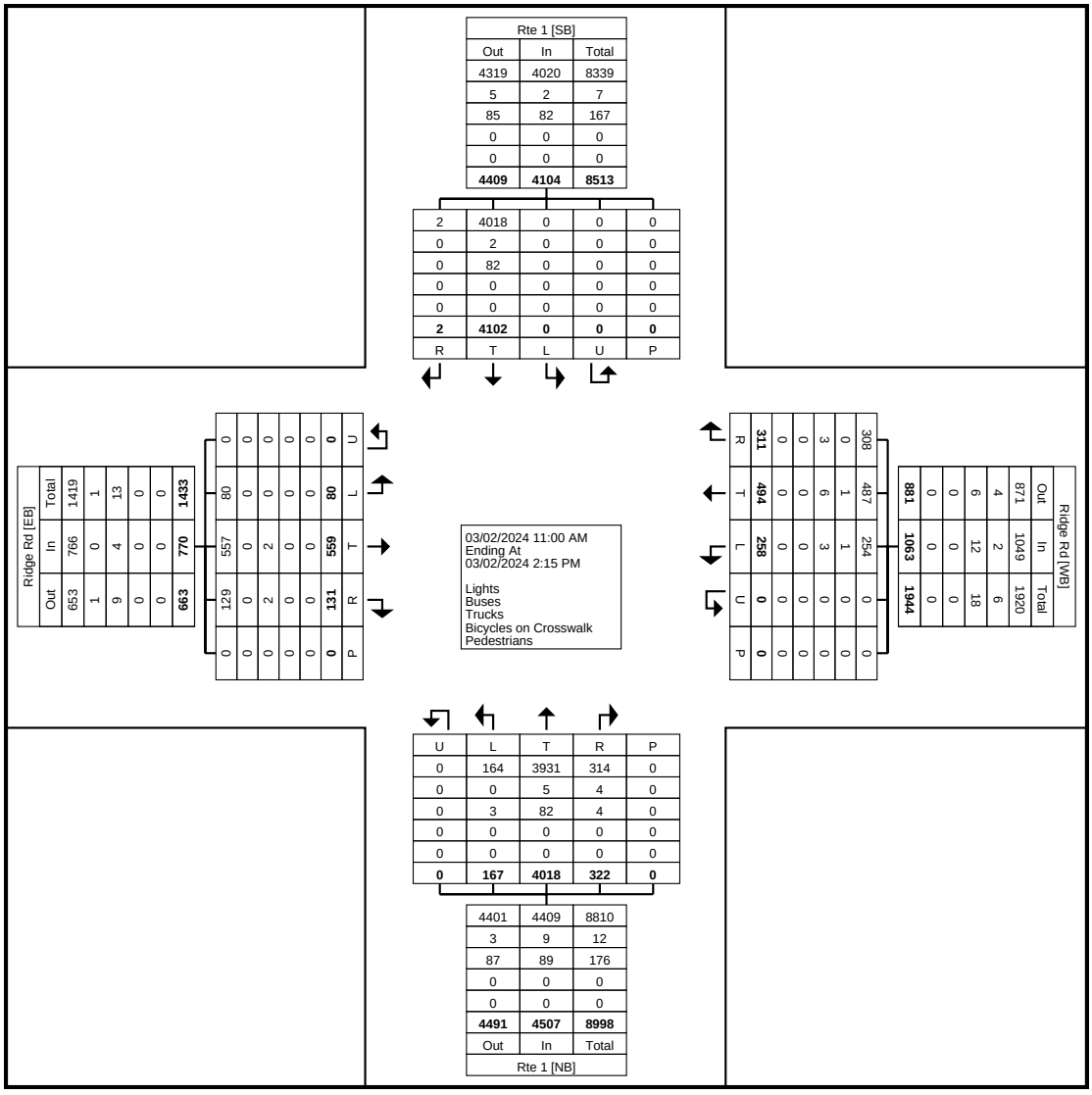
Start Time	Ridge Rd Eastbound							Ridge Rd Westbound							Rte 1 Northbound							Rte 1 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	7	49	6	3	0	0	65	28	30	35	10	0	0	103	15	331	11	9	0	0	366	0	300	1	0	0	301	835
11:15 AM	13	46	5	2	0	0	66	15	40	27	1	0	0	83	12	322	18	5	0	0	357	0	332	0	0	0	332	838
11:30 AM	9	39	7	7	0	0	62	15	44	26	1	0	0	86	19	367	27	7	0	0	420	0	340	0	0	0	340	908
11:45 AM	12	58	7	5	0	0	82	20	35	18	1	0	0	74	4	332	15	10	0	0	361	0	361	0	0	0	361	878
Hourly Total	41	192	25	17	0	0	275	78	149	106	13	0	0	346	50	1352	71	31	0	0	1504	0	1333	1	0	0	1334	3459
12:00 PM	16	43	7	6	0	0	72	20	38	26	2	0	0	86	14	388	24	6	0	0	432	0	332	0	0	0	332	922
12:15 PM	6	55	5	6	0	0	72	12	37	15	1	0	0	65	17	395	20	4	0	0	436	0	340	0	0	0	340	913
12:30 PM	6	41	5	5	0	0	57	29	50	26	0	0	0	105	19	360	32	3	0	0	414	0	327	0	0	0	327	903
12:45 PM	11	55	5	7	0	0	78	24	34	26	0	0	0	84	14	353	20	3	0	0	390	0	325	0	0	0	325	877
Hourly Total	39	194	22	24	0	0	279	85	159	93	3	0	0	340	64	1496	96	16	0	0	1672	0	1324	0	0	0	1324	3615
1:00 PM	0	28	5	3	0	0	36	27	50	18	1	0	0	96	14	289	26	8	0	0	337	0	333	0	0	0	333	802
1:15 PM	0	47	6	10	0	0	63	15	35	18	3	0	0	71	9	299	20	10	0	0	338	0	396	0	0	0	396	868
1:30 PM	0	58	6	4	0	0	68	25	55	26	0	0	0	106	15	284	11	3	0	0	313	0	352	1	0	0	353	840
1:45 PM	0	40	2	6	0	0	48	28	46	30	0	0	0	104	15	297	28	2	0	0	342	0	364	0	0	0	364	858
Hourly Total	0	173	19	23	0	0	215	95	186	92	4	0	0	377	53	1169	85	23	0	0	1330	0	1445	1	0	0	1446	3368
2:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
Grand Total	80	559	66	65	0	0	770	258	494	291	20	0	0	1063	167	4018	252	70	0	0	4507	0	4102	2	0	0	4104	10444
Approach %	10.4	72.6	8.6	8.4	0.0	-	-	24.3	46.5	27.4	1.9	0.0	-	-	3.7	89.2	5.6	1.6	0.0	-	-	0.0	100.0	0.0	0.0	-	-	-
Total %	0.8	5.4	0.6	0.6	0.0	-	7.4	2.5	4.7	2.8	0.2	0.0	-	10.2	1.6	38.5	2.4	0.7	0.0	-	43.2	0.0	39.3	0.0	0.0	-	39.3	-
Lights	80	557	65	64	0	-	766	254	487	289	19	0	-	1049	164	3931	246	68	0	-	4409	0	4018	2	0	-	4020	10244
% Lights	100.0	99.6	98.5	98.5	-	-	99.5	98.4	98.6	99.3	95.0	-	-	98.7	98.2	97.8	97.6	97.1	-	-	97.8	-	98.0	100.0	-	-	98.0	98.1
Buses	0	0	0	0	0	-	0	1	1	0	0	0	-	2	0	5	3	1	0	-	9	0	2	0	0	-	2	13
% Buses	0.0	0.0	0.0	0.0	-	-	0.0	0.4	0.2	0.0	0.0	-	-	0.2	0.0	0.1	1.2	1.4	-	-	0.2	-	0.0	0.0	-	-	0.0	0.1
Trucks	0	2	1	1	0	-	4	3	6	2	1	0	-	12	3	82	3	1	0	-	89	0	82	0	0	-	82	187
% Trucks	0.0	0.4	1.5	1.5	-	-	0.5	1.2	1.2	0.7	5.0	-	-	1.1	1.8	2.0	1.2	1.4	-	-	2.0	-	2.0	0.0	-	-	2.0	1.8
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Plainsboro, NJ
Route 1 & NB Jughandle
Saturday, February 3, 2024
Location: 40.366382, -74.595616

Count Name: Route 1 & Ridge Rd (3/2)
Site Code:
Start Date: 03/02/2024



Turning Movement Data Plot

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Plainsboro, NJ
Route 1 & NB Jughandle
Saturday, February 3, 2024
Location: 40.366382, -74.595616

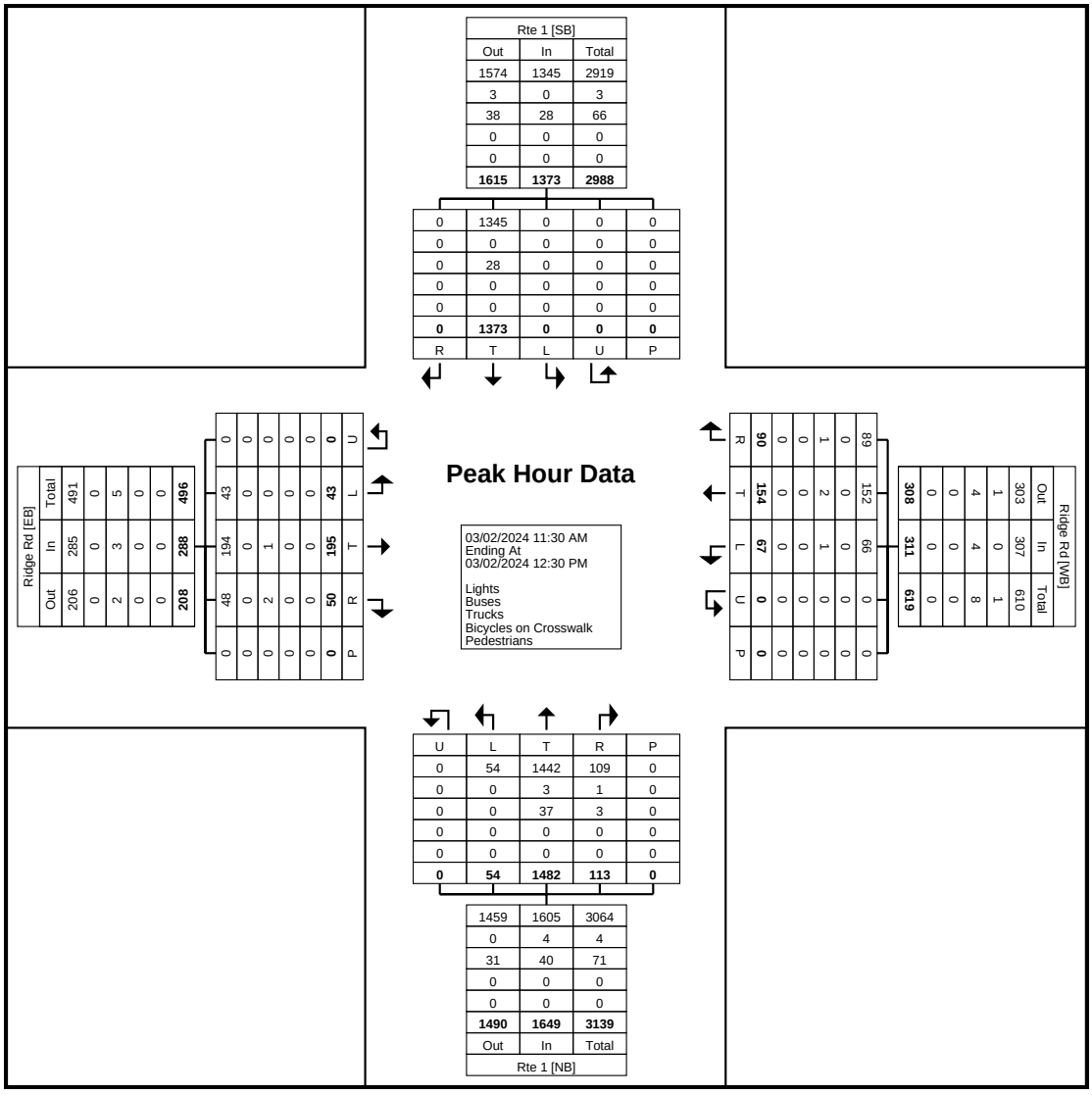
Count Name: Route 1 & Ridge Rd (3/2)
Site Code:
Start Date: 03/02/2024

Turning Movement Peak Hour Data (11:30 AM)

Start Time	Ridge Rd Eastbound							Ridge Rd Westbound							Rte 1 Northbound							Rte 1 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:30 AM	9	39	7	7	0	0	62	15	44	26	1	0	0	86	19	367	27	7	0	0	420	0	340	0	0	0	340	908
11:45 AM	12	58	7	5	0	0	82	20	35	18	1	0	0	74	4	332	15	10	0	0	361	0	361	0	0	0	361	878
12:00 PM	16	43	7	6	0	0	72	20	38	26	2	0	0	86	14	388	24	6	0	0	432	0	332	0	0	0	332	922
12:15 PM	6	55	5	6	0	0	72	12	37	15	1	0	0	65	17	395	20	4	0	0	436	0	340	0	0	0	340	913
Total	43	195	26	24	0	0	288	67	154	85	5	0	0	311	54	1482	86	27	0	0	1649	0	1373	0	0	0	1373	3621
Approach %	14.9	67.7	9.0	8.3	0.0	-	-	21.5	49.5	27.3	1.6	0.0	-	-	3.3	89.9	5.2	1.6	0.0	-	-	0.0	100.0	0.0	0.0	-	-	-
Total %	1.2	5.4	0.7	0.7	0.0	-	8.0	1.9	4.3	2.3	0.1	0.0	-	8.6	1.5	40.9	2.4	0.7	0.0	-	45.5	0.0	37.9	0.0	0.0	-	37.9	-
PHF	0.672	0.841	0.929	0.857	0.000	-	0.878	0.838	0.875	0.817	0.625	0.000	-	0.904	0.711	0.938	0.796	0.675	0.000	-	0.946	0.000	0.951	0.000	0.000	-	0.951	0.982
Lights	43	194	25	23	0	-	285	66	152	84	5	0	-	307	54	1442	82	27	0	-	1605	0	1345	0	0	-	1345	3542
% Lights	100.0	99.5	96.2	95.8	-	-	99.0	98.5	98.7	98.8	100.0	-	-	98.7	100.0	97.3	95.3	100.0	-	-	97.3	-	98.0	-	-	-	98.0	97.8
Buses	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	3	1	0	0	-	4	0	0	0	0	-	0	4
% Buses	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.2	1.2	0.0	-	-	0.2	-	0.0	-	-	-	0.0	0.1
Trucks	0	1	1	1	0	-	3	1	2	1	0	0	-	4	0	37	3	0	0	-	40	0	28	0	0	-	28	75
% Trucks	0.0	0.5	3.8	4.2	-	-	1.0	1.5	1.3	1.2	0.0	-	-	1.3	0.0	2.5	3.5	0.0	-	-	2.4	-	2.0	-	-	-	2.0	2.1
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Plainsboro, NJ
Route 1 & NB Jughandle
Saturday, February 3, 2024
Location: 40.366382, -74.595616

Count Name: Route 1 & Ridge Rd (3/2)
Site Code:
Start Date: 03/02/2024



Turning Movement Peak Hour Data Plot (11:30 AM)

Route 1 & Independence Way South (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160871, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
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Coatesville, PA, 19320, US

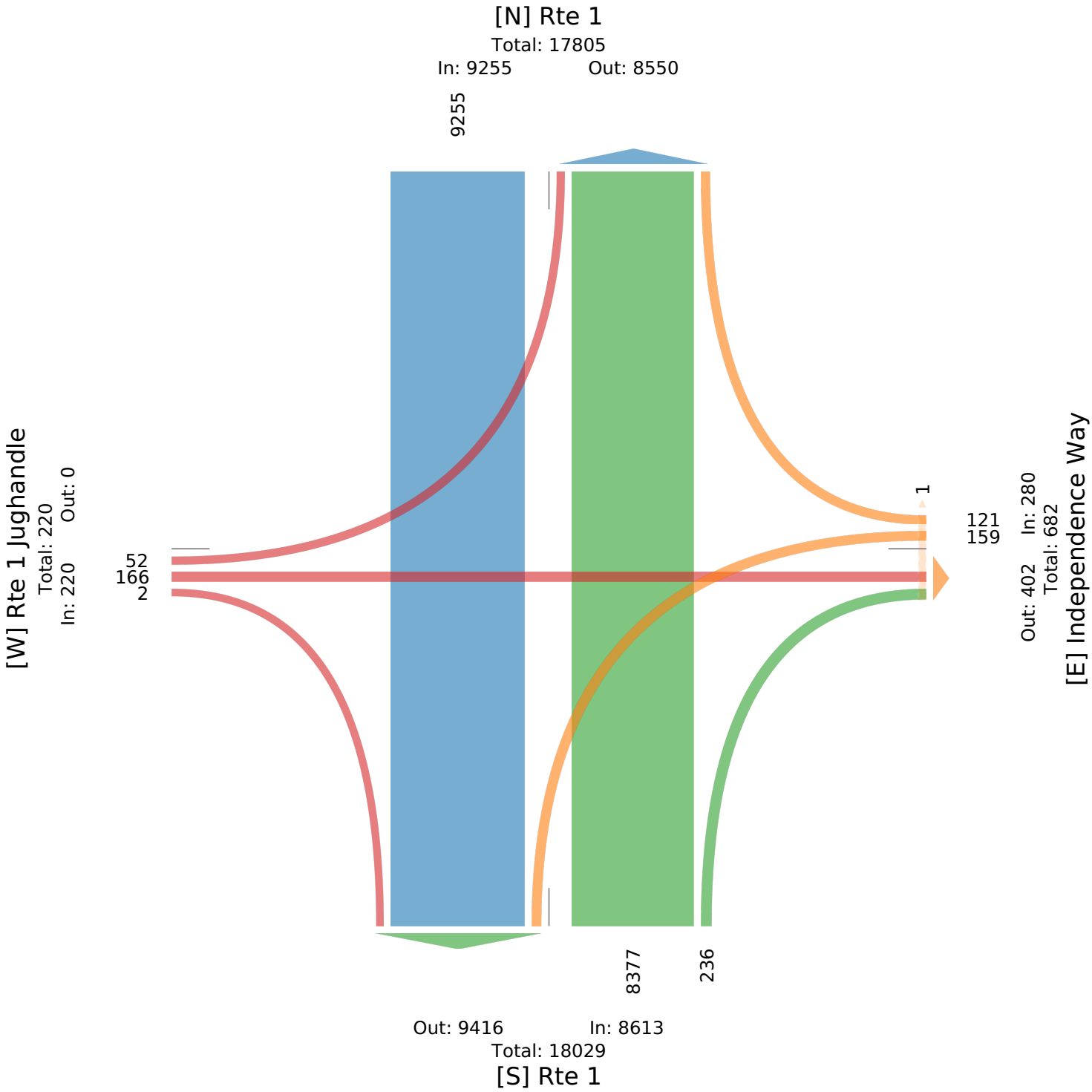
Leg	Rte 1 Jughandle						Independence Way						Rte 1						Rte 1					
Direction	Eastbound						Westbound						Northbound						Southbound					
Time	L	T	R	RR	App	Ped*	L	R	U	RR	App	Ped*	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	Int
2024-02-29 7:00AM	3	2	0	0	**5**	0	1	0	0	0	**1**	0	466	5	0	0	**471**	0	0	508	0	**508**	0	**985**
7:15AM	2	9	0	0	**11**	0	1	1	0	0	**2**	0	460	8	0	0	**468**	0	0	521	0	**521**	0	**1002**
7:30AM	1	3	0	0	**4**	0	3	2	0	0	**5**	0	492	16	0	0	**508**	0	0	741	0	**741**	0	**1258**
7:45AM	4	13	0	0	**17**	0	1	0	0	0	**1**	0	413	23	0	1	**437**	0	0	635	0	**635**	0	**1090**
Hourly Total	10	27	0	0	**37**	0	6	3	0	0	**9**	0	1831	52	0	1	**1884**	0	0	2405	0	**2405**	0	**4335**
8:00AM	0	11	0	0	**11**	0	4	1	0	0	**5**	0	386	21	0	0	**407**	0	0	628	0	**628**	0	**1051**
8:15AM	5	23	0	0	**28**	0	1	0	0	0	**1**	0	395	28	0	0	**423**	0	0	632	0	**632**	0	**1084**
8:30AM	3	13	0	0	**16**	0	4	1	0	0	**5**	1	381	21	0	0	**402**	0	0	598	0	**598**	0	**1021**
8:45AM	3	33	0	0	**36**	0	0	2	0	3	**5**	0	312	31	0	1	**344**	0	0	584	0	**584**	0	**969**
Hourly Total	11	80	0	0	**91**	0	9	4	0	3	**16**	1	1474	101	0	1	**1576**	0	0	2442	0	**2442**	0	**4125**
9:00AM	6	25	0	0	**31**	0	3	0	0	1	**4**	0	356	24	0	0	**380**	0	0	488	0	**488**	0	**903**
9:15AM	4	21	0	0	**25**	0	3	1	0	0	**4**	0	364	33	0	0	**397**	0	0	526	0	**526**	0	**952**
Hourly Total	10	46	0	0	**56**	0	6	1	0	1	**8**	0	720	57	0	0	**777**	0	0	1014	0	**1014**	0	**1855**
4:00PM	3	0	0	0	**3**	0	17	1	0	3	**21**	0	471	3	0	0	**474**	0	0	402	0	**402**	0	**900**
4:15PM	1	1	0	2	**4**	0	12	4	0	6	**22**	0	544	6	0	0	**550**	0	0	421	0	**421**	0	**997**
4:30PM	3	2	0	0	**5**	0	16	8	0	13	**37**	0	507	3	0	0	**510**	0	0	419	0	**419**	0	**971**
4:45PM	2	3	0	0	**5**	0	17	13	0	5	**35**	0	543	3	0	0	**546**	0	0	393	0	**393**	0	**979**
Hourly Total	9	6	0	2	**17**	0	62	26	0	27	**115**	0	2065	15	0	0	**2080**	0	0	1635	0	**1635**	0	**3847**
5:00PM	2	2	0	0	**4**	0	20	5	0	12	**37**	0	565	4	0	0	**569**	0	0	485	0	**485**	0	**1095**
5:15PM	4	3	0	0	**7**	0	18	11	0	8	**37**	0	608	0	0	0	**608**	0	0	441	0	**441**	0	**1093**
5:30PM	3	0	0	0	**3**	0	22	5	0	3	**30**	0	566	2	0	0	**568**	0	0	431	0	**431**	0	**1032**
5:45PM	3	2	0	0	**5**	0	16	7	0	5	**28**	0	548	3	0	0	**551**	0	0	402	0	**402**	0	**986**
Hourly Total	12	7	0	0	**19**	0	76	28	0	28	**132**	0	2287	9	0	0	**2296**	0	0	1759	0	**1759**	0	**4206**
6:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	52	166	0	2	**220**	0	159	62	0	59	**280**	1	8377	234	0	2	**8613**	0	0	9255	0	**9255**	0	**18368**
% Approach	23.6%	75.5%	0%	0.9%	**-**	-	56.8%	22.1%	0%	21.1%	**-**	-	97.3%	2.7%	0%	0%	**-**	-	0%	100%	0%	**-**	-	-
% Total	0.3%	0.9%	0%	0%	**1.2%**	-	0.9%	0.3%	0%	0.3%	**1.5%**	-	45.6%	1.3%	0%	0%	**46.9%**	-	0%	50.4%	0%	**50.4%**	-	-
Lights	51	166	0	2	**219**	-	156	62	0	59	**277**	-	7920	231	0	2	**8153**	-	0	8795	0	**8795**	-	17444
% Lights	98.1%	100%	0%	100%	**99.5%**	-	98.1%	100%	0%	100%	**98.9%**	-	94.5%	98.7%	0%	100%	**94.7%**	-	0%	95.0%	0%	**95.0%**	-	95.0%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	**0**	-	3	0	0	0	**3**	-	417	3	0	0	**420**	-	0	428	0	**428**	-	851
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	1.9%	0%	0%	0%	**1.1%**	-	5.0%	1.3%	0%	0%	**4.9%**	-	0%	4.6%	0%	**4.6%**	-	4.6%
Buses	1	0	0	0	**1**	-	0	0	0	0	**0**	-	40	0	0	0	**40**	-	0	32	0	**32**	-	73
% Buses	1.9%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.5%	0%	0%	0%	**0.5%**	-	0%	0.3%	0%	**0.3%**	-	0.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Independence Way South (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160871, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Route 1 & Independence Way South (2/29) - TMC

Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160871, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

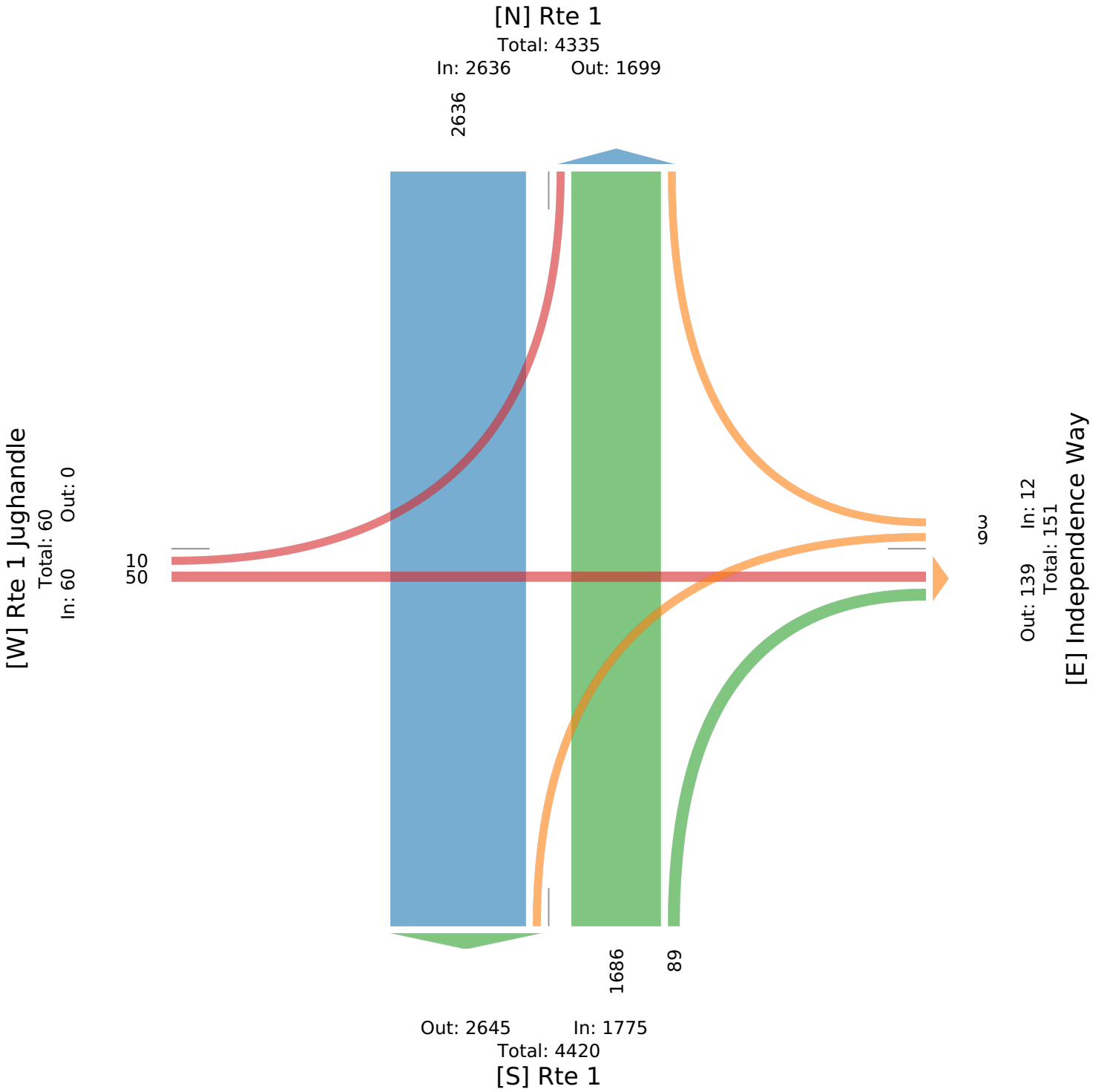
Leg / Direction	Rte 1 Jughandle Eastbound						Independence Way Westbound						Rte 1 Northbound						Rte 1 Southbound					
Time	L	T	R	RR	**App**	Ped*	L	R	U	RR	**App**	Ped*	T	R	U	RR	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-02-29 7:30AM	1	3	0	0	**4**	0	3	2	0	0	**5**	0	492	16	0	0	**508**	0	0	741	0	**741**	0	**1258**
7:45AM	4	13	0	0	**17**	0	1	0	0	0	**1**	0	413	23	0	1	**437**	0	0	635	0	**635**	0	**1090**
8:00AM	0	11	0	0	**11**	0	4	1	0	0	**5**	0	386	21	0	0	**407**	0	0	628	0	**628**	0	**1051**
8:15AM	5	23	0	0	**28**	0	1	0	0	0	**1**	0	395	28	0	0	**423**	0	0	632	0	**632**	0	**1084**
Total	10	50	0	0	**60**	0	9	3	0	0	**12**	0	1686	88	0	1	**1775**	0	0	2636	0	**2636**	0	**4483**
% Approach	16.7%	83.3%	0%	0%	**-**	-	75.0%	25.0%	0%	0%	**-**	-	95.0%	5.0%	0%	0.1%	**-**	-	0%	100%	0%	**-**	-	**-**
% Total	0.2%	1.1%	0%	0%	**1.3%**	-	0.2%	0.1%	0%	0%	**0.3%**	-	37.6%	2.0%	0%	0%	**39.6%**	-	0%	58.8%	0%	**58.8%**	-	**-**
PHF	0.500	0.543	-	-	**0.536**	-	0.563	0.375	-	-	**0.600**	-	0.857	0.786	-	0.250	**0.874**	-	-	0.889	-	**0.889**	-	0.891
Lights	10	50	0	0	**60**	-	8	3	0	0	**11**	-	1556	88	0	1	**1645**	-	0	2493	0	**2493**	-	4209
% Lights	100%	100%	0%	0%	**100%**	-	88.9%	100%	0%	0%	**91.7%**	-	92.3%	100%	0%	100%	**92.7%**	-	0%	94.6%	0%	**94.6%**	-	93.9%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	115	0	0	0	**115**	-	0	131	0	**131**	-	247
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	11.1%	0%	0%	0%	**8.3%**	-	6.8%	0%	0%	0%	**6.5%**	-	0%	5.0%	0%	**5.0%**	-	5.5%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	15	0	0	0	**15**	-	0	12	0	**12**	-	27
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.9%	0%	0%	0%	**0.8%**	-	0%	0.5%	0%	**0.5%**	-	0.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Independence Way South (2/29) - TMC

Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160871, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Route 1 & Independence Way South (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160871, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

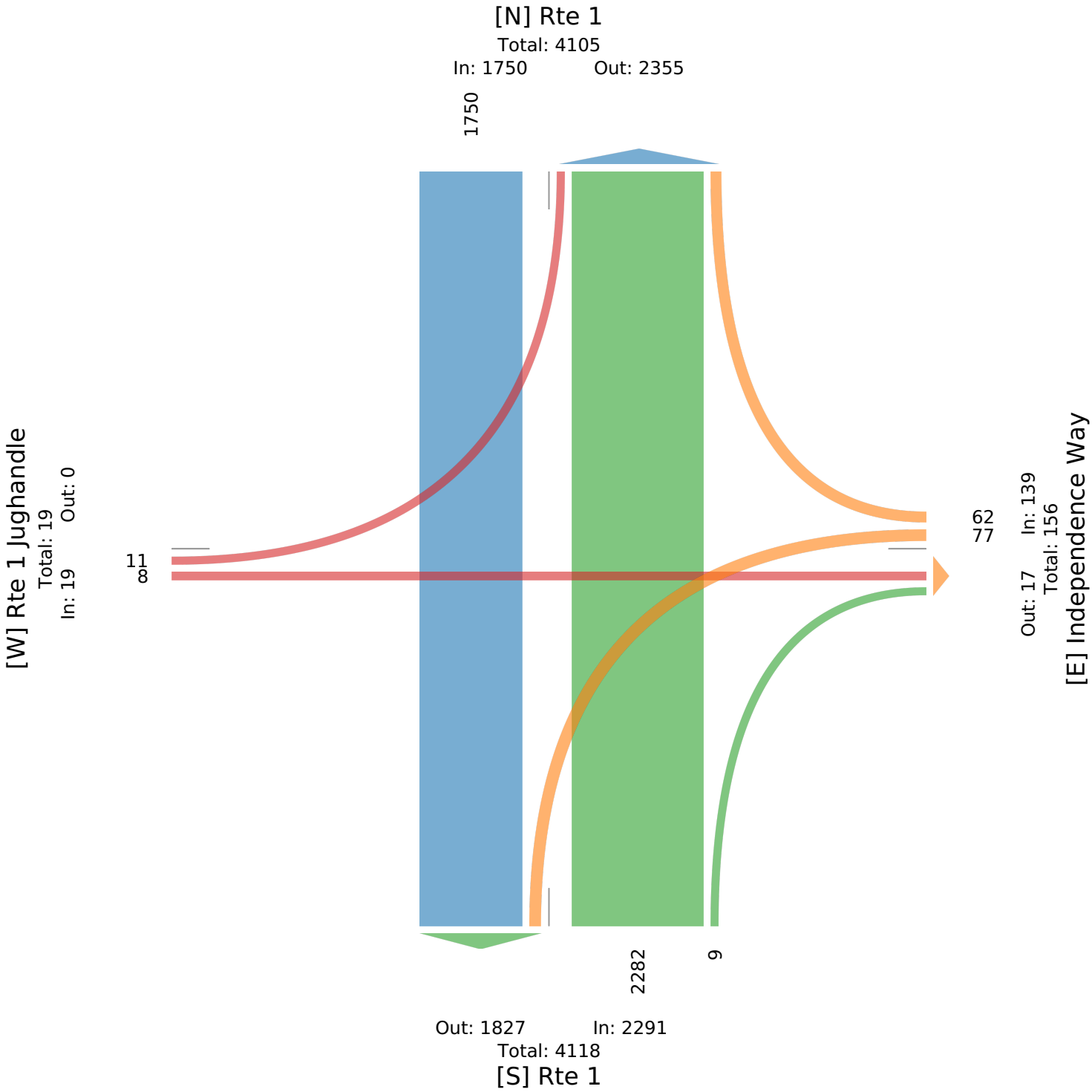
Leg	Rte 1 Jughandle						Independence Way						Rte 1						Rte 1						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	RR	**App**	Ped*	L	R	U	RR	**App**	Ped*	T	R	U	RR	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-02-29 4:45PM	2	3	0	0	**5**	0	17	13	0	5	**35**	0	543	3	0	0	**546**	0	0	393	0	**393**	0	**979**
5:00PM	2	2	0	0	**4**	0	20	5	0	12	**37**	0	565	4	0	0	**569**	0	0	485	0	**485**	0	**1095**
5:15PM	4	3	0	0	**7**	0	18	11	0	8	**37**	0	608	0	0	0	**608**	0	0	441	0	**441**	0	**1093**
5:30PM	3	0	0	0	**3**	0	22	5	0	3	**30**	0	566	2	0	0	**568**	0	0	431	0	**431**	0	**1032**
Total	11	8	0	0	**19**	0	77	34	0	28	**139**	0	2282	9	0	0	**2291**	0	0	1750	0	**1750**	0	**4199**
% Approach	57.9%	42.1%	0%	0%	**-**	-	55.4%	24.5%	0%	20.1%	**-**	-	99.6%	0.4%	0%	0%	**-**	-	0%	100%	0%	**-**	-	-
% Total	0.3%	0.2%	0%	0%	**0.5%**	-	1.8%	0.8%	0%	0.7%	**3.3%**	-	54.3%	0.2%	0%	0%	**54.6%**	-	0%	41.7%	0%	**41.7%**	-	-
PHF	0.688	0.667	-	-	**0.679**	-	0.875	0.654	-	0.583	**0.939**	-	0.938	0.563	-	-	**0.942**	-	-	0.902	-	**0.902**	-	0.959
Lights	11	8	0	0	**19**	-	77	34	0	28	**139**	-	2227	9	0	0	**2236**	-	0	1710	0	**1710**	-	4104
% Lights	100%	100%	0%	0%	**100%**	-	100%	100%	0%	100%	**100%**	-	97.6%	100%	0%	0%	**97.6%**	-	0%	97.7%	0%	**97.7%**	-	97.7%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	50	0	0	0	**50**	-	0	39	0	**39**	-	89
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.2%	0%	0%	0%	**2.2%**	-	0%	2.2%	0%	**2.2%**	-	2.1%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	5	0	0	0	**5**	-	0	1	0	**1**	-	6
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0%	0%	0%	**0.2%**	-	0%	0.1%	0%	**0.1%**	-	0.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Independence Way South (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160871, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Route 1 & Independence Way South (3/2) - TMC

Sat Mar 2, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160872, Location: 40.361631, -74.601414



Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

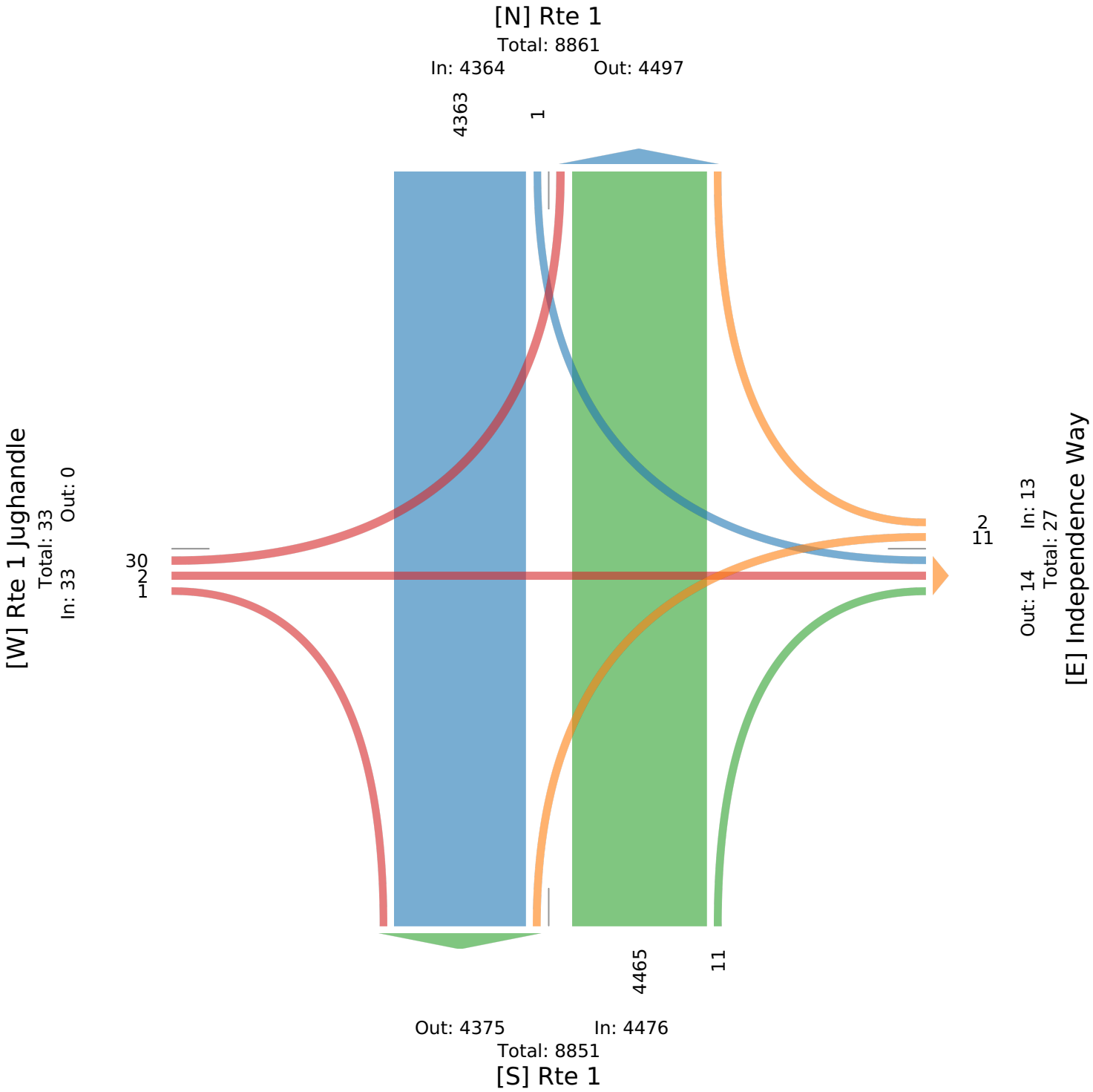
Leg	Rte 1 Jughandle						Independence Way						Rte 1						Rte 1						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	RR	**App**	Ped*	L	R	U	RR	**App**	Ped*	T	R	U	RR	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-03-02 11:00AM	4	0	1	0	**5**	0	1	0	0	0	**1**	0	370	0	0	0	**370**	0	0	375	0	**375**	0	**751**
11:15AM	1	0	0	0	**1**	0	0	0	0	0	**0**	0	357	0	0	0	**357**	0	0	373	0	**373**	0	**731**
11:30AM	2	0	0	0	**2**	0	2	0	0	0	**2**	0	388	1	0	0	**389**	0	0	351	0	**351**	0	**744**
11:45AM	2	0	0	0	**2**	0	0	0	0	1	**1**	0	365	1	0	0	**366**	0	0	403	0	**403**	0	**772**
Hourly Total	9	0	1	0	**10**	0	3	0	0	1	**4**	0	1480	2	0	0	**1482**	0	0	1502	0	**1502**	0	**2998**
12:00PM	4	0	0	0	**4**	0	1	0	0	0	**1**	0	407	1	0	0	**408**	0	0	354	0	**354**	0	**767**
12:15PM	6	0	0	0	**6**	0	3	0	0	0	**3**	0	370	2	0	0	**372**	0	0	319	0	**319**	0	**700**
12:30PM	3	1	0	0	**4**	0	1	0	0	0	**1**	0	365	1	0	0	**366**	0	1	332	0	**333**	0	**704**
12:45PM	0	1	0	0	**1**	0	1	0	0	0	**1**	0	392	2	0	0	**394**	0	0	318	0	**318**	0	**714**
Hourly Total	13	2	0	0	**15**	0	6	0	0	0	**6**	0	1534	6	0	0	**1540**	0	1	1323	0	**1324**	0	**2885**
1:00PM	3	0	0	0	**3**	0	2	0	0	0	**2**	0	356	1	0	0	**357**	0	0	352	0	**352**	0	**714**
1:15PM	3	0	0	0	**3**	0	0	1	0	0	**1**	0	380	1	0	0	**381**	0	0	404	0	**404**	0	**789**
1:30PM	2	0	0	0	**2**	0	0	0	0	0	**0**	0	354	1	0	0	**355**	0	0	402	0	**402**	0	**759**
1:45PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	361	0	0	0	**361**	0	0	380	0	**380**	0	**741**
Hourly Total	8	0	0	0	**8**	0	2	1	0	0	**3**	0	1451	3	0	0	**1454**	0	0	1538	0	**1538**	0	**3003**
2:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	30	2	1	0	**33**	0	11	1	0	1	**13**	0	4465	11	0	0	**4476**	0	1	4363	0	**4364**	0	**8886**
% Approach	90.9%	6.1%	3.0%	0%	**-**	-	84.6%	7.7%	0%	7.7%	**-**	-	99.8%	0.2%	0%	0%	**-**	-	0%	100.0%	0%	**-**	-	-
% Total	0.3%	0%	0%	0%	**0.4%**	-	0.1%	0%	0%	0%	**0.1%**	-	50.2%	0.1%	0%	0%	**50.4%**	-	0%	49.1%	0%	**49.1%**	-	-
Lights	29	2	1	0	**32**	-	11	1	0	1	**13**	-	4364	11	0	0	**4375**	-	1	4274	0	**4275**	-	8695
% Lights	96.7%	100%	100%	0%	**97.0%**	-	100%	100%	0%	100%	**100%**	-	97.7%	100%	0%	0%	**97.7%**	-	100%	98.0%	0%	**98.0%**	-	97.9%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	95	0	0	0	**95**	-	0	85	0	**85**	-	180
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.1%	0%	0%	0%	**2.1%**	-	0%	1.9%	0%	**1.9%**	-	2.0%
Buses	1	0	0	0	**1**	-	0	0	0	0	**0**	-	6	0	0	0	**6**	-	0	4	0	**4**	-	11
% Buses	3.3%	0%	0%	0%	**3.0%**	-	0%	0%	0%	0%	**0%**	-	0.1%	0%	0%	0%	**0.1%**	-	0%	0.1%	0%	**0.1%**	-	0.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Independence Way South (3/2) - TMC

Sat Mar 2, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160872, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Route 1 & Independence Way South (3/2) - TMC

Sat Mar 2, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160872, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

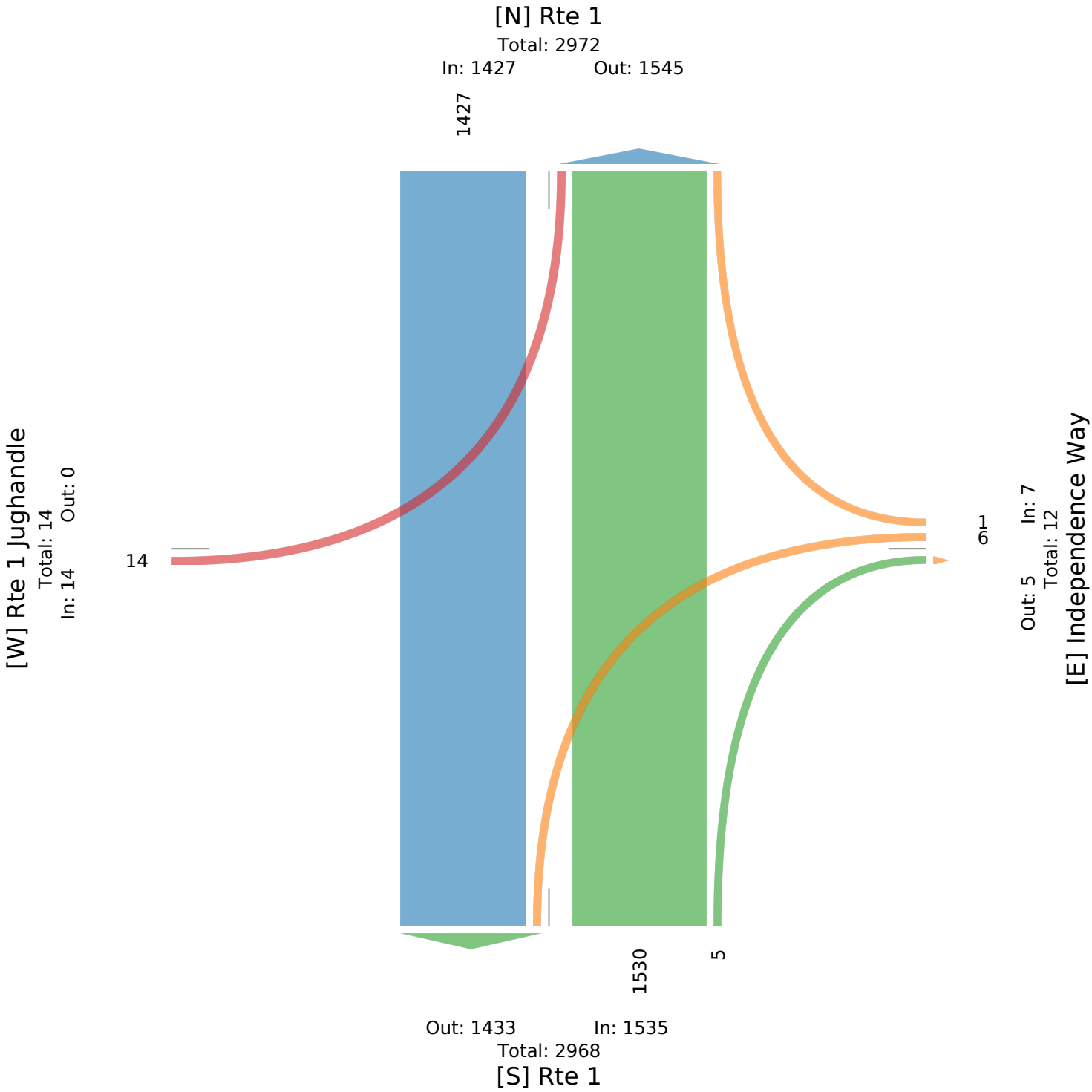
Leg / Direction	Rte 1 Jughandle Eastbound						Independence Way Westbound						Rte 1 Northbound						Rte 1 Southbound						
Time	L	T	R	RR	**App**	Ped*	L	R	U	RR	**App**	Ped*	T	R	U	RR	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-03-02 11:30AM	2	0	0	0	**2**	0	2	0	0	0	**2**	0	388	1	0	0	**389**	0	0	351	0	**351**	0	**744**
11:45AM	2	0	0	0	**2**	0	0	0	0	1	**1**	0	365	1	0	0	**366**	0	0	403	0	**403**	0	**772**
12:00PM	4	0	0	0	**4**	0	1	0	0	0	**1**	0	407	1	0	0	**408**	0	0	354	0	**354**	0	**767**
12:15PM	6	0	0	0	**6**	0	3	0	0	0	**3**	0	370	2	0	0	**372**	0	0	319	0	**319**	0	**700**
Total	14	0	0	0	**14**	0	6	0	0	1	**7**	0	1530	5	0	0	**1535**	0	0	1427	0	**1427**	0	**2983**
% Approach	100%	0%	0%	0%	**-**	-	85.7%	0%	0%	14.3%	**-**	-	99.7%	0.3%	0%	0%	**-**	-	0%	100%	0%	**-**	-	**-**
% Total	0.5%	0%	0%	0%	**0.5%**	-	0.2%	0%	0%	0%	**0.2%**	-	51.3%	0.2%	0%	0%	**51.5%**	-	0%	47.8%	0%	**47.8%**	-	**-**
PHF	0.583	-	-	-	**0.583**	-	0.500	-	-	0.250	**0.583**	-	0.940	0.625	-	-	**0.941**	-	-	0.885	-	**0.885**	-	0.966
Lights	13	0	0	0	**13**	-	6	0	0	1	**7**	-	1488	5	0	0	**1493**	-	0	1394	0	**1394**	-	2907
% Lights	92.9%	0%	0%	0%	**92.9%**	-	100%	0%	0%	100%	**100%**	-	97.3%	100%	0%	0%	**97.3%**	-	0%	97.7%	0%	**97.7%**	-	97.5%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	39	0	0	0	**39**	-	0	32	0	**32**	-	71
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.5%	0%	0%	0%	**2.5%**	-	0%	2.2%	0%	**2.2%**	-	2.4%
Buses	1	0	0	0	**1**	-	0	0	0	0	**0**	-	3	0	0	0	**3**	-	0	1	0	**1**	-	5
% Buses	7.1%	0%	0%	0%	**7.1%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0%	0%	0%	**0.2%**	-	0%	0.1%	0%	**0.1%**	-	0.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Route 1 & Independence Way South (3/2) - TMC

Sat Mar 2, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160872, Location: 40.361631, -74.601414

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Route 1 NB Ramps (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160867, Location: 40.356044, -74.605042

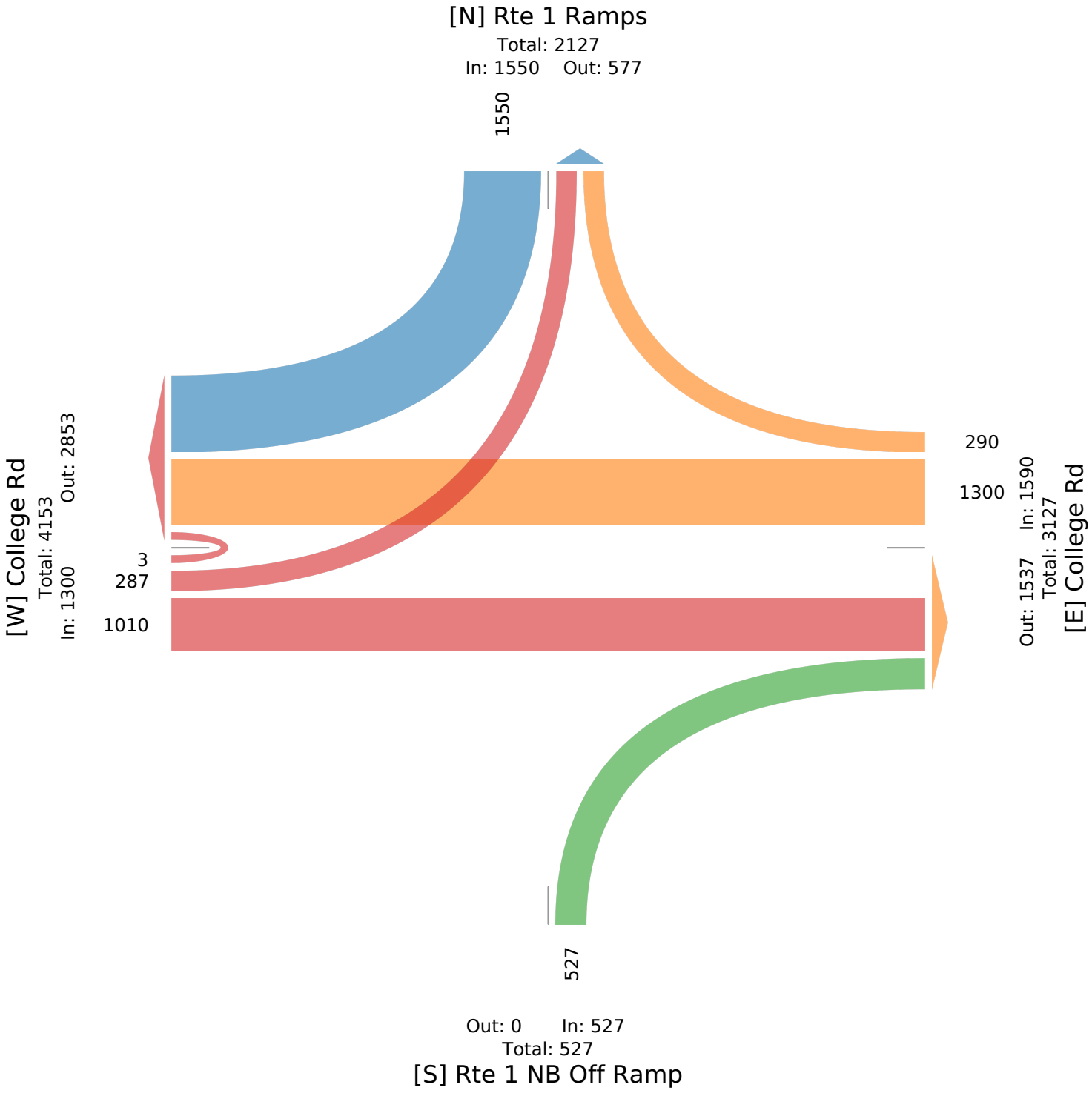
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	College Rd					College Rd					Rte 1 NB Off Ramp			Rte 1 Ramps					
Direction	Eastbound					Westbound					Northbound			Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	R	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-02-29 7:00AM	8	32	0	**40**	0	34	5	0	**39**	0	17	**17**	-	0	58	0	**58**	0	**154**
7:15AM	7	32	0	**39**	0	30	2	0	**32**	0	25	**25**	-	0	73	0	**73**	0	**169**
7:30AM	11	45	0	**56**	0	74	8	0	**82**	0	31	**31**	-	0	90	0	**90**	0	**259**
7:45AM	11	56	0	**67**	0	97	17	0	**114**	0	38	**38**	-	0	119	0	**119**	0	**338**
Hourly Total	37	165	0	**202**	0	235	32	0	**267**	0	111	**111**	-	0	340	0	**340**	0	**920**
8:00AM	28	83	0	**111**	0	62	11	0	**73**	0	53	**53**	-	0	106	0	**106**	0	**343**
8:15AM	11	82	0	**93**	0	70	18	0	**88**	0	47	**47**	-	0	94	0	**94**	0	**322**
8:30AM	8	93	0	**101**	0	50	10	0	**60**	0	50	**50**	-	0	75	0	**75**	0	**286**
8:45AM	12	84	0	**96**	0	71	23	0	**94**	0	56	**56**	-	0	90	0	**90**	0	**336**
Hourly Total	59	342	0	**401**	0	253	62	0	**315**	0	206	**206**	-	0	365	0	**365**	0	**1287**
9:00AM	21	71	0	**92**	0	54	16	0	**70**	0	37	**37**	-	0	66	0	**66**	0	**265**
9:15AM	10	71	0	**81**	0	45	15	0	**60**	0	38	**38**	-	0	55	0	**55**	0	**234**
Hourly Total	31	142	0	**173**	0	99	31	0	**130**	0	75	**75**	-	0	121	0	**121**	0	**499**
4:00PM	21	31	0	**52**	0	90	18	0	**108**	0	12	**12**	-	0	77	0	**77**	0	**249**
4:15PM	21	41	1	**63**	0	75	21	0	**96**	0	19	**19**	-	0	81	0	**81**	0	**259**
4:30PM	20	48	0	**68**	0	97	21	0	**118**	0	19	**19**	-	0	86	0	**86**	0	**291**
4:45PM	17	49	0	**66**	0	83	23	0	**106**	0	20	**20**	-	0	97	0	**97**	0	**289**
Hourly Total	79	169	1	**249**	0	345	83	0	**428**	0	70	**70**	-	0	341	0	**341**	0	**1088**
5:00PM	22	58	1	**81**	0	99	29	0	**128**	0	10	**10**	-	0	98	0	**98**	0	**317**
5:15PM	27	44	0	**71**	0	98	24	0	**122**	0	19	**19**	-	0	112	0	**112**	0	**324**
5:30PM	15	47	0	**62**	0	87	17	0	**104**	0	14	**14**	-	0	100	0	**100**	0	**280**
5:45PM	17	43	1	**61**	0	84	12	0	**96**	0	22	**22**	-	0	73	0	**73**	0	**252**
Hourly Total	81	192	2	**275**	0	368	82	0	**450**	0	65	**65**	-	0	383	0	**383**	0	**1173**
Total	287	1010	3	**1300**	0	1300	290	0	**1590**	0	527	**527**	-	0	1550	0	**1550**	0	**4967**
% Approach	22.1%	77.7%	0.2%	**-**	-	81.8%	18.2%	0%	**-**	-	100%	**-**	-	0%	100%	0%	**-**	-	-
% Total	5.8%	20.3%	0.1%	**26.2%**	-	26.2%	5.8%	0%	**32.0%**	-	10.6%	**10.6%**	-	0%	31.2%	0%	**31.2%**	-	-
Lights	277	991	3	**1271**	-	1274	287	0	**1561**	-	515	**515**	-	0	1510	0	**1510**	-	4857
% Lights	96.5%	98.1%	100%	**97.8%**	-	98.0%	99.0%	0%	**98.2%**	-	97.7%	**97.7%**	-	0%	97.4%	0%	**97.4%**	-	97.8%
Articulated Trucks and Single-Unit Trucks	3	8	0	**11**	-	9	3	0	**12**	-	9	**9**	-	0	20	0	**20**	-	52
% Articulated Trucks and Single-Unit Trucks	1.0%	0.8%	0%	**0.8%**	-	0.7%	1.0%	0%	**0.8%**	-	1.7%	**1.7%**	-	0%	1.3%	0%	**1.3%**	-	1.0%
Buses	7	11	0	**18**	-	17	0	0	**17**	-	3	**3**	-	0	20	0	**20**	-	58
% Buses	2.4%	1.1%	0%	**1.4%**	-	1.3%	0%	0%	**1.1%**	-	0.6%	**0.6%**	-	0%	1.3%	0%	**1.3%**	-	1.2%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Route 1 NB Ramps (2/29) - TMC
Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160867, Location: 40.356044, -74.605042

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Route 1 NB Ramps (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160867, Location: 40.356044, -74.605042

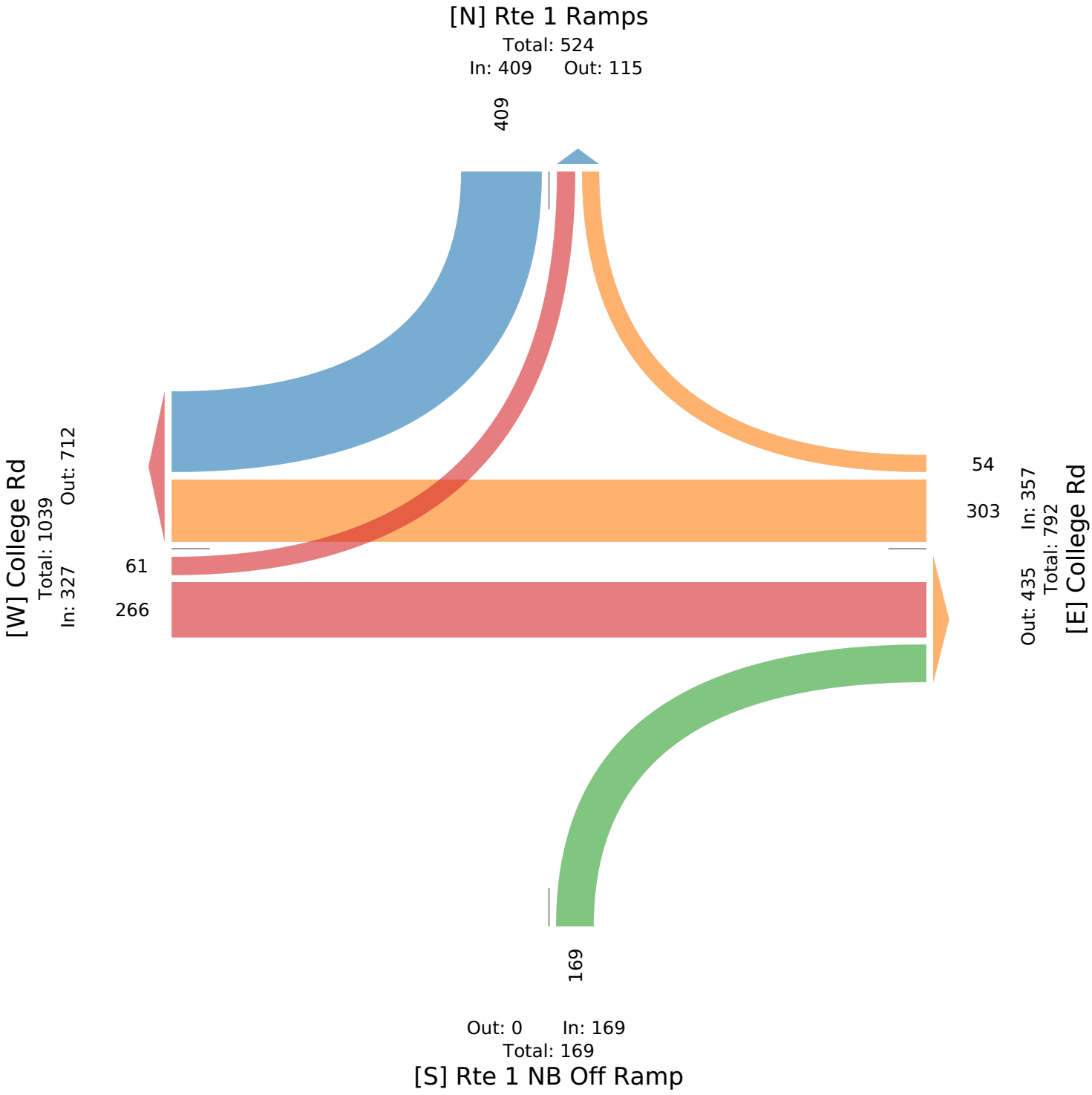
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	College Rd Eastbound					College Rd Westbound					Rte 1 NB Off Ramp Northbound			Rte 1 Ramps Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	R	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-02-29 7:30AM	11	45	0	**56**	0	74	8	0	**82**	0	31	**31**	-	0	90	0	**90**	0	**259**
7:45AM	11	56	0	**67**	0	97	17	0	**114**	0	38	**38**	-	0	119	0	**119**	0	**338**
8:00AM	28	83	0	**111**	0	62	11	0	**73**	0	53	**53**	-	0	106	0	**106**	0	**343**
8:15AM	11	82	0	**93**	0	70	18	0	**88**	0	47	**47**	-	0	94	0	**94**	0	**322**
Total	61	266	0	**327**	0	303	54	0	**357**	0	169	**169**	-	0	409	0	**409**	0	**1262**
% Approach	18.7%	81.3%	0%	**-**	-	84.9%	15.1%	0%	**-**	-	100%	**-**	-	0%	100%	0%	**-**	-	-
% Total	4.8%	21.1%	0%	**25.9%**	-	24.0%	4.3%	0%	**28.3%**	-	13.4%	**13.4%**	-	0%	32.4%	0%	**32.4%**	-	-
PHF	0.545	0.801	-	**0.736**	-	0.781	0.750	-	**0.783**	-	0.797	**0.797**	-	-	0.859	-	**0.859**	-	0.920
Lights	60	261	0	**321**	-	292	53	0	**345**	-	165	**165**	-	0	402	0	**402**	-	1233
% Lights	98.4%	98.1%	0%	**98.2%**	-	96.4%	98.1%	0%	**96.6%**	-	97.6%	**97.6%**	-	0%	98.3%	0%	**98.3%**	-	97.7%
Articulated Trucks and Single-Unit Trucks	0	2	0	**2**	-	6	1	0	**7**	-	3	**3**	-	0	2	0	**2**	-	14
% Articulated Trucks and Single-Unit Trucks	0%	0.8%	0%	**0.6%**	-	2.0%	1.9%	0%	**2.0%**	-	1.8%	**1.8%**	-	0%	0.5%	0%	**0.5%**	-	1.1%
Buses	1	3	0	**4**	-	5	0	0	**5**	-	1	**1**	-	0	5	0	**5**	-	15
% Buses	1.6%	1.1%	0%	**1.2%**	-	1.7%	0%	0%	**1.4%**	-	0.6%	**0.6%**	-	0%	1.2%	0%	**1.2%**	-	1.2%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Route 1 NB Ramps (2/29) - TMC
Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160867, Location: 40.356044, -74.605042

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Route 1 NB Ramps (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160867, Location: 40.356044, -74.605042

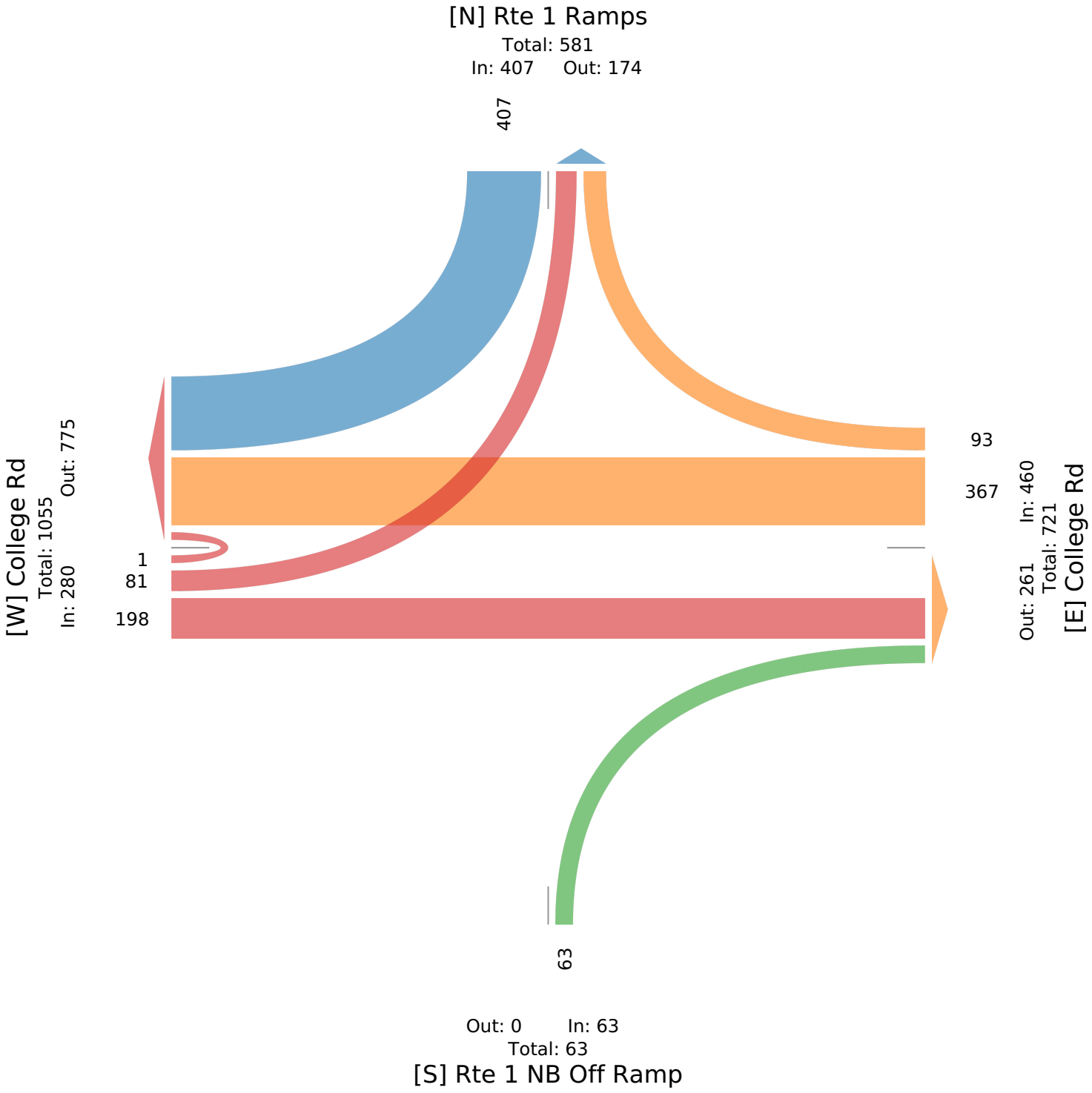
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	College Rd Eastbound					College Rd Westbound					Rte 1 NB Off Ramp Northbound			Rte 1 Ramps Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	R	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-02-29 4:45PM	17	49	0	**66**	0	83	23	0	**106**	0	20	**20**	-	0	97	0	**97**	0	**289**
5:00PM	22	58	1	**81**	0	99	29	0	**128**	0	10	**10**	-	0	98	0	**98**	0	**317**
5:15PM	27	44	0	**71**	0	98	24	0	**122**	0	19	**19**	-	0	112	0	**112**	0	**324**
5:30PM	15	47	0	**62**	0	87	17	0	**104**	0	14	**14**	-	0	100	0	**100**	0	**280**
Total	81	198	1	**280**	0	367	93	0	**460**	0	63	**63**	-	0	407	0	**407**	0	**1210**
% Approach	28.9%	70.7%	0.4%	**-**	-	79.8%	20.2%	0%	**-**	-	100%	**-**	-	0%	100%	0%	**-**	-	-
% Total	6.7%	16.4%	0.1%	**23.1%**	-	30.3%	7.7%	0%	**38.0%**	-	5.2%	**5.2%**	-	0%	33.6%	0%	**33.6%**	-	-
PHF	0.750	0.853	0.250	**0.864**	-	0.927	0.802	-	**0.898**	-	0.788	**0.788**	-	-	0.908	-	**0.908**	-	0.934
Lights	81	196	1	**278**	-	366	93	0	**459**	-	63	**63**	-	0	403	0	**403**	-	1203
% Lights	100%	99.0%	100%	**99.3%**	-	99.7%	100%	0%	**99.8%**	-	100%	**100%**	-	0%	99.0%	0%	**99.0%**	-	99.4%
Articulated Trucks and Single-Unit Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	**0**	-	0	2	0	**2**	-	2
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	**0%**	-	0%	0.5%	0%	**0.5%**	-	0.2%
Buses	0	2	0	**2**	-	1	0	0	**1**	-	0	**0**	-	0	2	0	**2**	-	5
% Buses	0%	1.0%	0%	**0.7%**	-	0.3%	0%	0%	**0.2%**	-	0%	**0%**	-	0%	0.5%	0%	**0.5%**	-	0.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Route 1 NB Ramps (2/29) - TMC
Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160867, Location: 40.356044, -74.605042

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Rt. 1 NB Ramps Sat 3/16 - TMC

Sat Mar 16, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1165259, Location: 40.356044, -74.605042

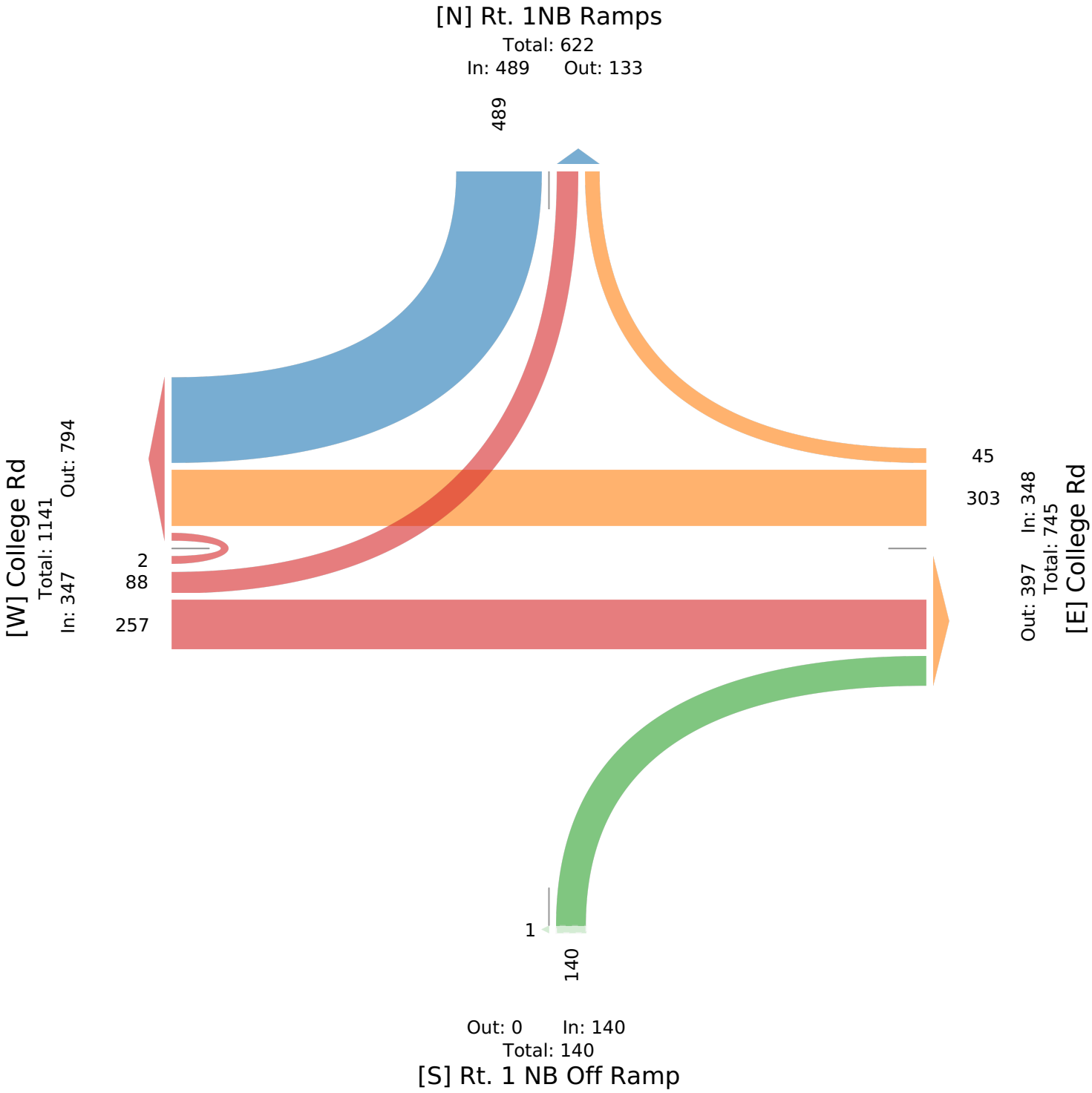
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	College Rd Eastbound					College Rd Westbound					Rt. 1 NB Off Ramp Northbound					Rt. 1NB Ramps Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	R	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-03-16 11:00AM	9	25	0	**34**	0	33	4	0	**37**	0	0	0	7	**7**	0	0	42	0	**42**	0	**120**
11:15AM	9	11	0	**20**	0	26	4	0	**30**	0	0	0	8	**8**	0	0	38	0	**38**	0	**96**
11:30AM	5	13	0	**18**	0	32	4	0	**36**	0	0	0	4	**4**	0	0	36	0	**36**	0	**94**
11:45AM	8	28	1	**37**	0	20	3	0	**23**	0	0	0	7	**7**	0	0	41	0	**41**	0	**108**
Hourly Total	31	77	1	**109**	0	111	15	0	**126**	0	0	0	26	**26**	0	0	157	0	**157**	0	**418**
12:00PM	12	24	0	**36**	0	23	1	0	**24**	0	0	0	10	**10**	1	0	41	0	**41**	0	**111**
12:15PM	5	17	0	**22**	0	17	1	0	**18**	0	0	0	35	**35**	0	0	38	0	**38**	0	**113**
12:30PM	5	20	0	**25**	0	18	3	0	**21**	0	0	0	16	**16**	0	0	49	0	**49**	0	**111**
12:45PM	9	32	0	**41**	0	29	5	0	**34**	0	0	0	14	**14**	0	0	40	0	**40**	0	**129**
Hourly Total	31	93	0	**124**	0	87	10	0	**97**	0	0	0	75	**75**	1	0	168	0	**168**	0	**464**
1:00PM	7	25	0	**32**	0	34	7	0	**41**	0	0	0	11	**11**	0	0	43	0	**43**	0	**127**
1:15PM	9	20	0	**29**	0	26	6	0	**32**	0	0	0	10	**10**	0	0	42	0	**42**	0	**113**
1:30PM	7	17	0	**24**	0	26	4	0	**30**	0	0	0	7	**7**	0	0	38	0	**38**	0	**99**
1:45PM	3	25	1	**29**	0	19	3	0	**22**	0	0	0	11	**11**	0	0	41	0	**41**	0	**103**
Hourly Total	26	87	1	**114**	0	105	20	0	**125**	0	0	0	39	**39**	0	0	164	0	**164**	0	**442**
2:00PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	88	257	2	**347**	0	303	45	0	**348**	0	0	0	140	**140**	1	0	489	0	**489**	0	**1324**
% Approach	25.4%	74.1%	0.6%	**-**	-	87.1%	12.9%	0%	**-**	-	0%	0%	100%	**-**	-	0%	100%	0%	**-**	-	-
% Total	6.6%	19.4%	0.2%	**26.2%**	-	22.9%	3.4%	0%	**26.3%**	-	0%	0%	10.6%	**10.6%**	-	0%	36.9%	0%	**36.9%**	-	-
Lights	88	253	2	**343**	-	300	43	0	**343**	-	0	0	138	**138**	-	0	484	0	**484**	-	1308
% Lights	100%	98.4%	100%	**98.8%**	-	99.0%	95.6%	0%	**98.6%**	-	0%	0%	98.6%	**98.6%**	-	0%	99.0%	0%	**99.0%**	-	98.8%
Articulated Trucks and Single-Unit Trucks	0	1	0	**1**	-	1	2	0	**3**	-	0	0	2	**2**	-	0	5	0	**5**	-	11
% Articulated Trucks and Single-Unit Trucks	0%	0.4%	0%	**0.3%**	-	0.3%	4.4%	0%	**0.9%**	-	0%	0%	1.4%	**1.4%**	-	0%	1.0%	0%	**1.0%**	-	0.8%
Buses	0	3	0	**3**	-	2	0	0	**2**	-	0	0	0	**0**	-	0	0	0	**0**	-	5
% Buses	0%	1.2%	0%	**0.9%**	-	0.7%	0%	0%	**0.6%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Rt. 1 NB Ramps Sat 3/16 - TMC
Sat Mar 16, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1165259, Location: 40.356044, -74.605042

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Rt. 1 NB Ramps Sat 3/16 - TMC

Sat Mar 16, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1165259, Location: 40.356044, -74.605042

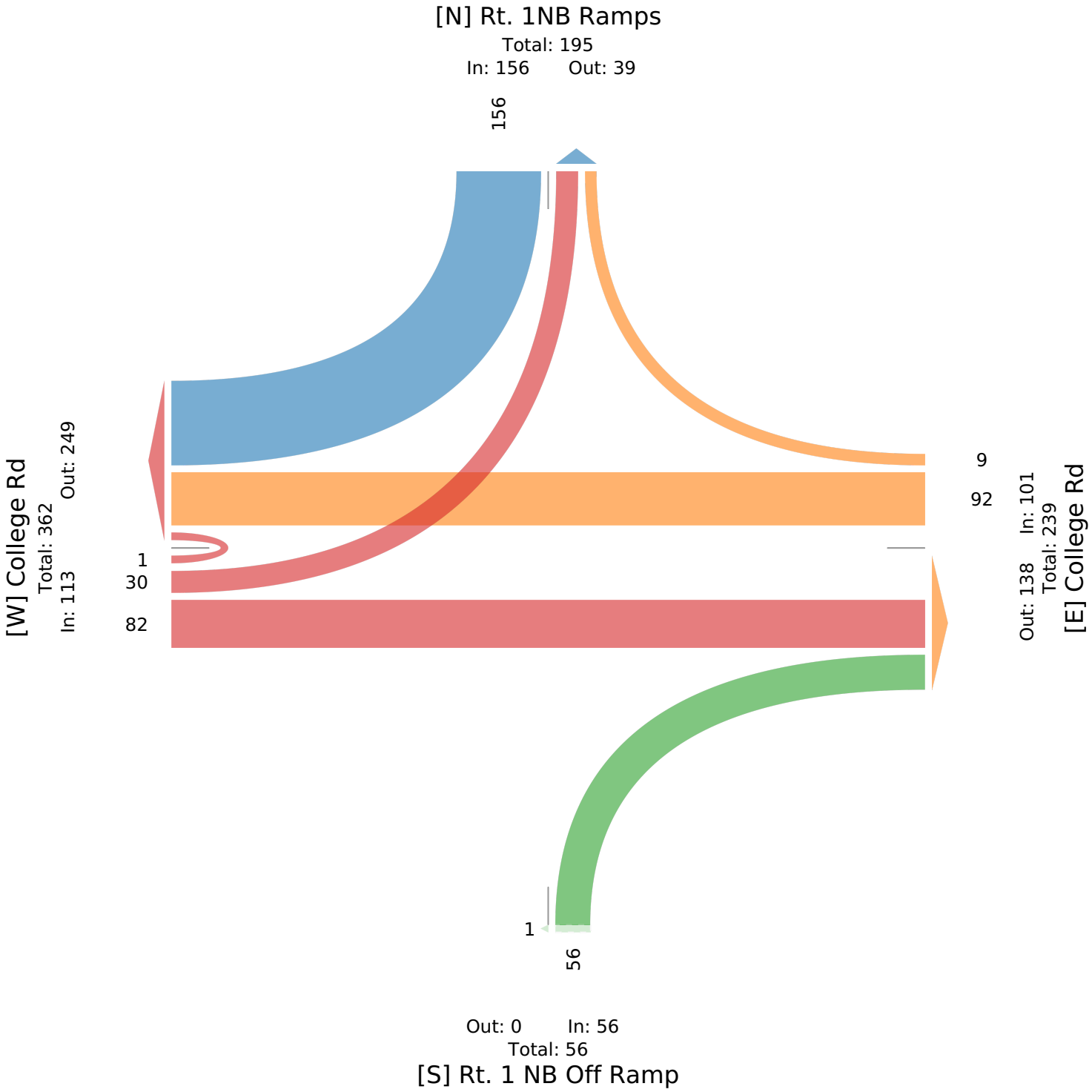
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	College Rd Eastbound					College Rd Westbound					Rt. 1 NB Off Ramp Northbound					Rt. 1NB Ramps Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	R	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2024-03-16 11:30AM	5	13	0	**18**	0	32	4	0	**36**	0	0	0	4	**4**	0	0	36	0	**36**	0	**94**
11:45AM	8	28	1	**37**	0	20	3	0	**23**	0	0	0	7	**7**	0	0	41	0	**41**	0	**108**
12:00PM	12	24	0	**36**	0	23	1	0	**24**	0	0	0	10	**10**	1	0	41	0	**41**	0	**111**
12:15PM	5	17	0	**22**	0	17	1	0	**18**	0	0	0	35	**35**	0	0	38	0	**38**	0	**113**
Total	30	82	1	**113**	0	92	9	0	**101**	0	0	0	56	**56**	1	0	156	0	**156**	0	**426**
% Approach	26.5%	72.6%	0.9%	**-**	-	91.1%	8.9%	0%	**-**	-	0%	0%	100%	**-**	-	0%	100%	0%	**-**	-	**-**
% Total	7.0%	19.2%	0.2%	**26.5%**	-	21.6%	2.1%	0%	**23.7%**	-	0%	0%	13.1%	**13.1%**	-	0%	36.6%	0%	**36.6%**	-	**-**
PHF	0.625	0.732	0.250	**0.764**	-	0.719	0.563	-	**0.701**	-	-	-	0.400	**0.400**	-	-	0.951	-	**0.951**	-	0.942
Lights	30	81	1	**112**	-	91	8	0	**99**	-	0	0	55	**55**	-	0	155	0	**155**	-	421
% Lights	100%	98.8%	100%	**99.1%**	-	98.9%	88.9%	0%	**98.0%**	-	0%	0%	98.2%	**98.2%**	-	0%	99.4%	0%	**99.4%**	-	98.8%
Articulated Trucks and Single-Unit Trucks	0	0	0	**0**	-	0	1	0	**1**	-	0	0	1	**1**	-	0	1	0	**1**	-	3
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	11.1%	0%	**1.0%**	-	0%	0%	1.8%	**1.8%**	-	0%	0.6%	0%	**0.6%**	-	0.7%
Buses	0	1	0	**1**	-	1	0	0	**1**	-	0	0	0	**0**	-	0	0	0	**0**	-	2
% Buses	0%	1.2%	0%	**0.9%**	-	1.1%	0%	0%	**1.0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.5%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Rt. 1 NB Ramps Sat 3/16 - TMC
Sat Mar 16, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1165259, Location: 40.356044, -74.605042

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



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Plainsboro, NJ
College Rd & Village Blvd
Thursday, February 29, 2024
Location: 40.357704, -74.611497

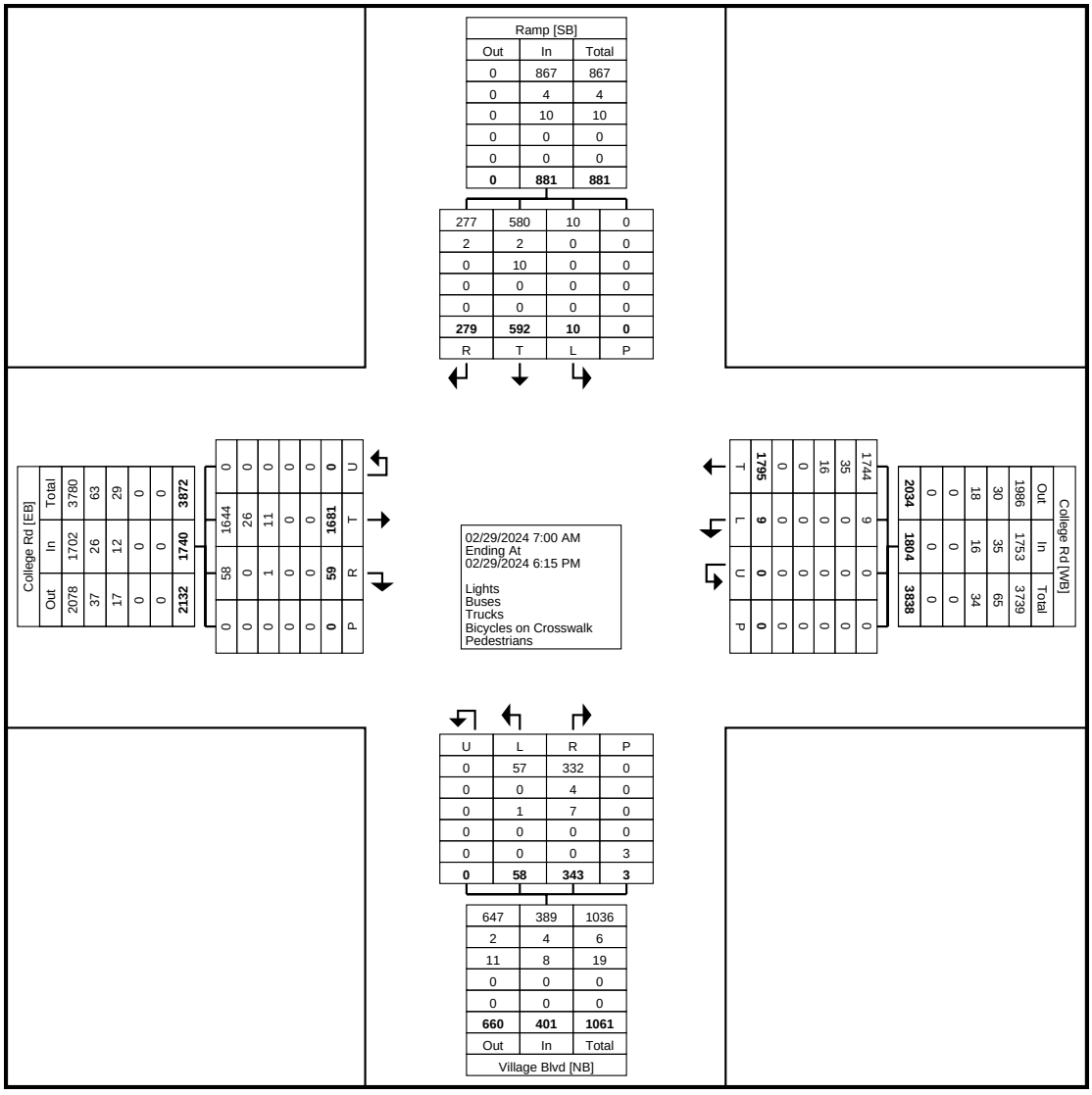
Count Name: College Rd & Village Blvd (2/29)
Site Code:
Start Date: 02/29/2024

Turning Movement Data

Start Time	College Rd Eastbound						College Rd Westbound					Village Blvd Northbound						Ramp Southbound					
	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	72	3	0	0	0	75	0	62	0	0	62	3	5	7	0	0	15	0	20	3	0	23	175
7:15 AM	66	2	0	0	0	68	0	82	0	0	82	2	17	3	0	1	22	0	20	7	0	27	199
7:30 AM	96	2	0	0	0	98	1	117	0	0	118	6	13	7	0	0	26	0	22	22	0	44	286
7:45 AM	112	1	0	0	0	113	0	166	0	0	166	2	11	6	0	0	19	0	23	31	0	54	352
Hourly Total	346	8	0	0	0	354	1	427	0	0	428	13	46	23	0	1	82	0	85	63	0	148	1012
8:00 AM	150	3	1	0	0	154	0	121	0	0	121	2	8	6	0	0	16	0	34	34	0	68	359
8:15 AM	138	5	0	0	0	143	0	100	0	0	100	5	15	4	0	0	24	1	41	18	0	60	327
8:30 AM	119	3	0	0	0	122	0	84	0	0	84	2	11	5	0	0	18	0	37	14	0	51	275
8:45 AM	103	2	1	0	0	106	0	117	0	0	117	1	8	0	0	0	9	2	38	21	0	61	293
Hourly Total	510	13	2	0	0	525	0	422	0	0	422	10	42	15	0	0	67	3	150	87	0	240	1254
9:00 AM	94	4	0	0	0	98	3	82	0	0	85	0	4	12	0	0	16	1	27	13	0	41	240
9:15 AM	85	1	0	0	0	86	0	64	0	0	64	1	7	6	0	0	14	0	34	10	0	44	208
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	179	5	0	0	0	184	3	146	0	0	149	1	11	18	0	0	30	1	61	23	0	85	448
4:00 PM	78	1	0	0	0	79	1	101	0	0	102	6	9	10	0	0	25	0	18	8	0	26	232
4:15 PM	82	5	1	0	0	88	0	99	0	0	99	3	15	9	0	0	27	1	21	15	0	37	251
4:30 PM	77	4	0	0	0	81	1	99	0	0	100	3	11	16	0	0	30	0	39	14	0	53	264
4:45 PM	71	3	1	0	0	75	1	107	0	0	108	5	18	9	0	2	32	1	37	16	0	54	269
Hourly Total	308	13	2	0	0	323	3	406	0	0	409	17	53	44	0	2	114	2	115	53	0	170	1016
5:00 PM	89	1	1	0	0	91	1	95	0	0	96	5	19	15	0	0	39	0	48	16	0	64	290
5:15 PM	69	9	0	0	0	78	0	111	0	0	111	2	10	11	0	0	23	1	57	13	0	71	283
5:30 PM	89	1	0	0	0	90	0	103	0	0	103	6	9	12	0	0	27	3	43	12	0	58	278
5:45 PM	91	4	0	0	0	95	1	85	0	0	86	4	12	3	0	0	19	0	33	12	0	45	245
Hourly Total	338	15	1	0	0	354	2	394	0	0	396	17	50	41	0	0	108	4	181	53	0	238	1096
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1681	54	5	0	0	1740	9	1795	0	0	1804	58	202	141	0	3	401	10	592	279	0	881	4826
Approach %	96.6	3.1	0.3	0.0	-	-	0.5	99.5	0.0	-	-	14.5	50.4	35.2	0.0	-	-	1.1	67.2	31.7	-	-	-
Total %	34.8	1.1	0.1	0.0	-	36.1	0.2	37.2	0.0	-	37.4	1.2	4.2	2.9	0.0	-	8.3	0.2	12.3	5.8	-	18.3	-
Lights	1644	53	5	0	-	1702	9	1744	0	-	1753	57	193	139	0	-	389	10	580	277	-	867	4711
% Lights	97.8	98.1	100.0	-	-	97.8	100.0	97.2	-	-	97.2	98.3	95.5	98.6	-	-	97.0	100.0	98.0	99.3	-	98.4	97.6
Buses	26	0	0	0	-	26	0	35	0	-	35	0	3	1	0	-	4	0	2	2	-	4	69
% Buses	1.5	0.0	0.0	-	-	1.5	0.0	1.9	-	-	1.9	0.0	1.5	0.7	-	-	1.0	0.0	0.3	0.7	-	0.5	1.4
Trucks	11	1	0	0	-	12	0	16	0	-	16	1	6	1	0	-	8	0	10	0	-	10	46
% Trucks	0.7	1.9	0.0	-	-	0.7	0.0	0.9	-	-	0.9	1.7	3.0	0.7	-	-	2.0	0.0	1.7	0.0	-	1.1	1.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

Plainsboro, NJ
College Rd & Village Blvd
Thursday, February 29, 2024
Location: 40.357704, -74.611497

Count Name: College Rd & Village Blvd (2/29)
Site Code:
Start Date: 02/29/2024



Turning Movement Data Plot

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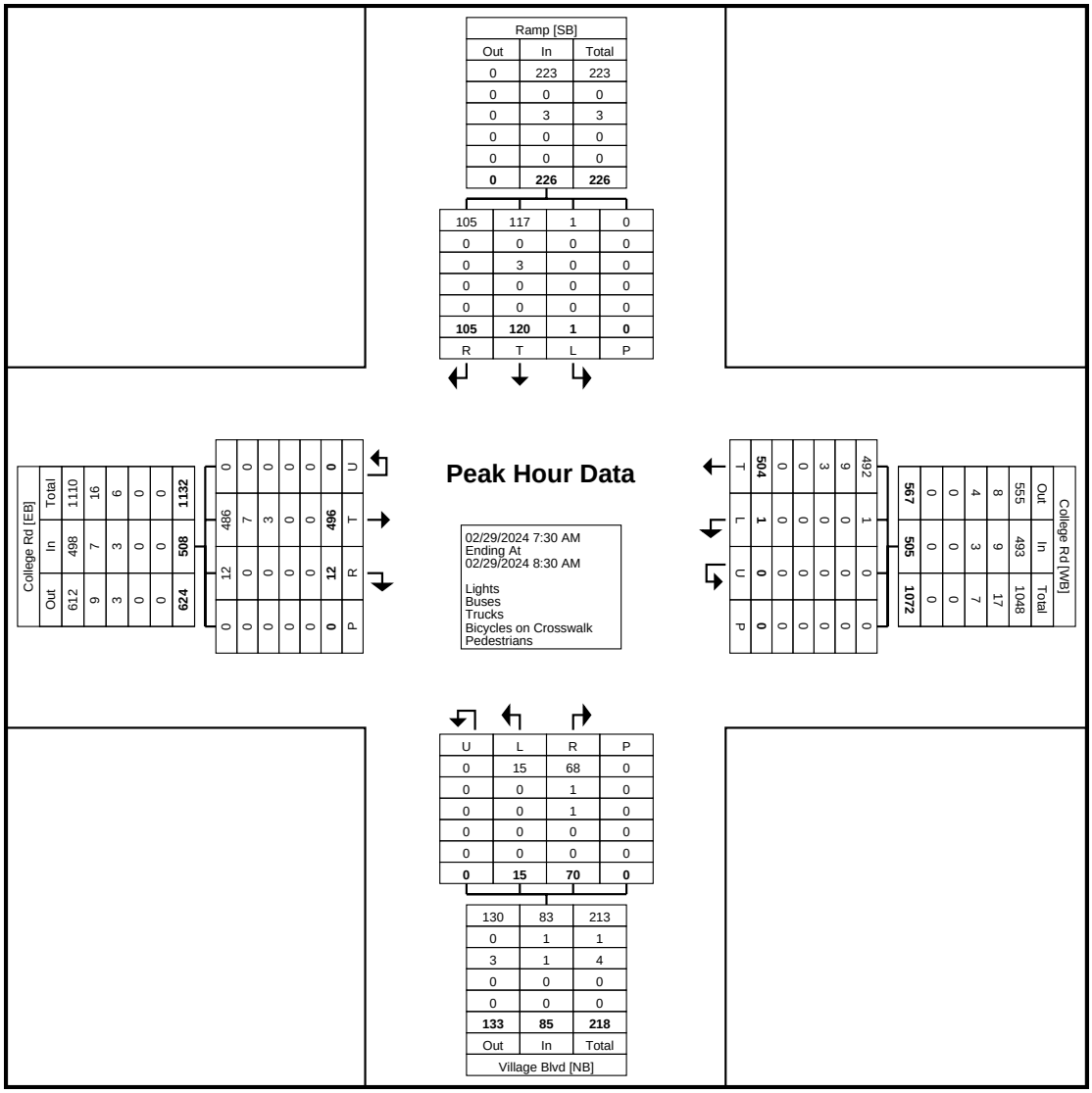
Count Name: College Rd & Village Blvd (2/29)
Site Code:
Start Date: 02/29/2024

Turning Movement Peak Hour Data (7:30 AM)

Start Time	College Rd Eastbound						College Rd Westbound					Village Blvd Northbound						Ramp Southbound					
	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	96	2	0	0	0	98	1	117	0	0	118	6	13	7	0	0	26	0	22	22	0	44	286
7:45 AM	112	1	0	0	0	113	0	166	0	0	166	2	11	6	0	0	19	0	23	31	0	54	352
8:00 AM	150	3	1	0	0	154	0	121	0	0	121	2	8	6	0	0	16	0	34	34	0	68	359
8:15 AM	138	5	0	0	0	143	0	100	0	0	100	5	15	4	0	0	24	1	41	18	0	60	327
Total	496	11	1	0	0	508	1	504	0	0	505	15	47	23	0	0	85	1	120	105	0	226	1324
Approach %	97.6	2.2	0.2	0.0	-	-	0.2	99.8	0.0	-	-	17.6	55.3	27.1	0.0	-	-	0.4	53.1	46.5	-	-	-
Total %	37.5	0.8	0.1	0.0	-	38.4	0.1	38.1	0.0	-	38.1	1.1	3.5	1.7	0.0	-	6.4	0.1	9.1	7.9	-	17.1	-
PHF	0.827	0.550	0.250	0.000	-	0.825	0.250	0.759	0.000	-	0.761	0.625	0.783	0.821	0.000	-	0.817	0.250	0.732	0.772	-	0.831	0.922
Lights	486	11	1	0	-	498	1	492	0	-	493	15	45	23	0	-	83	1	117	105	-	223	1297
% Lights	98.0	100.0	100.0	-	-	98.0	100.0	97.6	-	-	97.6	100.0	95.7	100.0	-	-	97.6	100.0	97.5	100.0	-	98.7	98.0
Buses	7	0	0	0	-	7	0	9	0	-	9	0	1	0	0	-	1	0	0	0	-	0	17
% Buses	1.4	0.0	0.0	-	-	1.4	0.0	1.8	-	-	1.8	0.0	2.1	0.0	-	-	1.2	0.0	0.0	0.0	-	0.0	1.3
Trucks	3	0	0	0	-	3	0	3	0	-	3	0	1	0	0	-	1	0	3	0	-	3	10
% Trucks	0.6	0.0	0.0	-	-	0.6	0.0	0.6	-	-	0.6	0.0	2.1	0.0	-	-	1.2	0.0	2.5	0.0	-	1.3	0.8
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Plainsboro, NJ
College Rd & Village Blvd
Thursday, February 29, 2024
Location: 40.357704, -74.611497

Count Name: College Rd & Village Blvd (2/29)
Site Code:
Start Date: 02/29/2024



Turning Movement Peak Hour Data Plot (7:30 AM)

Plainsboro, NJ
College Rd & Village Blvd
Thursday, February 29, 2024
Location: 40.357704, -74.611497

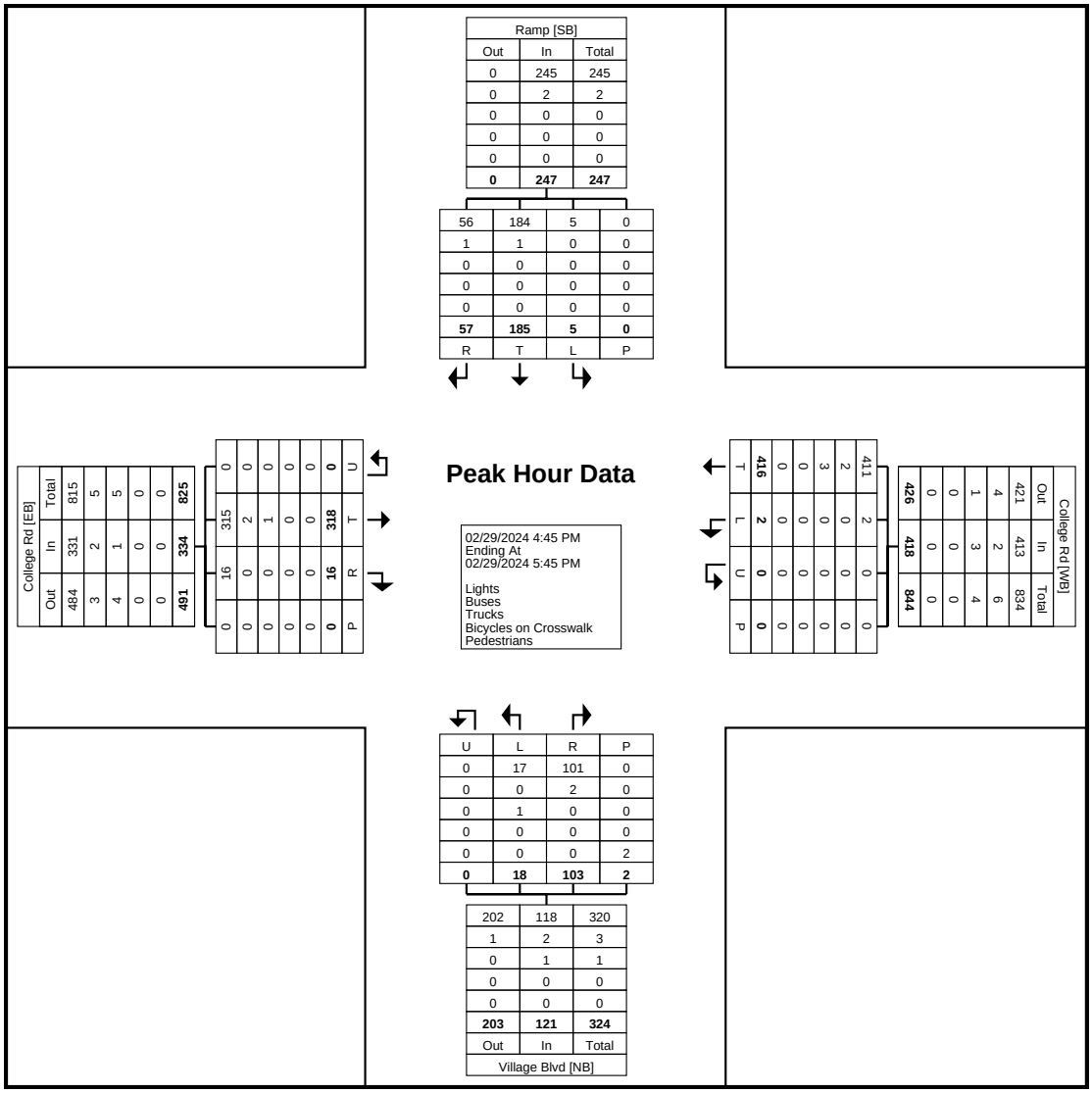
Count Name: College Rd & Village Blvd (2/29)
Site Code:
Start Date: 02/29/2024

Turning Movement Peak Hour Data (4:45 PM)

Start Time	College Rd Eastbound						College Rd Westbound					Village Blvd Northbound						Ramp Southbound					
	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	71	3	1	0	0	75	1	107	0	0	108	5	18	9	0	2	32	1	37	16	0	54	269
5:00 PM	89	1	1	0	0	91	1	95	0	0	96	5	19	15	0	0	39	0	48	16	0	64	290
5:15 PM	69	9	0	0	0	78	0	111	0	0	111	2	10	11	0	0	23	1	57	13	0	71	283
5:30 PM	89	1	0	0	0	90	0	103	0	0	103	6	9	12	0	0	27	3	43	12	0	58	278
Total	318	14	2	0	0	334	2	416	0	0	418	18	56	47	0	2	121	5	185	57	0	247	1120
Approach %	95.2	4.2	0.6	0.0	-	-	0.5	99.5	0.0	-	-	14.9	46.3	38.8	0.0	-	-	2.0	74.9	23.1	-	-	-
Total %	28.4	1.3	0.2	0.0	-	29.8	0.2	37.1	0.0	-	37.3	1.6	5.0	4.2	0.0	-	10.8	0.4	16.5	5.1	-	22.1	-
PHF	0.893	0.389	0.500	0.000	-	0.918	0.500	0.937	0.000	-	0.941	0.750	0.737	0.783	0.000	-	0.776	0.417	0.811	0.891	-	0.870	0.966
Lights	315	14	2	0	-	331	2	411	0	-	413	17	55	46	0	-	118	5	184	56	-	245	1107
% Lights	99.1	100.0	100.0	-	-	99.1	100.0	98.8	-	-	98.8	94.4	98.2	97.9	-	-	97.5	100.0	99.5	98.2	-	99.2	98.8
Buses	2	0	0	0	-	2	0	2	0	-	2	0	1	1	0	-	2	0	1	1	-	2	8
% Buses	0.6	0.0	0.0	-	-	0.6	0.0	0.5	-	-	0.5	0.0	1.8	2.1	-	-	1.7	0.0	0.5	1.8	-	0.8	0.7
Trucks	1	0	0	0	-	1	0	3	0	-	3	1	0	0	0	-	1	0	0	0	-	0	5
% Trucks	0.3	0.0	0.0	-	-	0.3	0.0	0.7	-	-	0.7	5.6	0.0	0.0	-	-	0.8	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

Plainsboro, NJ
College Rd & Village Blvd
Thursday, February 29, 2024
Location: 40.357704, -74.611497

Count Name: College Rd & Village Blvd (2/29)
Site Code:
Start Date: 02/29/2024



Turning Movement Peak Hour Data Plot (4:45 PM)

www.TSTData.com
Tri-State Traffic Data, Inc

Coatesville, PA, Pennsylvania, United States 19320
610-466-1469
Serving Transportation Professionals Since 1995

Plainsboro, NJ
College Rd & Village Blvd
Saturday, March 2, 2024
Location: 40.357704, -74.611497

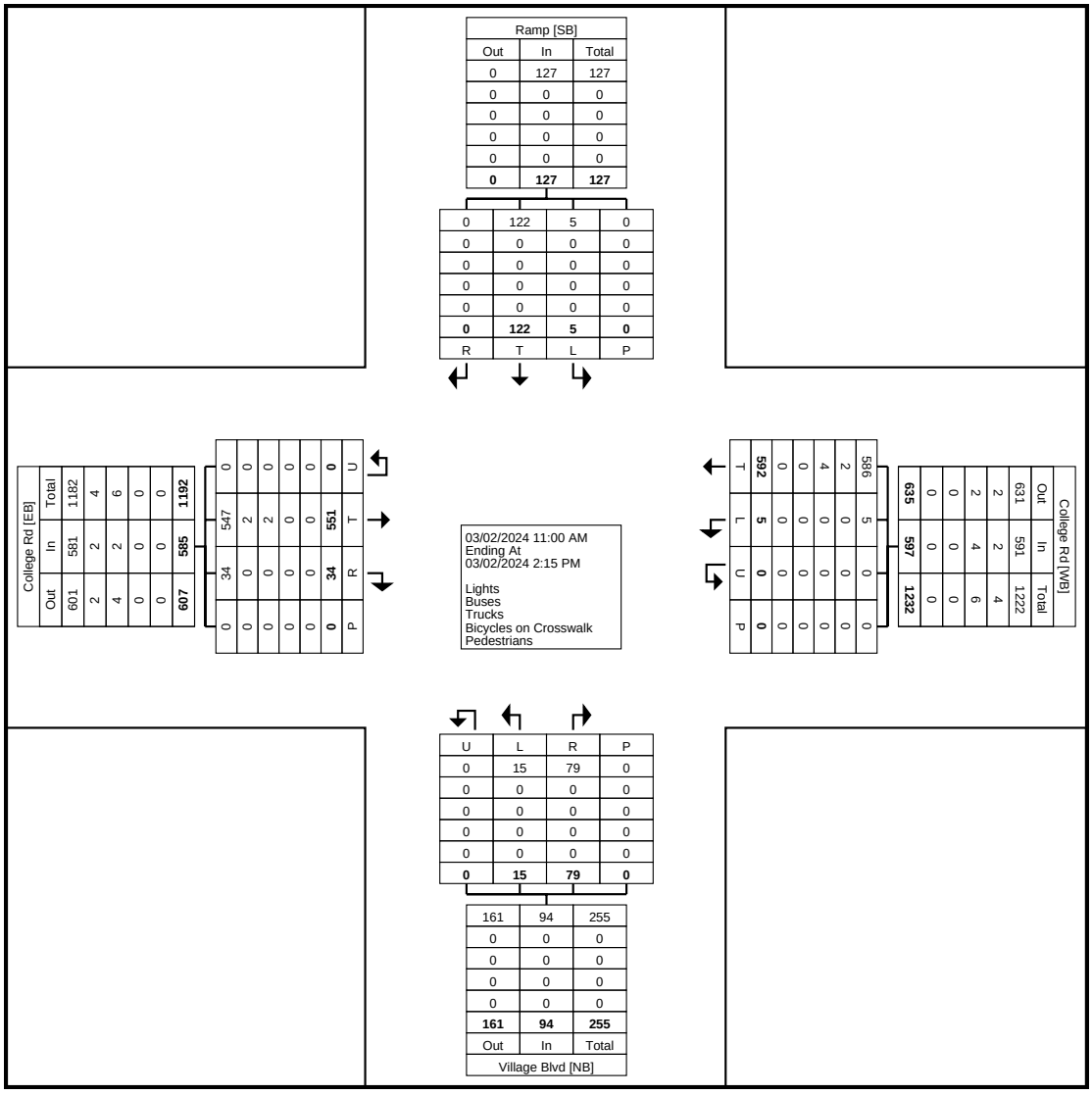
Count Name: College Rd & Village Blvd (3/2)
Site Code:
Start Date: 03/02/2024

Turning Movement Data

Start Time	College Rd Eastbound						College Rd Westbound					Village Blvd Northbound						Ramp Southbound					
	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
11:00 AM	29	7	0	0	0	36	0	47	0	0	47	2	7	0	0	0	9	0	11	0	0	11	103
11:15 AM	33	3	0	0	0	36	0	48	0	0	48	2	5	0	0	0	7	1	21	0	0	22	113
11:30 AM	38	7	1	0	0	46	2	53	0	0	55	2	5	1	0	0	8	0	15	0	0	15	124
11:45 AM	62	1	0	0	0	63	1	46	0	0	47	3	8	2	0	0	13	2	17	0	0	19	142
Hourly Total	162	18	1	0	0	181	3	194	0	0	197	9	25	3	0	0	37	3	64	0	0	67	482
12:00 PM	52	1	0	0	0	53	0	51	0	0	51	1	6	2	0	0	9	0	5	0	0	5	118
12:15 PM	55	2	0	0	0	57	0	57	0	0	57	0	3	1	0	0	4	0	6	0	0	6	124
12:30 PM	44	2	0	0	0	46	0	49	0	0	49	0	5	0	0	0	5	0	8	0	0	8	108
12:45 PM	44	2	0	0	0	46	0	43	0	0	43	2	6	5	0	0	13	1	11	0	0	12	114
Hourly Total	195	7	0	0	0	202	0	200	0	0	200	3	20	8	0	0	31	1	30	0	0	31	464
1:00 PM	42	2	0	0	0	44	0	51	0	0	51	1	10	2	0	0	13	0	4	0	0	4	112
1:15 PM	38	1	0	0	0	39	1	58	0	0	59	0	2	0	0	0	2	0	8	0	0	8	108
1:30 PM	61	3	0	0	0	64	0	39	0	0	39	0	4	0	0	0	4	0	8	0	0	8	115
1:45 PM	53	2	0	0	0	55	1	50	0	0	51	2	5	0	0	0	7	1	8	0	0	9	122
Hourly Total	194	8	0	0	0	202	2	198	0	0	200	3	21	2	0	0	26	1	28	0	0	29	457
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	551	33	1	0	0	585	5	592	0	0	597	15	66	13	0	0	94	5	122	0	0	127	1403
Approach %	94.2	5.6	0.2	0.0	-	-	0.8	99.2	0.0	-	-	16.0	70.2	13.8	0.0	-	-	3.9	96.1	0.0	-	-	-
Total %	39.3	2.4	0.1	0.0	-	41.7	0.4	42.2	0.0	-	42.6	1.1	4.7	0.9	0.0	-	6.7	0.4	8.7	0.0	-	9.1	-
Lights	547	33	1	0	-	581	5	586	0	-	591	15	66	13	0	-	94	5	122	0	-	127	1393
% Lights	99.3	100.0	100.0	-	-	99.3	100.0	99.0	-	-	99.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	99.3
Buses	2	0	0	0	-	2	0	2	0	-	2	0	0	0	0	-	0	0	0	0	-	0	4
% Buses	0.4	0.0	0.0	-	-	0.3	0.0	0.3	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.3
Trucks	2	0	0	0	-	2	0	4	0	-	4	0	0	0	0	-	0	0	0	0	-	0	6
% Trucks	0.4	0.0	0.0	-	-	0.3	0.0	0.7	-	-	0.7	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Plainsboro, NJ
College Rd & Village Blvd
Saturday, March 2, 2024
Location: 40.357704, -74.611497

Count Name: College Rd & Village Blvd (3/2)
Site Code:
Start Date: 03/02/2024



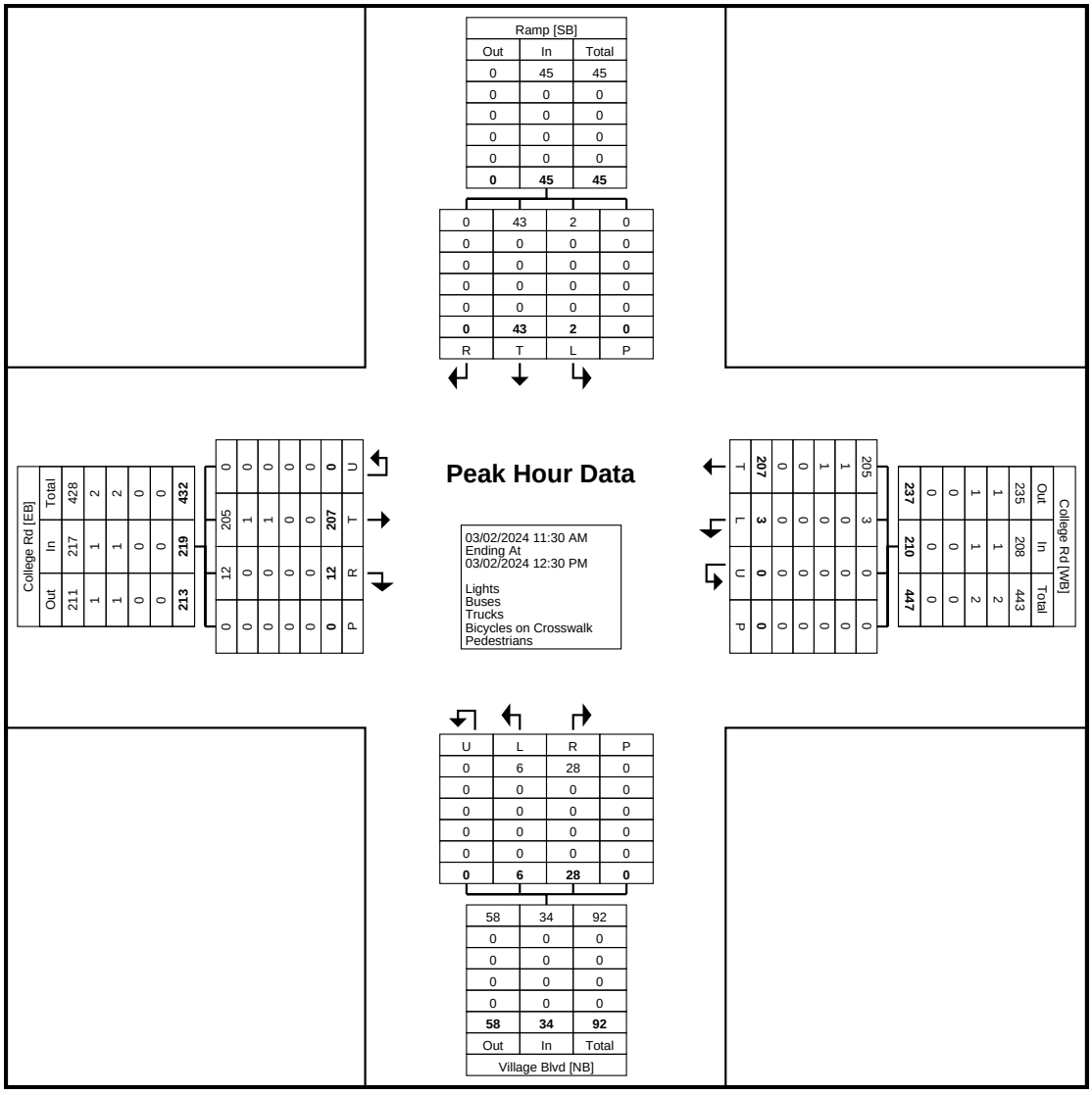
Turning Movement Data Plot

Turning Movement Peak Hour Data (11:30 AM)

Start Time	College Rd Eastbound						College Rd Westbound					Village Blvd Northbound						Ramp Southbound					
	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
11:30 AM	38	7	1	0	0	46	2	53	0	0	55	2	5	1	0	0	8	0	15	0	0	15	124
11:45 AM	62	1	0	0	0	63	1	46	0	0	47	3	8	2	0	0	13	2	17	0	0	19	142
12:00 PM	52	1	0	0	0	53	0	51	0	0	51	1	6	2	0	0	9	0	5	0	0	5	118
12:15 PM	55	2	0	0	0	57	0	57	0	0	57	0	3	1	0	0	4	0	6	0	0	6	124
Total	207	11	1	0	0	219	3	207	0	0	210	6	22	6	0	0	34	2	43	0	0	45	508
Approach %	94.5	5.0	0.5	0.0	-	-	1.4	98.6	0.0	-	-	17.6	64.7	17.6	0.0	-	-	4.4	95.6	0.0	-	-	-
Total %	40.7	2.2	0.2	0.0	-	43.1	0.6	40.7	0.0	-	41.3	1.2	4.3	1.2	0.0	-	6.7	0.4	8.5	0.0	-	8.9	-
PHF	0.835	0.393	0.250	0.000	-	0.869	0.375	0.908	0.000	-	0.921	0.500	0.688	0.750	0.000	-	0.654	0.250	0.632	0.000	-	0.592	0.894
Lights	205	11	1	0	-	217	3	205	0	-	208	6	22	6	0	-	34	2	43	0	-	45	504
% Lights	99.0	100.0	100.0	-	-	99.1	100.0	99.0	-	-	99.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	99.2
Buses	1	0	0	0	-	1	0	1	0	-	1	0	0	0	0	-	0	0	0	0	-	0	2
% Buses	0.5	0.0	0.0	-	-	0.5	0.0	0.5	-	-	0.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.4
Trucks	1	0	0	0	-	1	0	1	0	-	1	0	0	0	0	-	0	0	0	0	-	0	2
% Trucks	0.5	0.0	0.0	-	-	0.5	0.0	0.5	-	-	0.5	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Plainsboro, NJ
College Rd & Village Blvd
Saturday, March 2, 2024
Location: 40.357704, -74.611497

Count Name: College Rd & Village Blvd (3/2)
Site Code:
Start Date: 03/02/2024



Turning Movement Peak Hour Data Plot (11:30 AM)

Seminary Rd & College Rd West (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160862, Location: 40.358364, -74.614376

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

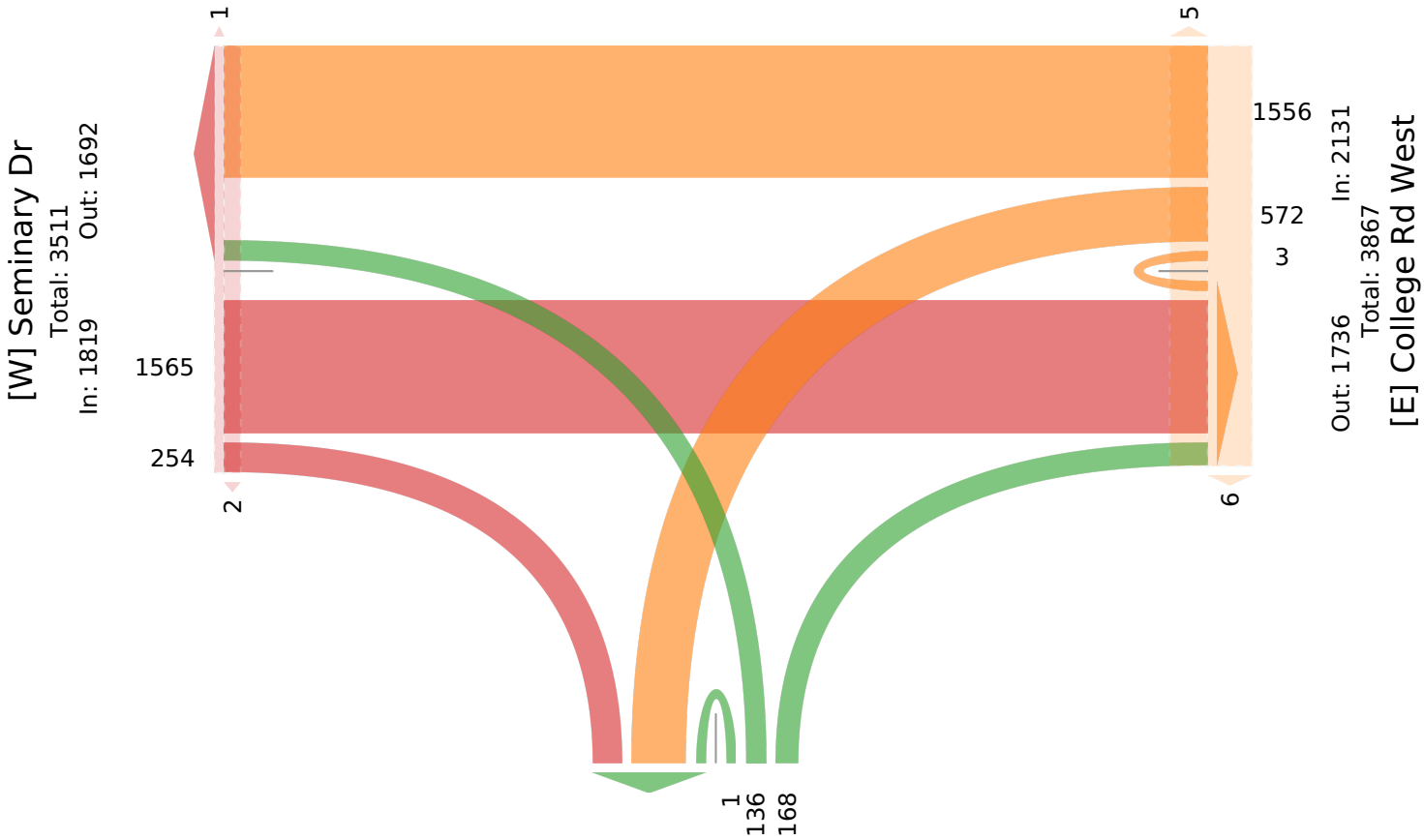
Leg	Seminary Dr						College Rd West					College Rd West						
Direction	Eastbound						Westbound					Northbound						
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int
2024-02-29 7:00AM	73	7	0	1	**81**	0	21	49	0	**70**	1	0	0	0	3	**3**	0	**154**
7:15AM	65	3	0	1	**69**	0	15	61	1	**77**	2	1	1	0	1	**3**	0	**149**
7:30AM	91	9	0	3	**103**	0	39	102	0	**141**	0	2	0	0	3	**5**	0	**249**
7:45AM	109	20	0	1	**130**	0	46	139	0	**185**	0	2	0	1	4	**7**	0	**322**
Hourly Total	338	39	0	6	**383**	0	121	351	1	**473**	3	5	1	1	11	**18**	0	**874**
8:00AM	154	25	0	1	**180**	0	53	124	0	**177**	1	4	0	0	2	**6**	0	**363**
8:15AM	143	20	0	2	**165**	0	50	68	0	**118**	0	6	0	0	3	**9**	0	**292**
8:30AM	124	26	0	1	**151**	0	52	48	0	**100**	0	5	1	0	5	**11**	0	**262**
8:45AM	97	16	0	0	**113**	1	71	71	0	**142**	0	3	2	0	7	**12**	0	**267**
Hourly Total	518	87	0	4	**609**	1	226	311	0	**537**	1	18	3	0	17	**38**	0	**1184**
9:00AM	90	21	0	3	**114**	1	42	55	0	**97**	0	6	1	0	8	**15**	0	**226**
9:15AM	86	17	0	1	**104**	0	46	38	0	**84**	0	4	1	0	5	**10**	0	**198**
9:30AM	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Hourly Total	176	38	0	4	**218**	1	88	93	0	**181**	0	10	2	0	13	**25**	0	**424**
4:00PM	62	8	0	0	**70**	0	16	99	0	**115**	0	11	2	0	12	**25**	0	**210**
4:15PM	67	5	0	0	**72**	0	19	90	0	**109**	0	12	1	0	13	**26**	0	**207**
4:30PM	65	10	0	3	**78**	0	12	110	0	**122**	0	8	1	0	22	**31**	0	**231**
4:45PM	57	9	0	1	**67**	0	21	100	0	**121**	4	17	2	0	9	**28**	0	**216**
Hourly Total	251	32	0	4	**287**	0	68	399	0	**467**	4	48	6	0	56	**110**	0	**864**
5:00PM	65	8	0	3	**76**	0	13	111	0	**124**	1	17	2	0	15	**34**	0	**234**
5:15PM	60	10	0	0	**70**	0	18	103	2	**123**	2	11	2	0	18	**31**	0	**224**
5:30PM	75	7	0	0	**82**	1	20	101	0	**121**	0	20	0	0	12	**32**	0	**235**
5:45PM	82	12	0	0	**94**	0	18	87	0	**105**	0	7	2	0	8	**17**	0	**216**
Hourly Total	282	37	0	3	**322**	1	69	402	2	**473**	3	55	6	0	53	**114**	0	**909**
6:00PM	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Total	1565	233	0	21	**1819**	3	572	1556	3	**2131**	11	136	18	1	150	**305**	0	**4255**
% Approach	86.0%	12.8%	0%	1.2%	**-**	-	26.8%	73.0%	0.1%	**-**	-	44.6%	5.9%	0.3%	49.2%	**-**	-	-
% Total	36.8%	5.5%	0%	0.5%	**42.7%**	-	13.4%	36.6%	0.1%	**50.1%**	-	3.2%	0.4%	0%	3.5%	**7.2%**	-	-
Lights	1547	228	0	20	**1795**	-	542	1525	3	**2070**	-	132	15	1	139	**287**	-	4152
% Lights	98.8%	97.9%	0%	95.2%	**98.7%**	-	94.8%	98.0%	100%	**97.1%**	-	97.1%	83.3%	100%	92.7%	**94.1%**	-	97.6%
Articulated Trucks and Single-Unit Trucks	6	0	0	0	**6**	-	3	20	0	**23**	-	1	0	0	1	**2**	-	31
% Articulated Trucks and Single-Unit Trucks	0.4%	0%	0%	0%	**0.3%**	-	0.5%	1.3%	0%	**1.1%**	-	0.7%	0%	0%	0.7%	**0.7%**	-	0.7%
Buses	12	5	0	1	**18**	-	27	11	0	**38**	-	3	3	0	10	**16**	-	72
% Buses	0.8%	2.1%	0%	4.8%	**1.0%**	-	4.7%	0.7%	0%	**1.8%**	-	2.2%	16.7%	0%	6.7%	**5.2%**	-	1.7%
Pedestrians	-	-	-	-	-	3	-	-	-	-	11	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & College Rd West (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160862, Location: 40.358364, -74.614376

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Seminary Rd & College Rd West (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160862, Location: 40.358364, -74.614376

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

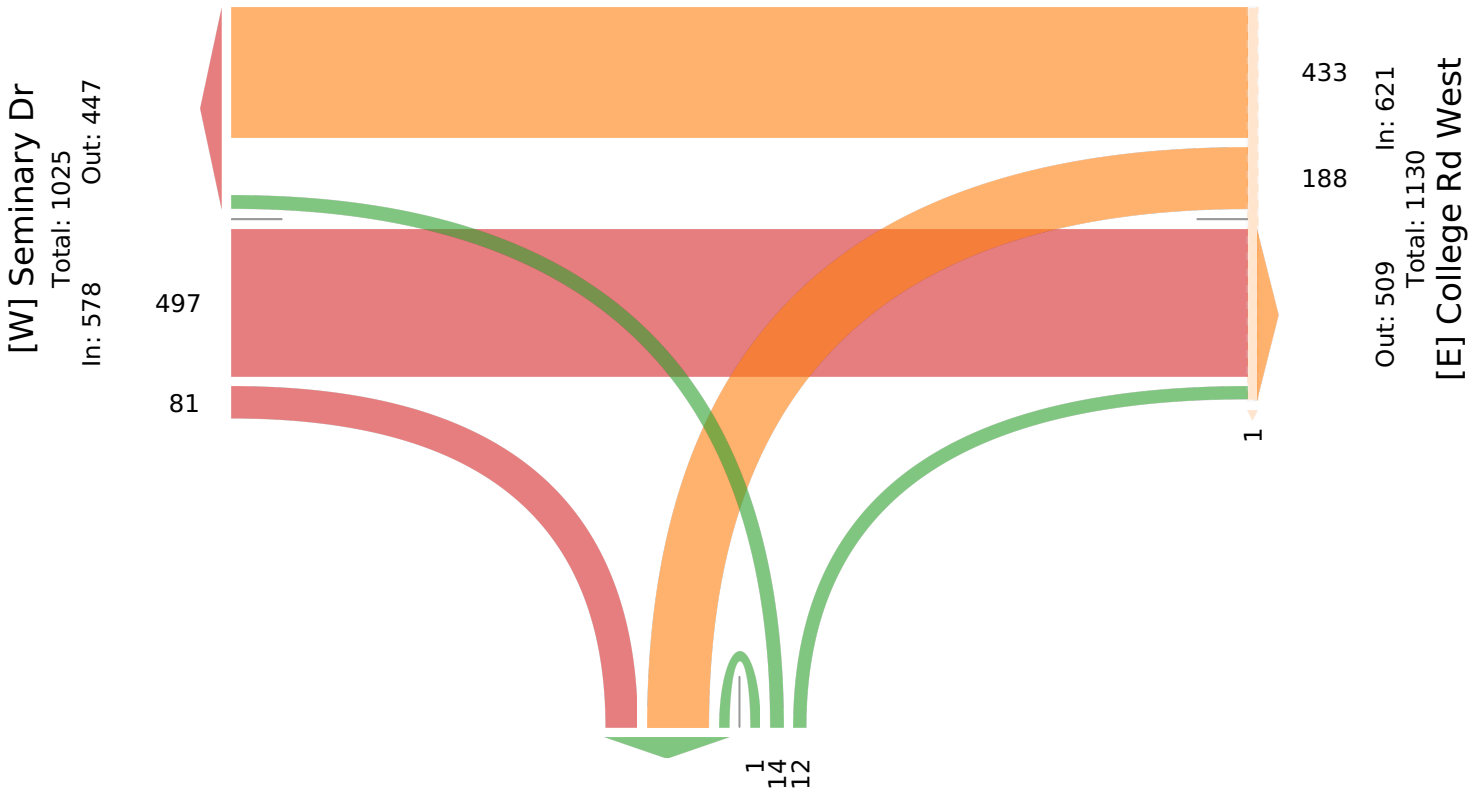
Leg Direction	Seminary Dr Eastbound						College Rd West Westbound					College Rd West Northbound						
Time	T	R	U	RR	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	RR	**App**	Ped*	**Int**
2024-02-29 7:30AM	91	9	0	3	**103**	0	39	102	0	**141**	0	2	0	0	3	**5**	0	**249**
7:45AM	109	20	0	1	**130**	0	46	139	0	**185**	0	2	0	1	4	**7**	0	**322**
8:00AM	154	25	0	1	**180**	0	53	124	0	**177**	1	4	0	0	2	**6**	0	**363**
8:15AM	143	20	0	2	**165**	0	50	68	0	**118**	0	6	0	0	3	**9**	0	**292**
Total	497	74	0	7	**578**	0	188	433	0	**621**	1	14	0	1	12	**27**	0	**1226**
% Approach	86.0%	12.8%	0%	1.2%	**-**	-	30.3%	69.7%	0%	**-**	-	51.9%	0%	3.7%	44.4%	**-**	-	-
% Total	40.5%	6.0%	0%	0.6%	**47.1%**	-	15.3%	35.3%	0%	**50.7%**	-	1.1%	0%	0.1%	1.0%	**2.2%**	-	-
PHF	0.807	0.740	-	0.583	**0.803**	-	0.887	0.779	-	**0.839**	-	0.583	-	0.250	0.750	**0.750**	-	0.844
Lights	490	73	0	7	**570**	-	186	423	0	**609**	-	13	0	1	11	**25**	-	1204
% Lights	98.6%	98.6%	0%	100%	**98.6%**	-	98.9%	97.7%	0%	**98.1%**	-	92.9%	0%	100%	91.7%	**92.6%**	-	98.2%
Articulated Trucks and Single-Unit Trucks	2	0	0	0	**2**	-	0	4	0	**4**	-	1	0	0	0	**1**	-	7
% Articulated Trucks and Single-Unit Trucks	0.4%	0%	0%	0%	**0.3%**	-	0%	0.9%	0%	**0.6%**	-	7.1%	0%	0%	0%	**3.7%**	-	0.6%
Buses	5	1	0	0	**6**	-	2	6	0	**8**	-	0	0	0	1	**1**	-	15
% Buses	1.0%	1.4%	0%	0%	**1.0%**	-	1.1%	1.4%	0%	**1.3%**	-	0%	0%	0%	8.3%	**3.7%**	-	1.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & College Rd West (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160862, Location: 40.358364, -74.614376

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Seminary Rd & College Rd West (2/29) - TMC

Thu Feb 29, 2024
PM Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160862, Location: 40.358364, -74.614376

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

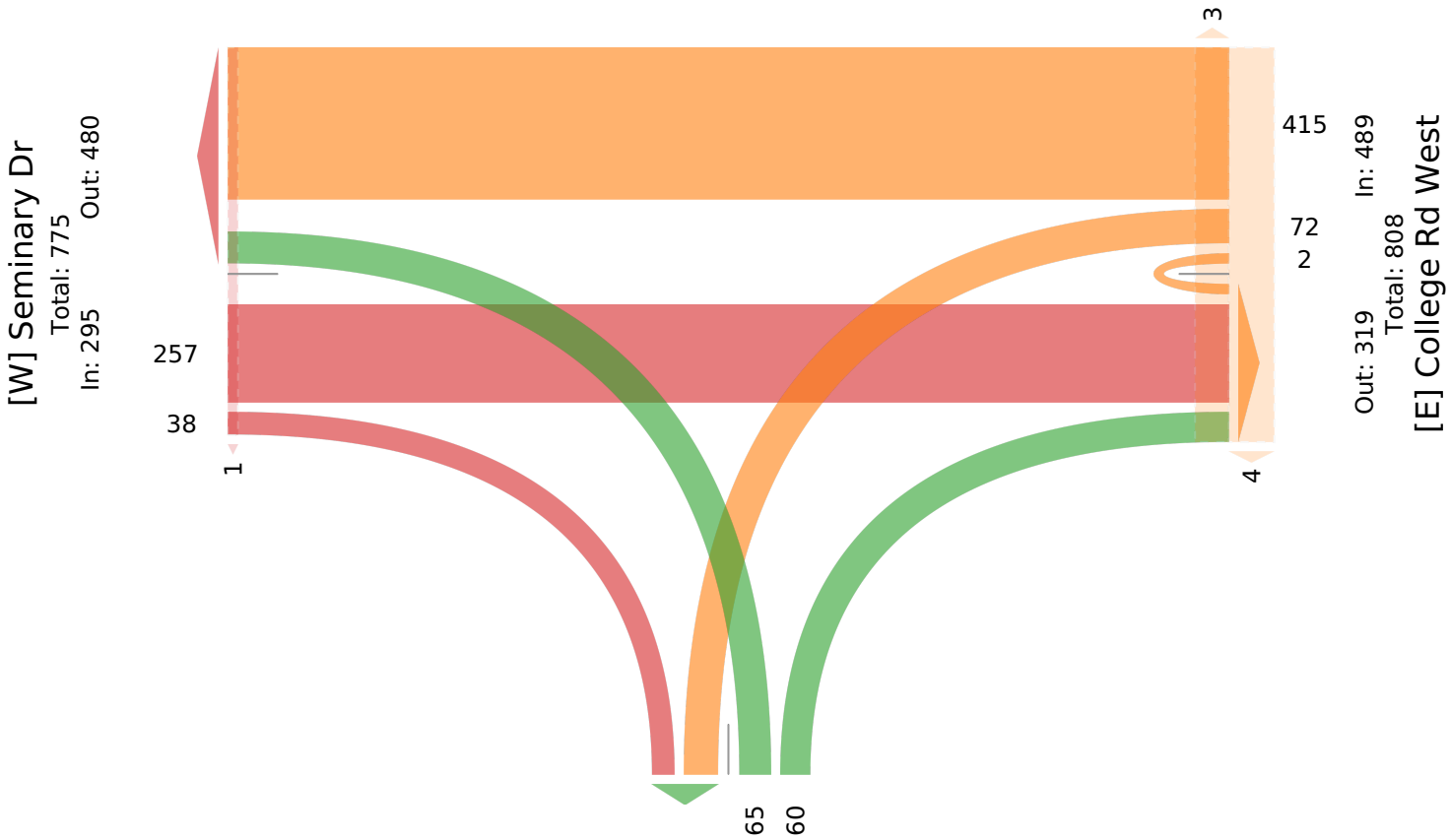
Leg / Direction	Seminary Dr Eastbound						College Rd West Westbound					College Rd West Northbound						
Time	T	R	U	RR	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	RR	**App**	Ped*	**Int**
2024-02-29 4:45PM	57	9	0	1	**67**	0	21	100	0	**121**	4	17	2	0	9	**28**	0	**216**
5:00PM	65	8	0	3	**76**	0	13	111	0	**124**	1	17	2	0	15	**34**	0	**234**
5:15PM	60	10	0	0	**70**	0	18	103	2	**123**	2	11	2	0	18	**31**	0	**224**
5:30PM	75	7	0	0	**82**	1	20	101	0	**121**	0	20	0	0	12	**32**	0	**235**
Total	257	34	0	4	**295**	1	72	415	2	**489**	7	65	6	0	54	**125**	0	**909**
% Approach	87.1%	11.5%	0%	1.4%	**-**	-	14.7%	84.9%	0.4%	**-**	-	52.0%	4.8%	0%	43.2%	**-**	-	**-**
% Total	28.3%	3.7%	0%	0.4%	**32.5%**	-	7.9%	45.7%	0.2%	**53.8%**	-	7.2%	0.7%	0%	5.9%	**13.8%**	-	**-**
PHF	0.857	0.850	-	0.333	**0.899**	-	0.857	0.935	0.250	**0.986**	-	0.813	0.750	-	0.750	**0.919**	-	0.967
Lights	255	33	0	4	**292**	-	69	410	2	**481**	-	65	6	0	53	**124**	-	897
% Lights	99.2%	97.1%	0%	100%	**99.0%**	-	95.8%	98.8%	100%	**98.4%**	-	100%	100%	0%	98.1%	**99.2%**	-	98.7%
Articulated Trucks and Single-Unit Trucks	1	0	0	0	**1**	-	1	4	0	**5**	-	0	0	0	0	**0**	-	6
% Articulated Trucks and Single-Unit Trucks	0.4%	0%	0%	0%	**0.3%**	-	1.4%	1.0%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	0.7%
Buses	1	1	0	0	**2**	-	2	1	0	**3**	-	0	0	0	1	**1**	-	6
% Buses	0.4%	2.9%	0%	0%	**0.7%**	-	2.8%	0.2%	0%	**0.6%**	-	0%	0%	0%	1.9%	**0.8%**	-	0.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	7	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & College Rd West (2/29) - TMC

Thu Feb 29, 2024
PM Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160862, Location: 40.358364, -74.614376

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



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Coatesville, PA, Pennsylvania, United States 19320
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Plainsboro, NJ
Seminary Rd & College Rd West
Saturday, March 2, 2024
Location: 40.358389, -74.614411

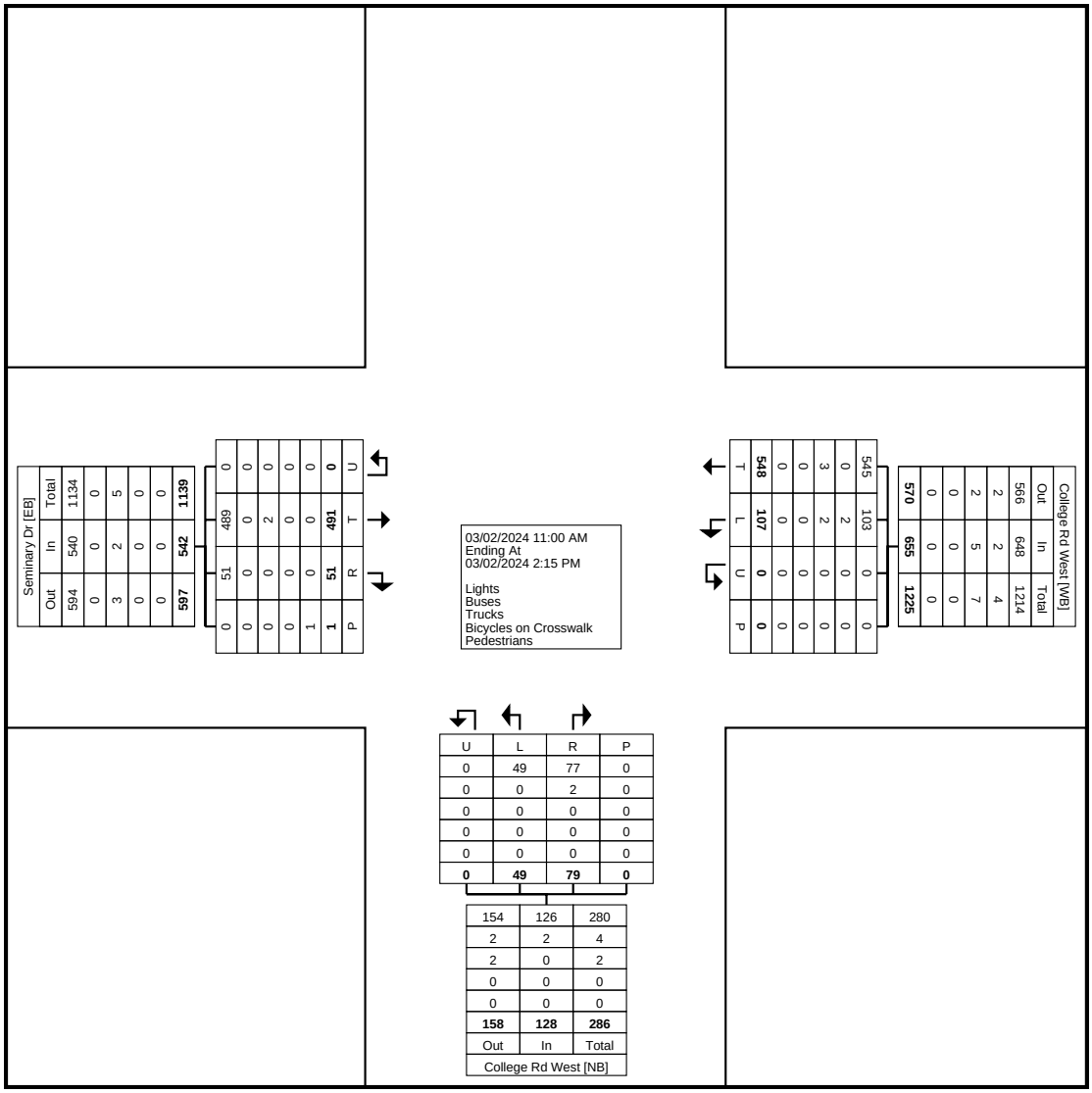
Count Name: Seminary Rd & College Rd West (3/2)
Site Code:
Start Date: 03/02/2024

Turning Movement Data

Start Time	Seminary Dr Eastbound						College Rd West Westbound					College Rd West Northbound						
	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	Right on Red	U-Turn	Peds	App. Total	Int. Total
11:00 AM	30	5	0	0	0	35	7	48	0	0	55	0	0	6	0	0	6	96
11:15 AM	31	4	0	0	1	35	7	42	0	0	49	3	2	0	0	0	5	89
11:30 AM	39	8	0	0	0	47	7	55	0	0	62	6	4	1	0	0	11	120
11:45 AM	52	10	0	0	0	62	11	44	0	0	55	10	4	5	0	0	19	136
Hourly Total	152	27	0	0	1	179	32	189	0	0	221	19	10	12	0	0	41	441
12:00 PM	41	4	0	0	0	45	10	47	0	0	57	7	2	11	0	0	20	122
12:15 PM	48	3	0	0	0	51	7	56	0	0	63	3	0	5	0	0	8	122
12:30 PM	42	2	0	0	0	44	10	43	0	0	53	4	0	5	0	0	9	106
12:45 PM	35	5	0	0	0	40	11	32	0	0	43	6	2	9	0	0	17	100
Hourly Total	166	14	0	0	0	180	38	178	0	0	216	20	4	30	0	0	54	450
1:00 PM	33	1	0	0	0	34	7	53	0	0	60	3	0	8	0	0	11	105
1:15 PM	33	3	0	0	0	36	11	43	0	0	54	2	0	6	0	0	8	98
1:30 PM	56	4	0	0	0	60	7	38	0	0	45	1	0	4	0	0	5	110
1:45 PM	51	2	0	0	0	53	12	47	0	0	59	4	0	5	0	0	9	121
Hourly Total	173	10	0	0	0	183	37	181	0	0	218	10	0	23	0	0	33	434
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	491	51	0	0	1	542	107	548	0	0	655	49	14	65	0	0	128	1325
Approach %	90.6	9.4	0.0	0.0	-	-	16.3	83.7	0.0	-	-	38.3	10.9	50.8	0.0	-	-	-
Total %	37.1	3.8	0.0	0.0	-	40.9	8.1	41.4	0.0	-	49.4	3.7	1.1	4.9	0.0	-	9.7	-
Lights	489	51	0	0	-	540	103	545	0	-	648	49	14	63	0	-	126	1314
% Lights	99.6	100.0	-	-	-	99.6	96.3	99.5	-	-	98.9	100.0	100.0	96.9	-	-	98.4	99.2
Buses	0	0	0	0	-	0	2	0	0	-	2	0	0	2	0	-	2	4
% Buses	0.0	0.0	-	-	-	0.0	1.9	0.0	-	-	0.3	0.0	0.0	3.1	-	-	1.6	0.3
Trucks	2	0	0	0	-	2	2	3	0	-	5	0	0	0	0	-	0	7
% Trucks	0.4	0.0	-	-	-	0.4	1.9	0.5	-	-	0.8	0.0	0.0	0.0	-	-	0.0	0.5
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-

Plainsboro, NJ
Seminary Rd & College Rd West
Saturday, March 2, 2024
Location: 40.358389, -74.614411

Count Name: Seminary Rd & College Rd West (3/2)
Site Code:
Start Date: 03/02/2024



Turning Movement Data Plot

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Plainsboro, NJ
Seminary Rd & College Rd West
Saturday, March 2, 2024
Location: 40.358389, -74.614411

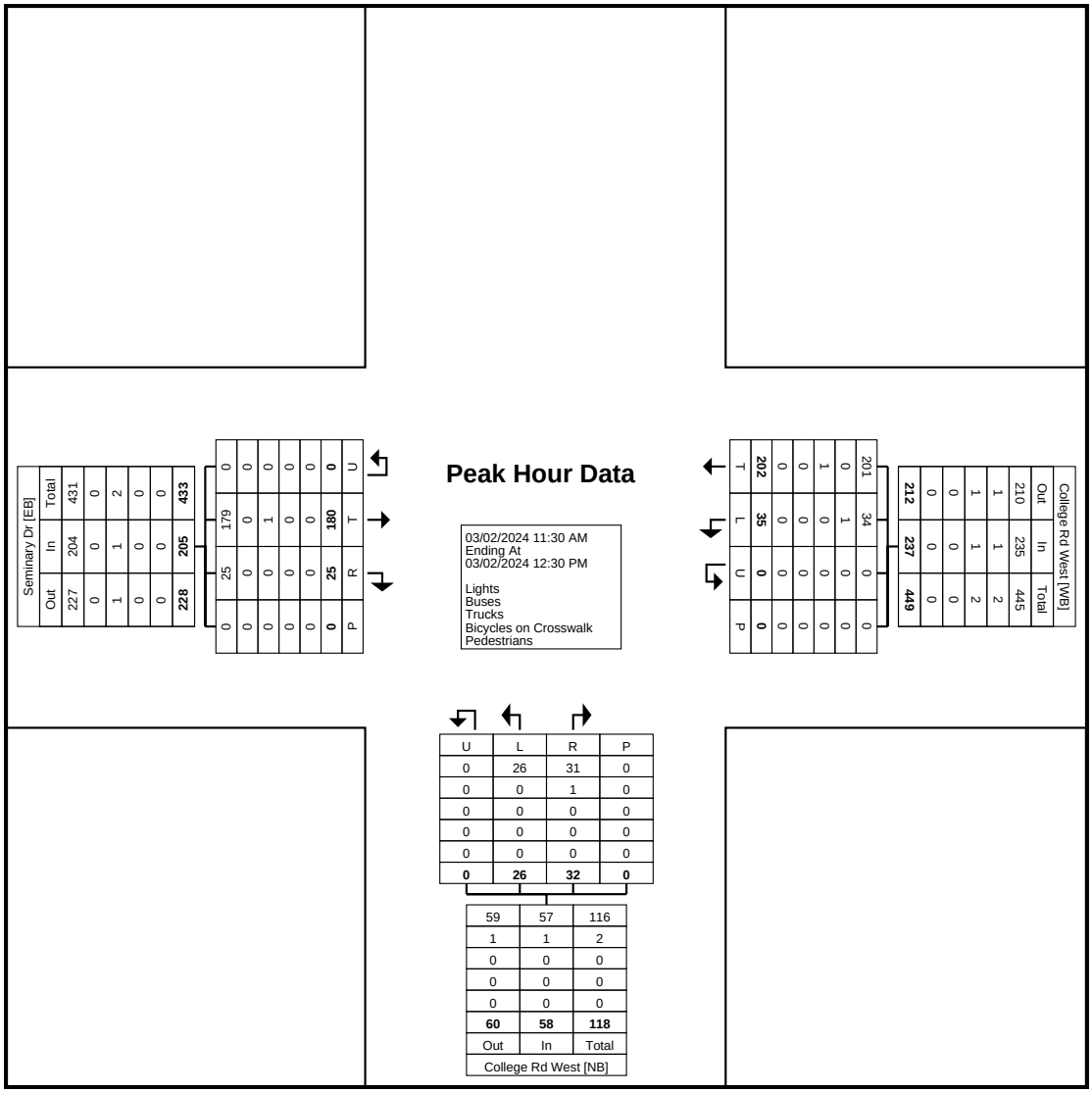
Count Name: Seminary Rd & College Rd West (3/2)
Site Code:
Start Date: 03/02/2024

Turning Movement Peak Hour Data (11:30 AM)

Start Time	Seminary Dr Eastbound						College Rd West Westbound					College Rd West Northbound						
	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	Right on Red	U-Turn	Peds	App. Total	Int. Total
11:30 AM	39	8	0	0	0	47	7	55	0	0	62	6	4	1	0	0	11	120
11:45 AM	52	10	0	0	0	62	11	44	0	0	55	10	4	5	0	0	19	136
12:00 PM	41	4	0	0	0	45	10	47	0	0	57	7	2	11	0	0	20	122
12:15 PM	48	3	0	0	0	51	7	56	0	0	63	3	0	5	0	0	8	122
Total	180	25	0	0	0	205	35	202	0	0	237	26	10	22	0	0	58	500
Approach %	87.8	12.2	0.0	0.0	-	-	14.8	85.2	0.0	-	-	44.8	17.2	37.9	0.0	-	-	-
Total %	36.0	5.0	0.0	0.0	-	41.0	7.0	40.4	0.0	-	47.4	5.2	2.0	4.4	0.0	-	11.6	-
PHF	0.865	0.625	0.000	0.000	-	0.827	0.795	0.902	0.000	-	0.940	0.650	0.625	0.500	0.000	-	0.725	0.919
Lights	179	25	0	0	-	204	34	201	0	-	235	26	10	21	0	-	57	496
% Lights	99.4	100.0	-	-	-	99.5	97.1	99.5	-	-	99.2	100.0	100.0	95.5	-	-	98.3	99.2
Buses	0	0	0	0	-	0	1	0	0	-	1	0	0	1	0	-	1	2
% Buses	0.0	0.0	-	-	-	0.0	2.9	0.0	-	-	0.4	0.0	0.0	4.5	-	-	1.7	0.4
Trucks	1	0	0	0	-	1	0	1	0	-	1	0	0	0	0	-	0	2
% Trucks	0.6	0.0	-	-	-	0.5	0.0	0.5	-	-	0.4	0.0	0.0	0.0	-	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Plainsboro, NJ
Seminary Rd & College Rd West
Saturday, March 2, 2024
Location: 40.358389, -74.614411

Count Name: Seminary Rd & College Rd West (3/2)
Site Code:
Start Date: 03/02/2024



Seminary Dr [EB]							
Out	227	0	1	0	0	0	**228**
In	204	0	1	0	0	0	**205**
Total	431	0	2	0	0	0	**433**

0	0	0	0	0	0	**0**	U
179	0	1	0	0	**180**	T	
25	0	0	0	0	**25**	R	
0	0	0	0	0	**0**	P	

T	**202**	0	0	1	0	201	
L	**35**	0	0	0	1	34	
U	**0**	0	0	0	0	0	
P	**0**	0	0	0	0	0	

College Rd West [WB]							
Out	210	1	1	0	0	**212**	
In	235	1	1	0	0	**237**	
Total	445	2	1	0	0	**449**	

U	L	R	P
0	26	31	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	**26**	**32**	**0**

59	57	116
1	1	2
0	0	0
0	0	0
0	0	0
60	**58**	**118**
Out	In	Total
College Rd West [NB]		

Turning Movement Peak Hour Data Plot (11:30 AM)

NJ-27 & Academy St. - TMC

Tue May 7, 2024
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184103, Location: 40.375008, -74.615311

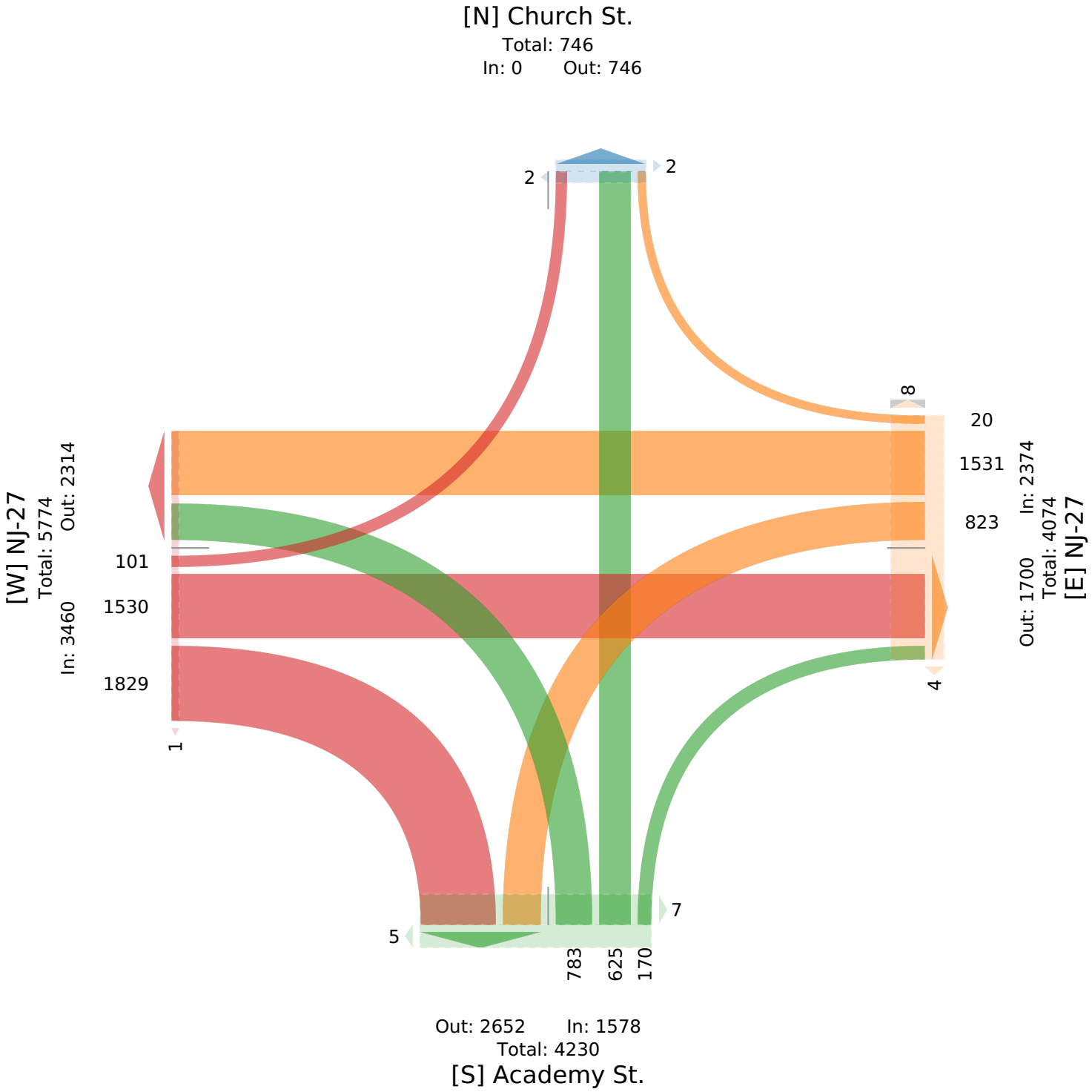
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	NJ-27						NJ-27						Academy St.						Church St.		
Direction	Eastbound						Westbound						Northbound						Southbound		
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**App**	Ped*	**Int**
2024-05-07 7:00AM	2	54	57	0	**113**	0	55	81	0	0	**136**	1	13	41	8	0	**62**	0	**0**	1	**311**
7:15AM	4	51	68	0	**123**	0	70	83	0	0	**153**	0	25	25	10	0	**60**	0	**0**	0	**336**
7:30AM	1	52	122	0	**175**	0	59	106	3	0	**168**	0	39	28	11	0	**78**	0	**0**	0	**421**
7:45AM	1	69	131	0	**201**	0	71	97	0	0	**168**	0	56	43	7	0	**106**	0	**0**	0	**475**
Hourly Total	8	226	378	0	**612**	0	255	367	3	0	**625**	1	133	137	36	0	**306**	0	**0**	1	**1543**
8:00AM	5	92	176	0	**273**	0	53	104	0	0	**157**	1	60	32	18	0	**110**	2	**0**	0	**540**
8:15AM	5	62	147	0	**214**	0	73	83	1	0	**157**	1	74	22	11	0	**107**	0	**0**	0	**478**
8:30AM	5	73	151	0	**229**	1	70	97	5	0	**172**	0	66	23	7	0	**96**	1	**0**	1	**497**
8:45AM	5	74	135	0	**214**	0	55	103	0	0	**158**	0	62	24	13	0	**99**	0	**0**	0	**471**
Hourly Total	20	301	609	0	**930**	1	251	387	6	0	**644**	2	262	101	49	0	**412**	3	**0**	1	**1986**
9:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**	0	**0**
4:00PM	5	111	101	0	**217**	0	37	96	3	0	**136**	1	44	43	6	0	**93**	0	**0**	0	**446**
4:15PM	10	137	96	0	**243**	0	35	83	0	0	**118**	0	33	62	10	0	**105**	0	**0**	1	**466**
4:30PM	9	120	96	0	**225**	0	31	80	2	0	**113**	1	40	51	12	0	**103**	3	**0**	1	**441**
4:45PM	11	129	103	0	**243**	0	43	90	0	0	**133**	2	55	40	13	0	**108**	1	**0**	0	**484**
Hourly Total	35	497	396	0	**928**	0	146	349	5	0	**500**	4	172	196	41	0	**409**	4	**0**	2	**1837**
5:00PM	11	119	99	0	**229**	0	45	107	0	0	**152**	1	51	54	12	0	**117**	0	**0**	0	**498**
5:15PM	8	137	118	0	**263**	0	44	103	2	0	**149**	0	58	54	10	0	**122**	0	**0**	0	**534**
5:30PM	11	143	104	0	**258**	0	51	110	2	0	**163**	1	63	40	8	0	**111**	3	**0**	0	**532**
5:45PM	8	107	125	0	**240**	0	31	108	2	0	**141**	3	44	43	14	0	**101**	2	**0**	0	**482**
Hourly Total	38	506	446	0	**990**	0	171	428	6	0	**605**	5	216	191	44	0	**451**	5	**0**	0	**2046**
6:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**	0	**0**
Total	101	1530	1829	0	**3460**	1	823	1531	20	0	**2374**	12	783	625	170	0	**1578**	12	**0**	4	**7412**
% Approach	2.9%	44.2%	52.9%	0%	**-**	-	34.7%	64.5%	0.8%	0%	**-**	-	49.6%	39.6%	10.8%	0%	**-**	-	**-**	-	-
% Total	1.4%	20.6%	24.7%	0%	**46.7%**	-	11.1%	20.7%	0.3%	0%	**32.0%**	-	10.6%	8.4%	2.3%	0%	**21.3%**	-	**0%**	-	-
Lights	99	1481	1813	0	**3393**	-	810	1478	20	0	**2308**	-	777	621	164	0	**1562**	-	**0**	-	7263
% Lights	98.0%	96.8%	99.1%	0%	**98.1%**	-	98.4%	96.5%	100%	0%	**97.2%**	-	99.2%	99.4%	96.5%	0%	**99.0%**	-	**-**	-	98.0%
Articulated Trucks and Single-Unit Trucks	2	33	8	0	**43**	-	8	44	0	0	**52**	-	6	3	4	0	**13**	-	**0**	-	108
% Articulated Trucks and Single-Unit Trucks	2.0%	2.2%	0.4%	0%	**1.2%**	-	1.0%	2.9%	0%	0%	**2.2%**	-	0.8%	0.5%	2.4%	0%	**0.8%**	-	**-**	-	1.5%
Buses	0	16	8	0	**24**	-	5	9	0	0	**14**	-	0	1	2	0	**3**	-	**0**	-	41
% Buses	0%	1.0%	0.4%	0%	**0.7%**	-	0.6%	0.6%	0%	0%	**0.6%**	-	0%	0.2%	1.2%	0%	**0.2%**	-	**-**	-	0.6%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	11	-	-	-	-	-	8	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	91.7%	-	-	-	-	-	66.7%	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	4	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	8.3%	-	-	-	-	-	33.3%	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

NJ-27 & Academy St. - TMC
Tue May 7, 2024
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184103, Location: 40.375008, -74.615311

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



NJ-27 & Academy St. - TMC

Tue May 7, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184103, Location: 40.375008, -74.615311



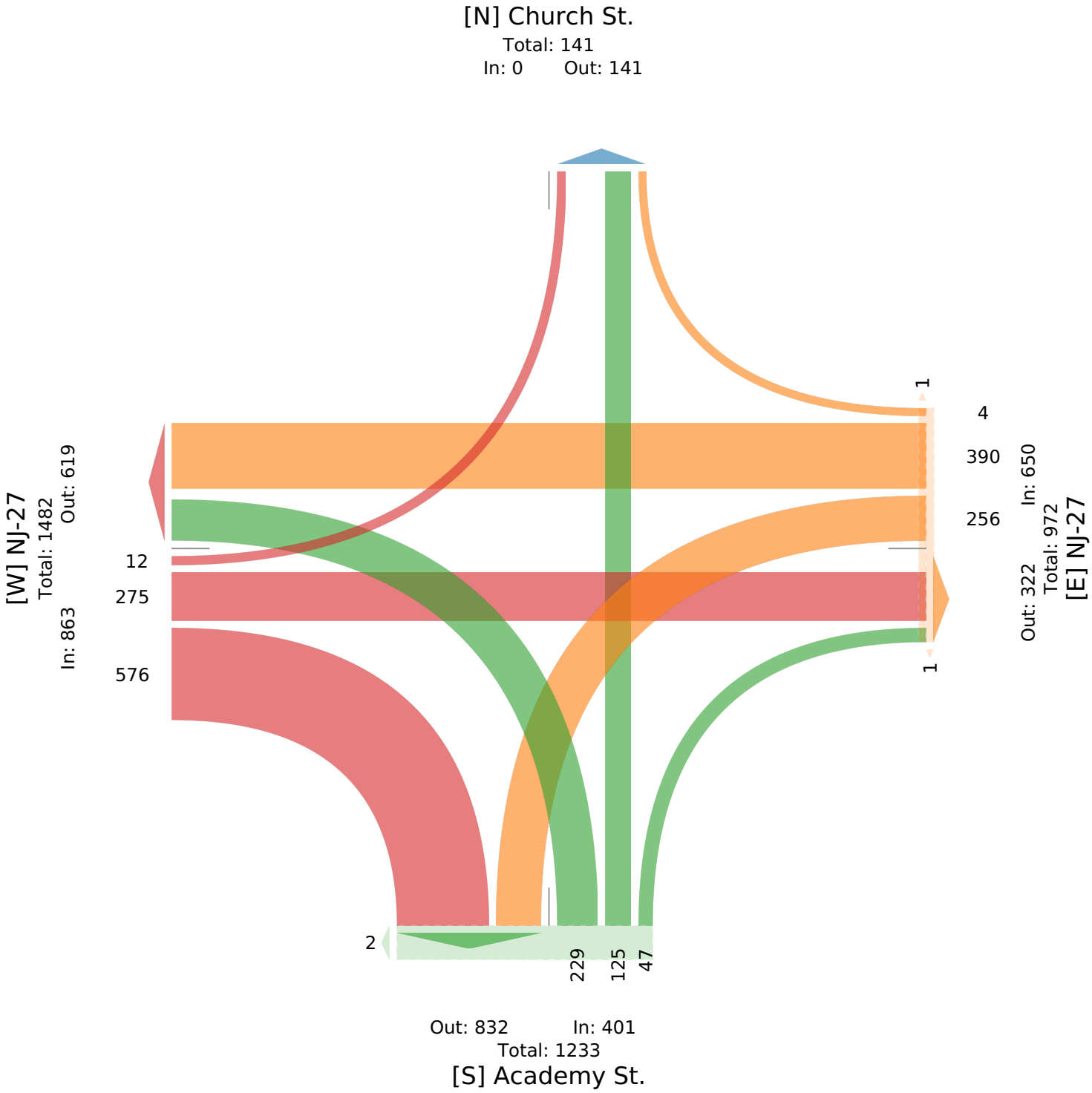
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	NJ-27						NJ-27						Academy St.						Church St.		
Direction	Eastbound						Westbound						Northbound						Southbound		
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	App	Ped*	Int
2024-05-07 7:30AM	1	52	122	0	**175**	0	59	106	3	0	**168**	0	39	28	11	0	**78**	0	**0**	0	**421**
7:45AM	1	69	131	0	**201**	0	71	97	0	0	**168**	0	56	43	7	0	**106**	0	**0**	0	**475**
8:00AM	5	92	176	0	**273**	0	53	104	0	0	**157**	1	60	32	18	0	**110**	2	**0**	0	**540**
8:15AM	5	62	147	0	**214**	0	73	83	1	0	**157**	1	74	22	11	0	**107**	0	**0**	0	**478**
Total	12	275	576	0	**863**	0	256	390	4	0	**650**	2	229	125	47	0	**401**	2	**0**	0	**1914**
% Approach	1.4%	31.9%	66.7%	0%	**-**	-	39.4%	60.0%	0.6%	0%	**-**	-	57.1%	31.2%	11.7%	0%	**-**	-	**-**	-	**-**
% Total	0.6%	14.4%	30.1%	0%	**45.1%**	-	13.4%	20.4%	0.2%	0%	**34.0%**	-	12.0%	6.5%	2.5%	0%	**21.0%**	-	**0%**	-	**-**
PHF	0.600	0.747	0.818	-	**0.790**	-	0.877	0.920	0.333	-	**0.967**	-	0.774	0.727	0.653	-	**0.911**	-	**-**	-	0.886
Lights	12	259	573	0	**844**	-	253	366	4	0	**623**	-	228	124	44	0	**396**	-	**0**	-	1863
% Lights	100%	94.2%	99.5%	0%	**97.8%**	-	98.8%	93.8%	100%	0%	**95.8%**	-	99.6%	99.2%	93.6%	0%	**98.8%**	-	**-**	-	97.3%
Articulated Trucks and Single-Unit Trucks	0	6	2	0	**8**	-	2	22	0	0	**24**	-	1	1	3	0	**5**	-	**0**	-	37
% Articulated Trucks and Single-Unit Trucks	0%	2.2%	0.3%	0%	**0.9%**	-	0.8%	5.6%	0%	0%	**3.7%**	-	0.4%	0.8%	6.4%	0%	**1.2%**	-	**-**	-	1.9%
Buses	0	10	1	0	**11**	-	1	2	0	0	**3**	-	0	0	0	0	**0**	-	**0**	-	14
% Buses	0%	3.6%	0.2%	0%	**1.3%**	-	0.4%	0.5%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	**-**	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	2	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

NJ-27 & Academy St. - TMC
Tue May 7, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184103, Location: 40.375008, -74.615311

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



NJ-27 & Academy St. - TMC

Tue May 7, 2024
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184103, Location: 40.375008, -74.615311



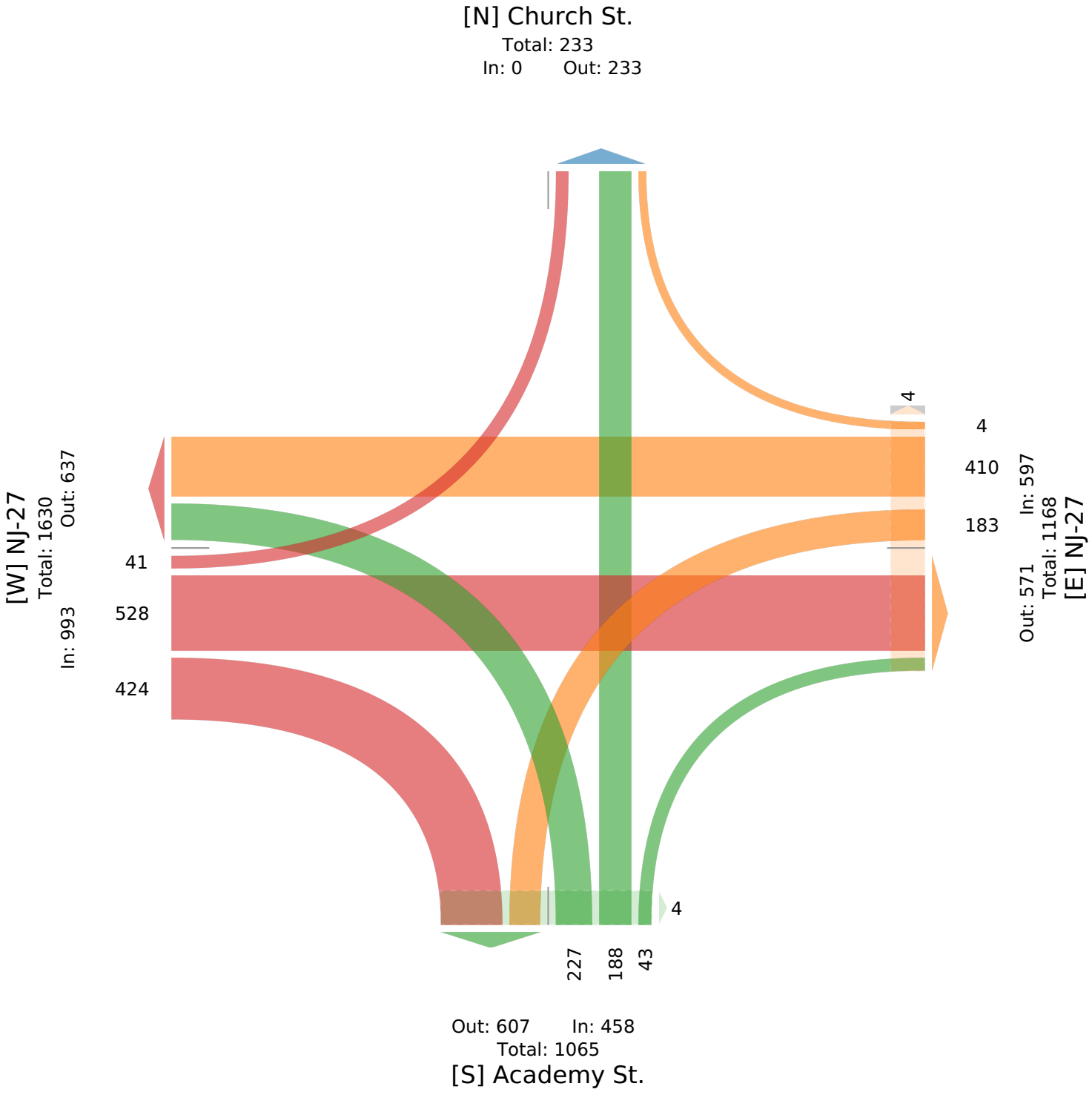
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	NJ-27 Eastbound						NJ-27 Westbound						Academy St. Northbound						Church St. Southbound		
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**App**	Ped*	**Int**
2024-05-07 4:45PM	11	129	103	0	**243**	0	43	90	0	0	**133**	2	55	40	13	0	**108**	1	**0**	0	**484**
5:00PM	11	119	99	0	**229**	0	45	107	0	0	**152**	1	51	54	12	0	**117**	0	**0**	0	**498**
5:15PM	8	137	118	0	**263**	0	44	103	2	0	**149**	0	58	54	10	0	**122**	0	**0**	0	**534**
5:30PM	11	143	104	0	**258**	0	51	110	2	0	**163**	1	63	40	8	0	**111**	3	**0**	0	**532**
Total	41	528	424	0	**993**	0	183	410	4	0	**597**	4	227	188	43	0	**458**	4	**0**	0	**2048**
% Approach	4.1%	53.2%	42.7%	0%	**-**	-	30.7%	68.7%	0.7%	0%	**-**	-	49.6%	41.0%	9.4%	0%	**-**	-	**-**	-	-
% Total	2.0%	25.8%	20.7%	0%	**48.5%**	-	8.9%	20.0%	0.2%	0%	**29.2%**	-	11.1%	9.2%	2.1%	0%	**22.4%**	-	**0%**	-	-
PHF	0.932	0.923	0.898	-	**0.944**	-	0.897	0.932	0.500	-	**0.916**	-	0.901	0.870	0.827	-	**0.939**	-	**-**	-	0.959
Lights	40	522	421	0	**983**	-	180	406	4	0	**590**	-	227	187	43	0	**457**	-	**0**	-	2030
% Lights	97.6%	98.9%	99.3%	0%	**99.0%**	-	98.4%	99.0%	100%	0%	**98.8%**	-	100%	99.5%	100%	0%	**99.8%**	-	**-**	-	99.1%
Articulated Trucks and Single-Unit Trucks	1	4	1	0	**6**	-	3	2	0	0	**5**	-	0	0	0	0	**0**	-	**0**	-	11
% Articulated Trucks and Single-Unit Trucks	2.4%	0.8%	0.2%	0%	**0.6%**	-	1.6%	0.5%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	**-**	-	0.5%
Buses	0	2	2	0	**4**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	**0**	-	7
% Buses	0%	0.4%	0.5%	0%	**0.4%**	-	0%	0.5%	0%	0%	**0.3%**	-	0%	0.5%	0%	0%	**0.2%**	-	**-**	-	0.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	3	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	75.0%	-	-	-	-	-	75.0%	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	25.0%	-	-	-	-	-	25.0%	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

NJ-27 & Academy St. - TMC
Tue May 7, 2024
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184103, Location: 40.375008, -74.615311

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Traffic Databank

716 S Sixth Ave
Mount Vernon, NY 10550

Mapleton Rd & Kingston Rd
Manual Turning Movement Count
Saturday Midday Peak Hour
Saturday, 20 May 2017

File Name : MAPLETON_RD_AT_KINGSTON_RD-SAT_415230_05-20-2017
Site Code :
Start Date : 5/20/2017
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	MAPLETON RD Southbound					KINGSTON RD Westbound					MAPLETON RD Northbound					KINGSTON RD Eastbound							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
10:00 AM	0	0	0	3	0	31	131	8	1	170	30	4	6	0	40	5	78	30	0	113	4	323	327
10:15 AM	0	0	0	2	0	36	83	7	0	126	31	8	14	0	53	4	69	38	0	111	2	290	292
10:30 AM	0	0	0	1	0	47	109	4	2	160	28	5	10	2	43	3	80	24	0	107	5	310	315
10:45 AM	0	0	0	2	0	33	108	3	2	144	33	5	18	0	56	2	97	42	0	141	4	341	345
Total	0	0	0	8	0	147	431	22	5	600	122	22	48	2	192	14	324	134	0	472	15	1264	1279
11:00 AM	0	0	0	3	0	48	98	5	1	151	24	7	8	0	39	5	104	39	0	148	4	338	342
11:15 AM	0	0	0	0	0	34	119	8	1	161	22	15	18	0	55	8	94	37	0	139	1	355	356
11:30 AM	0	0	0	0	0	41	117	8	2	166	28	11	9	0	48	3	103	48	0	154	2	368	370
11:45 AM	0	0	0	0	0	39	123	8	2	170	31	15	16	3	62	4	105	39	0	148	5	380	385
Total	0	0	0	3	0	162	457	29	6	648	105	48	51	3	204	20	406	163	0	589	12	1441	1453
12:00 PM	0	0	0	1	0	46	115	2	1	163	32	6	15	1	53	6	90	35	0	131	3	347	350
12:15 PM	0	0	0	0	0	46	134	1	5	181	20	7	12	0	39	2	105	36	0	143	5	363	368
12:30 PM	0	0	0	1	0	52	113	0	5	165	22	10	13	0	45	1	109	34	0	144	6	354	360
12:45 PM	0	0	0	0	0	39	114	4	2	157	27	5	9	3	41	7	94	34	0	135	5	333	338
Total	0	0	0	2	0	183	476	7	13	666	101	28	49	4	178	16	398	139	0	553	19	1397	1416
01:00 PM	0	0	0	0	0	30	99	0	0	129	23	6	15	0	44	0	104	45	0	149	0	322	322
01:15 PM	0	0	0	0	0	41	121	4	2	166	28	7	17	0	52	0	121	41	0	162	2	380	382
01:30 PM	0	0	0	0	0	30	100	3	1	133	24	6	12	0	42	1	93	24	0	118	1	293	294
01:45 PM	0	0	0	0	0	28	101	1	2	130	27	6	27	0	60	0	96	33	0	129	2	319	321
Total	0	0	0	0	0	129	421	8	5	558	102	25	71	0	198	1	414	143	0	558	5	1314	1319
02:00 PM	0	0	0	1	0	25	116	2	3	143	18	10	10	3	38	3	91	35	0	129	7	310	317
02:15 PM	0	1	0	1	1	32	96	5	1	133	17	12	6	2	35	5	104	29	0	138	4	307	311
02:30 PM	0	0	0	0	0	34	137	2	0	173	29	13	7	0	49	3	113	30	0	146	0	368	368
02:45 PM	0	0	0	0	0	26	105	2	1	133	17	19	8	1	44	2	108	31	0	141	2	318	320
Total	0	1	0	2	1	117	454	11	5	582	81	54	31	6	166	13	416	125	0	554	13	1303	1316
03:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	1	0	15	1	738	2240	77	34	3055	511	177	250	15	938	64	1958	704	0	2726	64	6720	6784
Apprch %	0	100	0			24.2	73.3	2.5			54.5	18.9	26.7			2.3	71.8	25.8					
Total %	0	0	0		0	11	33.3	1.1		45.5	7.6	2.6	3.7		14	1	29.1	10.5		40.6	0.9	99.1	
Lights	0	1	0		1	734	2212	77		3023	509	176	245		930	64	1916	701		2681	0	0	6635
% Lights	0	100	0	0	6.2	99.5	98.8	100	0	97.9	99.6	99.4	98	0	97.6	100	97.9	99.6	0	98.3	0	0	97.8
Buses	0	0	0		0	1	15	0		16	1	1	1		3	0	14	0		14	0	0	33
% Buses	0	0	0	0	0	0.1	0.7	0	0	0.5	0.2	0.6	0.4	0	0.3	0	0.7	0	0	0.5	0	0	0.5
Trucks	0	0	0		0	3	13	0		16	1	0	4		5	0	28	3		31	0	0	52
% Trucks	0	0	0	0	0	0.4	0.6	0	0	0.5	0.2	0	1.6	0	0.5	0	1.4	0.4	0	1.1	0	0	0.8
Pedestrians	0	0	0		15	0	0	0		34	0	0	0		15	0	0	0		0	0	0	64
% Pedestrians	0	0	0	100	93.8	0	0	0	100	1.1	0	0	0	100	1.6	0	0	0	0	0	0	0	0.9

Traffic Databank

716 S Sixth Ave
Mount Vernon, NY 10550

Mapleton Rd & Kingston Rd
Manual Turning Movement Count
Saturday Midday Peak Hour
Saturday, 20 May 2017

File Name : MAPLETON_RD_AT_KINGSTON_RD-SAT_415230_05-20-2017
Site Code :
Start Date : 5/20/2017

	MAPLETON RD Southbound				KINGSTON RD Westbound				MAPLETON RD Northbound				KINGSTON RD Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:45 AM to 03:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	0	0	0	0	39	123	**8**	170	31	**15**	**16**	**62**	4	105	**39**	**148**	**380**
12:00 PM	0	0	0	0	46	115	2	163	**32**	6	15	53	**6**	90	35	131	347
12:15 PM	0	0	0	0	46	**134**	1	**181**	20	7	12	39	2	105	36	143	363
12:30 PM	0	0	0	0	**52**	113	0	165	22	10	13	45	1	**109**	34	144	354
Total Volume	0	0	0	0	183	485	11	679	105	38	56	199	13	409	144	566	1444
% App. Total	0	0	0		27	71.4	1.6		52.8	19.1	28.1		2.3	72.3	25.4		
PHF	.000	.000	.000	.000	.880	.905	.344	.938	.820	.633	.875	.802	.542	.938	.923	.956	.950
Lights	0	0	0	0	182	476	11	669	105	38	56	199	13	398	144	555	1423
% Lights	0	0	0	0	99.5	98.1	100	98.5	100	100	100	100	100	97.3	100	98.1	98.5
Buses	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
% Buses	0	0	0	0	0	0.6	0	0.4	0	0	0	0	0	0.7	0	0.5	0.4
Trucks	0	0	0	0	1	6	0	7	0	0	0	0	0	8	0	8	15
% Trucks	0	0	0	0	0.5	1.2	0	1.0	0	0	0	0	0	2.0	0	1.4	1.0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NJ-27 & Laurel Ave. - TMC

Tue May 7, 2024
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	NJ-27							NJ-27						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*
2024-05-07 7:00AM	4	59	0	0	0	**63**	4	8	103	16	0	0	**127**	0
7:15AM	4	58	2	0	0	**64**	1	18	116	10	0	1	**145**	0
7:30AM	2	61	0	0	0	**63**	1	16	111	9	0	0	**136**	1
7:45AM	8	68	3	0	0	**79**	0	16	125	10	0	0	**151**	0
Hourly Total	18	246	5	0	0	**269**	6	58	455	45	0	1	**559**	1
8:00AM	5	98	0	0	0	**103**	4	11	115	5	0	1	**132**	0
8:15AM	4	73	2	0	0	**79**	0	12	116	10	0	0	**138**	0
8:30AM	2	68	2	0	0	**72**	2	6	104	15	0	0	**125**	0
8:45AM	6	82	2	0	0	**90**	0	10	130	10	0	0	**150**	0
Hourly Total	17	321	6	0	0	**344**	6	39	465	40	0	1	**545**	0
9:00AM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
4:00PM	4	110	3	0	1	**118**	0	14	107	17	0	0	**138**	0
4:15PM	8	132	3	0	0	**143**	4	7	88	21	0	0	**116**	0
4:30PM	6	122	1	0	0	**129**	5	11	94	17	0	0	**122**	0
4:45PM	4	135	7	0	0	**146**	0	16	95	17	0	0	**128**	0
Hourly Total	22	499	14	0	1	**536**	9	48	384	72	0	0	**504**	0
5:00PM	4	130	4	0	0	**138**	2	6	113	18	0	1	**138**	0
5:15PM	6	141	1	0	0	**148**	2	11	111	19	0	0	**141**	0
5:30PM	3	146	1	0	0	**150**	0	14	110	25	0	0	**149**	0
5:45PM	2	102	3	0	0	**107**	1	9	110	12	0	1	**132**	0
Hourly Total	15	519	9	0	0	**543**	5	40	444	74	0	2	**560**	0
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Total	72	1585	34	0	1	**1692**	26	185	1748	231	0	4	**2168**	1
% Approach	4.3%	93.7%	2.0%	0%	0.1%	**-**	-	8.5%	80.6%	10.7%	0%	0.2%	**-**	-
% Total	1.1%	24.7%	0.5%	0%	0%	**26.3%**	-	2.9%	27.2%	3.6%	0%	0.1%	**33.7%**	-
Lights	68	1533	32	0	1	**1634**	-	178	1692	224	0	4	**2098**	-
% Lights	94.4%	96.7%	94.1%	0%	100%	**96.6%**	-	96.2%	96.8%	97.0%	0%	100%	**96.8%**	-
Articulated Trucks and Single-Unit Trucks	4	34	2	0	0	**40**	-	3	43	6	0	0	**52**	-
% Articulated Trucks and Single-Unit Trucks	5.6%	2.1%	5.9%	0%	0%	**2.4%**	-	1.6%	2.5%	2.6%	0%	0%	**2.4%**	-
Buses	0	18	0	0	0	**18**	-	4	13	1	0	0	**18**	-
% Buses	0%	1.1%	0%	0%	0%	**1.1%**	-	2.2%	0.7%	0.4%	0%	0%	**0.8%**	-
Pedestrians	-	-	-	-	-	-	21	-	-	-	-	-	-	1
% Pedestrians	-	-	-	-	-	-	80.8%	-	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	-	-	5	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	19.2%	-	-	-	-	-	-	0%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

NJ-27 & Laurel Ave. - TMC

Tue May 7, 2024
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

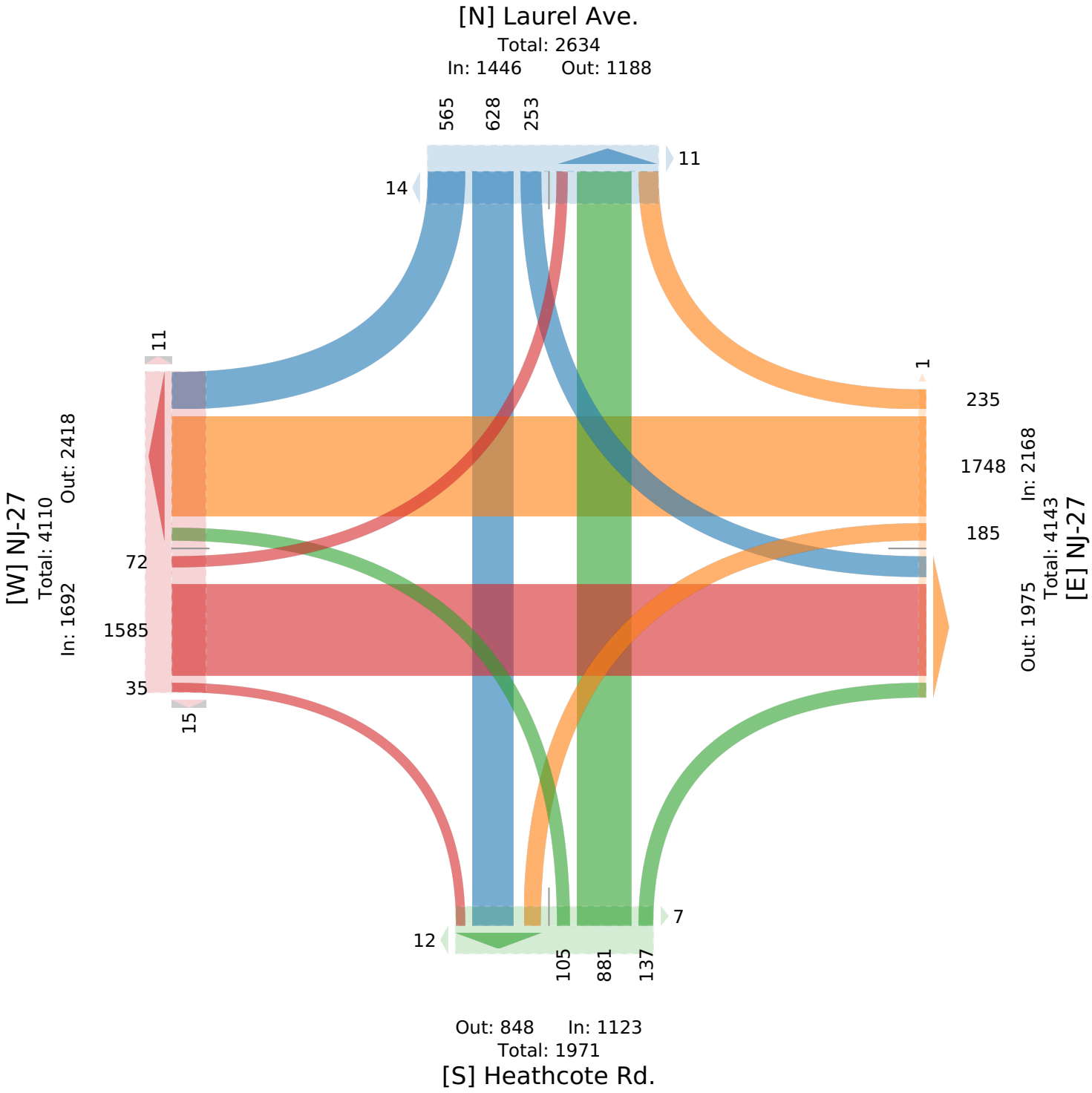
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Heathcote Rd. Northbound							Laurel Ave. Southbound							
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*	Int
2024-05-07 7:00AM	3	35	6	0	0	**44**	4	13	33	40	0	0	**86**	0	**320**
7:15AM	2	42	4	0	0	**48**	0	8	29	46	0	0	**83**	0	**340**
7:30AM	6	47	7	0	0	**60**	1	16	47	44	0	0	**107**	0	**366**
7:45AM	6	52	6	0	0	**64**	1	10	32	44	0	0	**86**	2	**380**
Hourly Total	17	176	23	0	0	**216**	6	47	141	174	0	0	**362**	2	**1406**
8:00AM	4	54	6	0	0	**64**	2	22	44	43	0	0	**109**	4	**408**
8:15AM	7	48	7	0	0	**62**	1	11	45	42	0	0	**98**	1	**377**
8:30AM	8	47	6	0	0	**61**	0	14	39	51	0	0	**104**	6	**362**
8:45AM	5	50	10	0	0	**65**	0	9	47	28	0	0	**84**	2	**389**
Hourly Total	24	199	29	0	0	**252**	3	56	175	164	0	0	**395**	13	**1536**
9:00AM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
4:00PM	5	75	12	0	0	**92**	0	20	39	24	0	0	**83**	2	**431**
4:15PM	7	62	11	0	0	**80**	3	21	44	25	0	0	**90**	2	**429**
4:30PM	6	57	10	0	0	**73**	2	14	30	31	0	0	**75**	2	**399**
4:45PM	3	68	9	0	0	**80**	0	25	36	25	0	0	**86**	1	**440**
Hourly Total	21	262	42	0	0	**325**	5	80	149	105	0	0	**334**	7	**1699**
5:00PM	9	76	14	0	0	**99**	0	20	37	29	0	0	**86**	2	**461**
5:15PM	12	57	9	0	0	**78**	4	21	42	28	0	0	**91**	1	**458**
5:30PM	12	53	10	0	0	**75**	0	13	38	46	0	0	**97**	0	**471**
5:45PM	10	58	10	0	0	**78**	1	15	46	19	0	0	**80**	0	**397**
Hourly Total	43	244	43	0	0	**330**	5	69	163	122	0	0	**354**	3	**1787**
6:00PM	0	0	0	0	0	**0**	0	1	0	0	0	0	**1**	0	**1**
Hourly Total	0	0	0	0	0	**0**	0	1	0	0	0	0	**1**	0	**1**
Total	105	881	137	0	0	**1123**	19	253	628	565	0	0	**1446**	25	**6429**
% Approach	9.3%	78.5%	12.2%	0%	0%	**-**	-	17.5%	43.4%	39.1%	0%	0%	**-**	-	-
% Total	1.6%	13.7%	2.1%	0%	0%	**17.5%**	-	3.9%	9.8%	8.8%	0%	0%	**22.5%**	-	-
Lights	101	862	126	0	0	**1089**	-	245	606	559	0	0	**1410**	-	6231
% Lights	96.2%	97.8%	92.0%	0%	0%	**97.0%**	-	96.8%	96.5%	98.9%	0%	0%	**97.5%**	-	96.9%
Articulated Trucks and Single-Unit Trucks	3	18	7	0	0	**28**	-	5	21	4	0	0	**30**	-	150
% Articulated Trucks and Single-Unit Trucks	2.9%	2.0%	5.1%	0%	0%	**2.5%**	-	2.0%	3.3%	0.7%	0%	0%	**2.1%**	-	2.3%
Buses	1	1	4	0	0	**6**	-	3	1	2	0	0	**6**	-	48
% Buses	1.0%	0.1%	2.9%	0%	0%	**0.5%**	-	1.2%	0.2%	0.4%	0%	0%	**0.4%**	-	0.7%
Pedestrians	-	-	-	-	-	-	17	-	-	-	-	-	-	25	
% Pedestrians	-	-	-	-	-	-	89.5%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	2	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	10.5%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

NJ-27 & Laurel Ave. - TMC
Tue May 7, 2024
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



NJ-27 & Laurel Ave. - TMC

Tue May 7, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	NJ-27 Eastbound							NJ-27 Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-05-07 7:30AM	2	61	0	0	0	**63**	1	16	111	9	0	0	**136**	1
7:45AM	8	68	3	0	0	**79**	0	16	125	10	0	0	**151**	0
8:00AM	5	98	0	0	0	**103**	4	11	115	5	0	1	**132**	0
8:15AM	4	73	2	0	0	**79**	0	12	116	10	0	0	**138**	0
Total	19	300	5	0	0	**324**	5	55	467	34	0	1	**557**	1
% Approach	5.9%	92.6%	1.5%	0%	0%	**-**	-	9.9%	83.8%	6.1%	0%	0.2%	**-**	-
% Total	1.2%	19.6%	0.3%	0%	0%	**21.2%**	-	3.6%	30.5%	2.2%	0%	0.1%	**36.4%**	-
PHF	0.594	0.765	0.417	-	-	**0.786**	-	0.859	0.934	0.850	-	0.250	**0.922**	-
Lights	18	282	5	0	0	**305**	-	52	441	30	0	1	**524**	-
% Lights	94.7%	94.0%	100%	0%	0%	**94.1%**	-	94.5%	94.4%	88.2%	0%	100%	**94.1%**	-
Articulated Trucks and Single-Unit Trucks	1	8	0	0	0	**9**	-	2	23	4	0	0	**29**	-
% Articulated Trucks and Single-Unit Trucks	5.3%	2.7%	0%	0%	0%	**2.8%**	-	3.6%	4.9%	11.8%	0%	0%	**5.2%**	-
Buses	0	10	0	0	0	**10**	-	1	3	0	0	0	**4**	-
% Buses	0%	3.3%	0%	0%	0%	**3.1%**	-	1.8%	0.6%	0%	0%	0%	**0.7%**	-
Pedestrians	-	-	-	-	-	-	5	-	-	-	-	-	-	1
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

NJ-27 & Laurel Ave. - TMC

Tue May 7, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

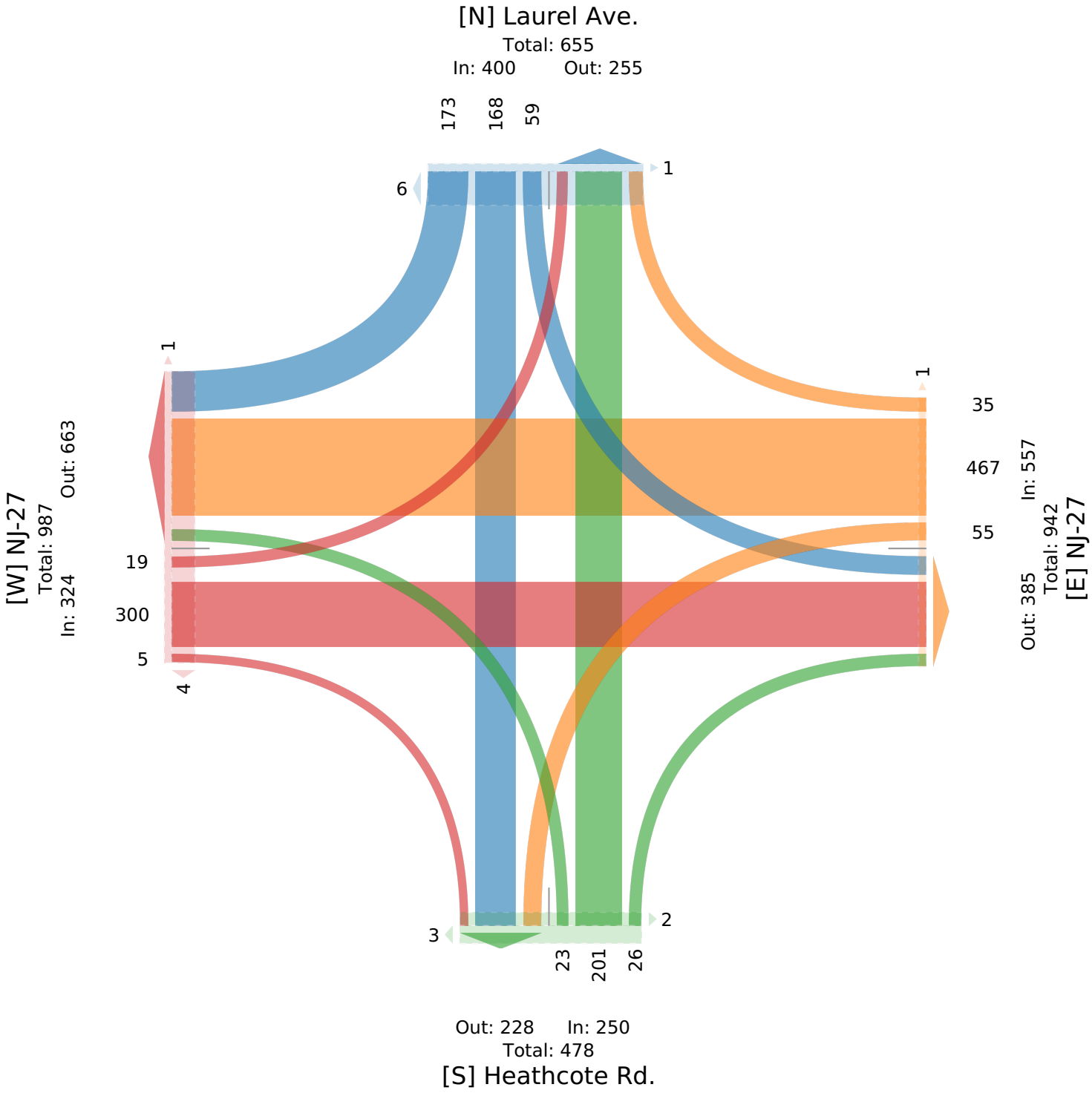
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Heathcote Rd. Northbound							Laurel Ave. Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-05-07 7:30AM	6	47	7	0	0	**60**	1	16	47	44	0	0	**107**	0	**366**
7:45AM	6	52	6	0	0	**64**	1	10	32	44	0	0	**86**	2	**380**
8:00AM	4	54	6	0	0	**64**	2	22	44	43	0	0	**109**	4	**408**
8:15AM	7	48	7	0	0	**62**	1	11	45	42	0	0	**98**	1	**377**
Total	23	201	26	0	0	**250**	5	59	168	173	0	0	**400**	7	**1531**
% Approach	9.2%	80.4%	10.4%	0%	0%	**-**	-	14.8%	42.0%	43.3%	0%	0%	**-**	-	**-**
% Total	1.5%	13.1%	1.7%	0%	0%	**16.3%**	-	3.9%	11.0%	11.3%	0%	0%	**26.1%**	-	**-**
PHF	0.821	0.931	0.929	-	-	**0.977**	-	0.670	0.894	0.983	-	-	**0.917**	-	0.938
Lights	20	193	24	0	0	**237**	-	58	159	171	0	0	**388**	-	1454
% Lights	87.0%	96.0%	92.3%	0%	0%	**94.8%**	-	98.3%	94.6%	98.8%	0%	0%	**97.0%**	-	95.0%
Articulated Trucks and Single-Unit Trucks	2	7	1	0	0	**10**	-	1	9	1	0	0	**11**	-	59
% Articulated Trucks and Single-Unit Trucks	8.7%	3.5%	3.8%	0%	0%	**4.0%**	-	1.7%	5.4%	0.6%	0%	0%	**2.8%**	-	3.9%
Buses	1	1	1	0	0	**3**	-	0	0	1	0	0	**1**	-	18
% Buses	4.3%	0.5%	3.8%	0%	0%	**1.2%**	-	0%	0%	0.6%	0%	0%	**0.3%**	-	1.2%
Pedestrians	-	-	-	-	-	-	4	-	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	-	80.0%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	20.0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

NJ-27 & Laurel Ave. - TMC
Tue May 7, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



NJ-27 & Laurel Ave. - TMC

Tue May 7, 2024
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	NJ-27							NJ-27						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-05-07 4:45PM	4	135	7	0	0	**146**	0	16	95	17	0	0	**128**	0
5:00PM	4	130	4	0	0	**138**	2	6	113	18	0	1	**138**	0
5:15PM	6	141	1	0	0	**148**	2	11	111	19	0	0	**141**	0
5:30PM	3	146	1	0	0	**150**	0	14	110	25	0	0	**149**	0
Total	17	552	13	0	0	**582**	4	47	429	79	0	1	**556**	0
% Approach	2.9%	94.8%	2.2%	0%	0%	**-**	-	8.5%	77.2%	14.2%	0%	0.2%	**-**	-
% Total	0.9%	30.2%	0.7%	0%	0%	**31.8%**	-	2.6%	23.4%	4.3%	0%	0.1%	**30.4%**	-
PHF	0.708	0.945	0.464	-	-	**0.970**	-	0.734	0.949	0.790	-	0.250	**0.933**	-
Lights	17	546	13	0	0	**576**	-	47	424	78	0	1	**550**	-
% Lights	100%	98.9%	100%	0%	0%	**99.0%**	-	100%	98.8%	98.7%	0%	100%	**98.9%**	-
Articulated Trucks and Single-Unit Trucks	0	4	0	0	0	**4**	-	0	3	0	0	0	**3**	-
% Articulated Trucks and Single-Unit Trucks	0%	0.7%	0%	0%	0%	**0.7%**	-	0%	0.7%	0%	0%	0%	**0.5%**	-
Buses	0	2	0	0	0	**2**	-	0	2	1	0	0	**3**	-
% Buses	0%	0.4%	0%	0%	0%	**0.3%**	-	0%	0.5%	1.3%	0%	0%	**0.5%**	-
Pedestrians	-	-	-	-	-	-	4	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

NJ-27 & Laurel Ave. - TMC

Tue May 7, 2024
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

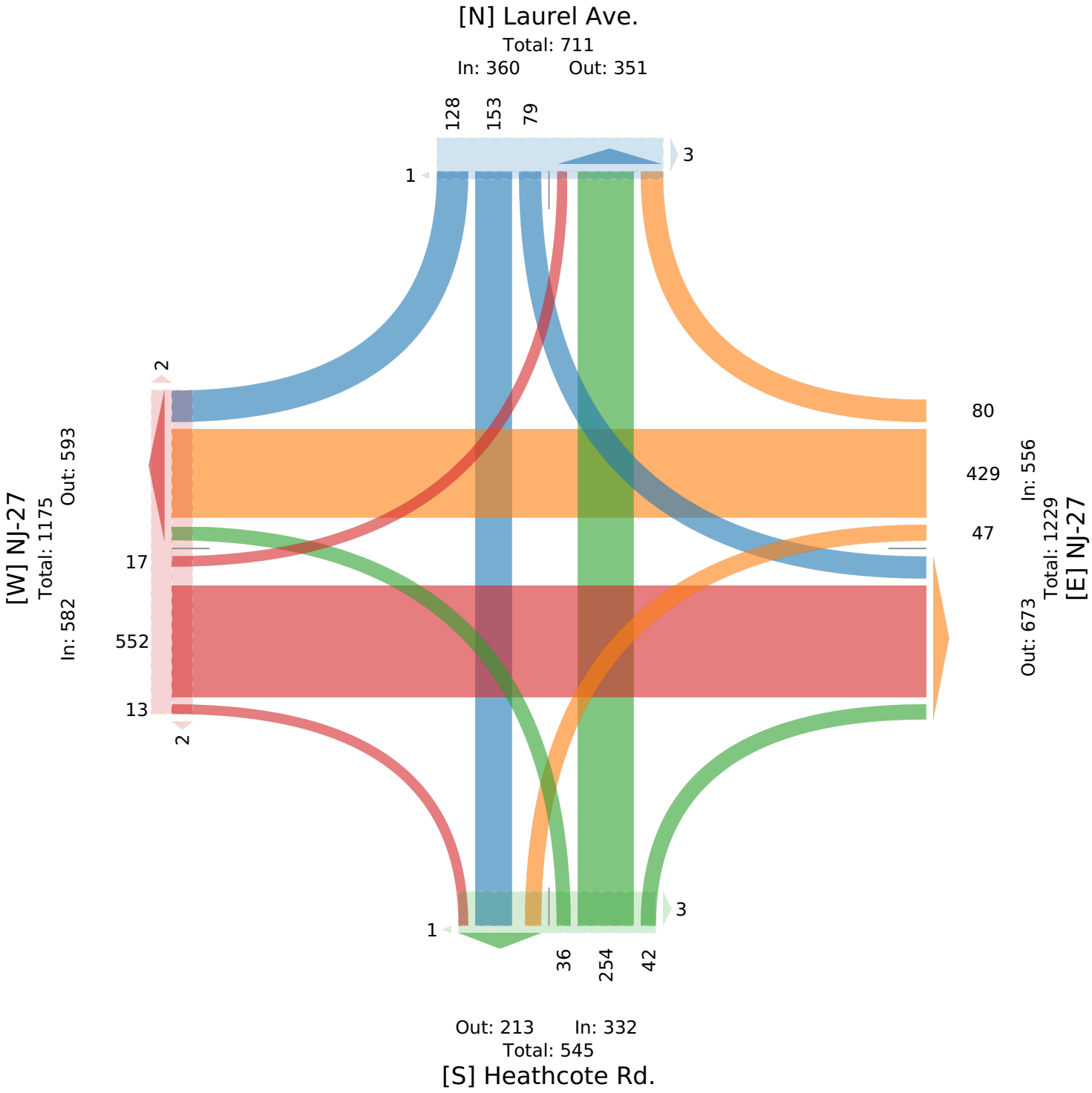
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	Heathcote Rd. Northbound							Laurel Ave. Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-05-07 4:45PM	3	68	9	0	0	**80**	0	25	36	25	0	0	**86**	1	**440**
5:00PM	9	76	14	0	0	**99**	0	20	37	29	0	0	**86**	2	**461**
5:15PM	12	57	9	0	0	**78**	4	21	42	28	0	0	**91**	1	**458**
5:30PM	12	53	10	0	0	**75**	0	13	38	46	0	0	**97**	0	**471**
Total	36	254	42	0	0	**332**	4	79	153	128	0	0	**360**	4	**1830**
% Approach	10.8%	76.5%	12.7%	0%	0%	**-**	-	21.9%	42.5%	35.6%	0%	0%	**-**	-	**-**
% Total	2.0%	13.9%	2.3%	0%	0%	**18.1%**	-	4.3%	8.4%	7.0%	0%	0%	**19.7%**	-	**-**
PHF	0.750	0.836	0.750	-	-	**0.838**	-	0.790	0.911	0.696	-	-	**0.928**	-	0.971
Lights	36	252	40	0	0	**328**	-	79	147	126	0	0	**352**	-	1806
% Lights	100%	99.2%	95.2%	0%	0%	**98.8%**	-	100%	96.1%	98.4%	0%	0%	**97.8%**	-	98.7%
Articulated Trucks and Single-Unit Trucks	0	2	2	0	0	**4**	-	0	6	2	0	0	**8**	-	19
% Articulated Trucks and Single-Unit Trucks	0%	0.8%	4.8%	0%	0%	**1.2%**	-	0%	3.9%	1.6%	0%	0%	**2.2%**	-	1.0%
Buses	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	5
% Buses	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0.3%
Pedestrians	-	-	-	-	-	-	4	-	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

NJ-27 & Laurel Ave. - TMC
Tue May 7, 2024
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1184101, Location: 40.375628, -74.613373

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Traffic Databank

716 S Sixth Ave
Mount Vernon, NY 10550

Heathcote Rd & Kingston Rd
Manual Turning Movement Count
Saturday Midday Peak Hour
Saturday, 20 May 2017

File Name : HEATHCOTE_RD_AT_KINGSTON_RD-SAT__415228_05-20-2017
Site Code :
Start Date : 5/20/2017
Page No : 1

Groups Printed- Lights - Buses - Trucks - Pedestrians

	HEATHCOTE RD Southbound					KINGSTON RD Westbound					HEATHCOTE RD Northbound					KINGSTON RD Eastbound							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
10:00 AM	13	22	29	2	64	15	135	18	0	168	6	21	14	2	41	6	81	7	0	94	4	367	371
10:15 AM	19	26	32	0	77	14	98	19	0	131	6	26	12	2	44	5	76	0	4	81	6	333	339
10:30 AM	16	24	31	0	71	11	120	17	0	148	10	33	12	1	55	2	86	0	0	88	1	362	363
10:45 AM	23	28	21	0	72	9	116	10	0	135	6	13	12	0	31	4	108	1	1	113	1	351	352
Total	71	100	113	2	284	49	469	64	0	582	28	93	50	5	171	17	351	8	5	376	12	1413	1425
11:00 AM	19	22	26	3	67	11	120	18	0	149	6	24	10	2	40	7	99	4	2	110	7	366	373
11:15 AM	21	29	22	2	72	17	135	14	0	166	6	14	9	0	29	9	96	7	0	112	2	379	381
11:30 AM	15	36	32	1	83	11	134	13	0	158	6	28	15	4	49	5	106	4	3	115	8	405	413
11:45 AM	21	24	26	3	71	13	125	16	3	154	16	22	17	4	55	11	99	7	1	117	11	397	408
Total	76	111	106	9	293	52	514	61	3	627	34	88	51	10	173	32	400	22	6	454	28	1547	1575
12:00 PM	20	36	35	1	91	12	99	16	0	127	6	21	16	1	43	6	92	3	1	101	3	362	365
12:15 PM	16	36	32	3	84	19	142	11	3	172	7	25	14	5	46	4	103	4	7	111	18	413	431
12:30 PM	18	28	29	1	75	12	133	11	0	156	8	29	17	6	54	13	116	6	4	135	11	420	431
12:45 PM	24	24	26	1	74	14	124	14	0	152	4	26	18	1	48	5	96	2	0	103	2	377	379
Total	78	124	122	6	324	57	498	52	3	607	25	101	65	13	191	28	407	15	12	450	34	1572	1606
01:00 PM	24	28	19	0	71	14	108	17	0	139	8	29	11	2	48	3	104	4	3	111	5	369	374
01:15 PM	19	29	28	2	76	11	125	15	0	151	11	19	15	0	45	7	120	8	0	135	2	407	409
01:30 PM	17	34	23	0	74	9	100	22	0	131	10	17	15	0	42	4	97	6	1	107	1	354	355
01:45 PM	18	33	25	2	76	11	106	11	0	128	7	17	21	3	45	5	107	2	2	114	7	363	370
Total	78	124	95	4	297	45	439	65	0	549	36	82	62	5	180	19	428	20	6	467	15	1493	1508
02:00 PM	22	28	19	0	69	25	115	12	0	152	7	18	14	0	39	5	98	3	0	106	0	366	366
02:15 PM	20	19	23	0	62	14	106	16	0	136	7	21	17	2	45	6	99	5	0	110	2	353	355
02:30 PM	14	33	27	1	74	14	143	17	0	174	10	16	18	1	44	6	117	3	0	126	2	418	420
02:45 PM	20	35	16	0	71	16	113	17	0	146	4	29	12	1	45	7	109	11	0	127	1	389	390
Total	76	115	85	1	276	69	477	62	0	608	28	84	61	4	173	24	423	22	0	469	5	1526	1531
*** BREAK ***																							
Grand Total	379	574	521	22	1474	272	2397	304	6	2973	151	448	289	37	888	120	2009	87	29	2216	94	7551	7645
Apprch %	25.7	38.9	35.3			9.1	80.6	10.2			17	50.5	32.5			5.4	90.7	3.9					
Total %	5	7.6	6.9		19.5	3.6	31.7	4		39.4	2	5.9	3.8		11.8	1.6	26.6	1.2		29.3	1.2	98.8	
Lights	372	565	517		1454	270	2369	301		2940	149	440	287		876	118	1968	83		2169	0	0	7439
% Lights	98.2	98.4	99.2	0	97.2	99.3	98.8	99	0	98.7	98.7	98.2	99.3	0	94.7	98.3	98	95.4	0	96.6	0	0	97.3
Buses	1	0	1		2	0	11	0		11	0	0	0		0	1	12	0		13	0	0	26
% Buses	0.3	0	0.2	0	0.1	0	0.5	0	0	0.4	0	0	0	0	0	0.8	0.6	0	0	0.6	0	0	0.3
Trucks	6	9	3		18	2	17	3		22	2	8	2		12	1	29	4		34	0	0	86
% Trucks	1.6	1.6	0.6	0	1.2	0.7	0.7	1	0	0.7	1.3	1.8	0.7	0	1.3	0.8	1.4	4.6	0	1.5	0	0	1.1
Pedestrians	0	0	0		22	0	0	0		6	0	0	0		37	0	0	0		29	0	0	94
% Pedestrians	0	0	0	100	1.5	0	0	0	100	0.2	0	0	0	100	4	0	0	0	100	1.3	0	0	1.2

Traffic Databank

716 S Sixth Ave
Mount Vernon, NY 10550

Heathcote Rd & Kingston Rd
Manual Turning Movement Count
Saturday Midday Peak Hour
Saturday, 20 May 2017

File Name : HEATHCOTE_RD_AT_KINGSTON_RD-SAT__415228_05-20-2017
Site Code :
Start Date : 5/20/2017
Page No : 2

	HEATHCOTE RD Southbound				KINGSTON RD Westbound				HEATHCOTE RD Northbound				KINGSTON RD Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 03:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	**21**	24	26	71	13	125	**16**	154	**16**	22	**17**	**55**	11	99	**7**	117	397
12:00 PM	20	**36**	**35**	**91**	12	99	16	127	6	21	16	43	6	92	3	101	362
12:15 PM	16	36	32	84	**19**	**142**	11	**172**	7	25	14	46	4	103	4	111	413
12:30 PM	18	28	29	75	12	133	11	156	8	**29**	17	54	**13**	**116**	6	**135**	**420**
Total Volume	75	124	122	321	56	499	54	609	37	97	64	198	34	410	20	464	1592
% App. Total	23.4	38.6	38		9.2	81.9	8.9		18.7	49	32.3		7.3	88.4	4.3		
PHF	.893	.861	.871	.882	.737	.879	.844	.885	.578	.836	.941	.900	.654	.884	.714	.859	.948
Lights	75	124	121	320	55	493	52	600	37	96	64	197	33	401	20	454	1571
% Lights	100	100	99.2	99.7	98.2	98.8	96.3	98.5	100	99.0	100	99.5	97.1	97.8	100	97.8	98.7
Buses	0	0	0	0	0	2	0	2	0	0	0	0	1	2	0	3	5
% Buses	0	0	0	0	0	0.4	0	0.3	0	0	0	0	2.9	0.5	0	0.6	0.3
Trucks	0	0	1	1	1	4	2	7	0	1	0	1	0	7	0	7	16
% Trucks	0	0	0.8	0.3	1.8	0.8	3.7	1.1	0	1.0	0	0.5	0	1.7	0	1.5	1.0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Mapleton Rd							Barclay Blvd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*
2024-02-29 7:00AM	2	0	2	0	3	**7**	0	8	6	0	0	0	**14**	3
7:15AM	4	0	3	0	4	**11**	1	4	2	5	0	1	**12**	1
7:30AM	5	0	2	0	1	**8**	0	4	5	5	0	4	**18**	0
7:45AM	22	1	8	0	2	**33**	0	10	3	5	0	0	**18**	0
Hourly Total	33	1	15	0	10	**59**	1	26	16	15	0	5	**62**	4
8:00AM	28	2	9	0	2	**41**	0	9	8	4	0	1	**22**	0
8:15AM	27	3	9	0	1	**40**	0	18	4	6	0	3	**31**	0
8:30AM	12	1	3	0	0	**16**	0	7	2	3	0	1	**13**	0
8:45AM	9	0	2	0	1	**12**	0	8	1	3	0	0	**12**	1
Hourly Total	76	6	23	0	4	**109**	0	42	15	16	0	5	**78**	1
9:00AM	2	0	0	0	2	**4**	0	3	0	3	0	0	**6**	2
9:15AM	5	1	2	0	1	**9**	0	3	2	0	0	1	**6**	0
9:30AM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Hourly Total	7	1	2	0	3	**13**	0	6	2	3	0	1	**12**	2
4:00PM	7	0	1	0	0	**8**	0	7	1	2	0	1	**11**	1
4:15PM	17	2	0	0	0	**19**	0	3	1	0	0	0	**4**	0
4:30PM	12	0	3	0	0	**15**	1	3	0	4	0	1	**8**	1
4:45PM	6	1	2	0	0	**9**	0	9	1	1	0	1	**12**	1
Hourly Total	42	3	6	0	0	**51**	1	22	3	7	0	3	**35**	3
5:00PM	8	0	2	0	2	**12**	0	7	2	1	0	2	**12**	2
5:15PM	4	0	1	0	1	**6**	0	3	0	1	0	1	**5**	0
5:30PM	8	0	0	0	2	**10**	0	4	2	0	0	0	**6**	0
5:45PM	4	0	1	0	1	**6**	0	6	2	4	0	0	**12**	0
Hourly Total	24	0	4	0	6	**34**	0	20	6	6	0	3	**35**	2
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Total	182	11	50	0	23	**266**	2	116	42	47	0	17	**222**	12
% Approach	68.4%	4.1%	18.8%	0%	8.6%	**-**	-	52.3%	18.9%	21.2%	0%	7.7%	**-**	-
% Total	4.3%	0.3%	1.2%	0%	0.5%	**6.2%**	-	2.7%	1.0%	1.1%	0%	0.4%	**5.2%**	-
Lights	181	11	50	0	23	**265**	-	104	42	47	0	17	**210**	-
% Lights	99.5%	100%	100%	0%	100%	**99.6%**	-	89.7%	100%	100%	0%	100%	**94.6%**	-
Articulated Trucks and Single-Unit Trucks	1	0	0	0	0	**1**	-	1	0	0	0	0	**1**	-
% Articulated Trucks and Single-Unit Trucks	0.5%	0%	0%	0%	0%	**0.4%**	-	0.9%	0%	0%	0%	0%	**0.5%**	-
Buses	0	0	0	0	0	**0**	-	11	0	0	0	0	**11**	-
% Buses	0%	0%	0%	0%	0%	**0%**	-	9.5%	0%	0%	0%	0%	**5.0%**	-
Pedestrians	-	-	-	-	-	-	2	-	-	-	-	-	-	10
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	83.3%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	2
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	16.7%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

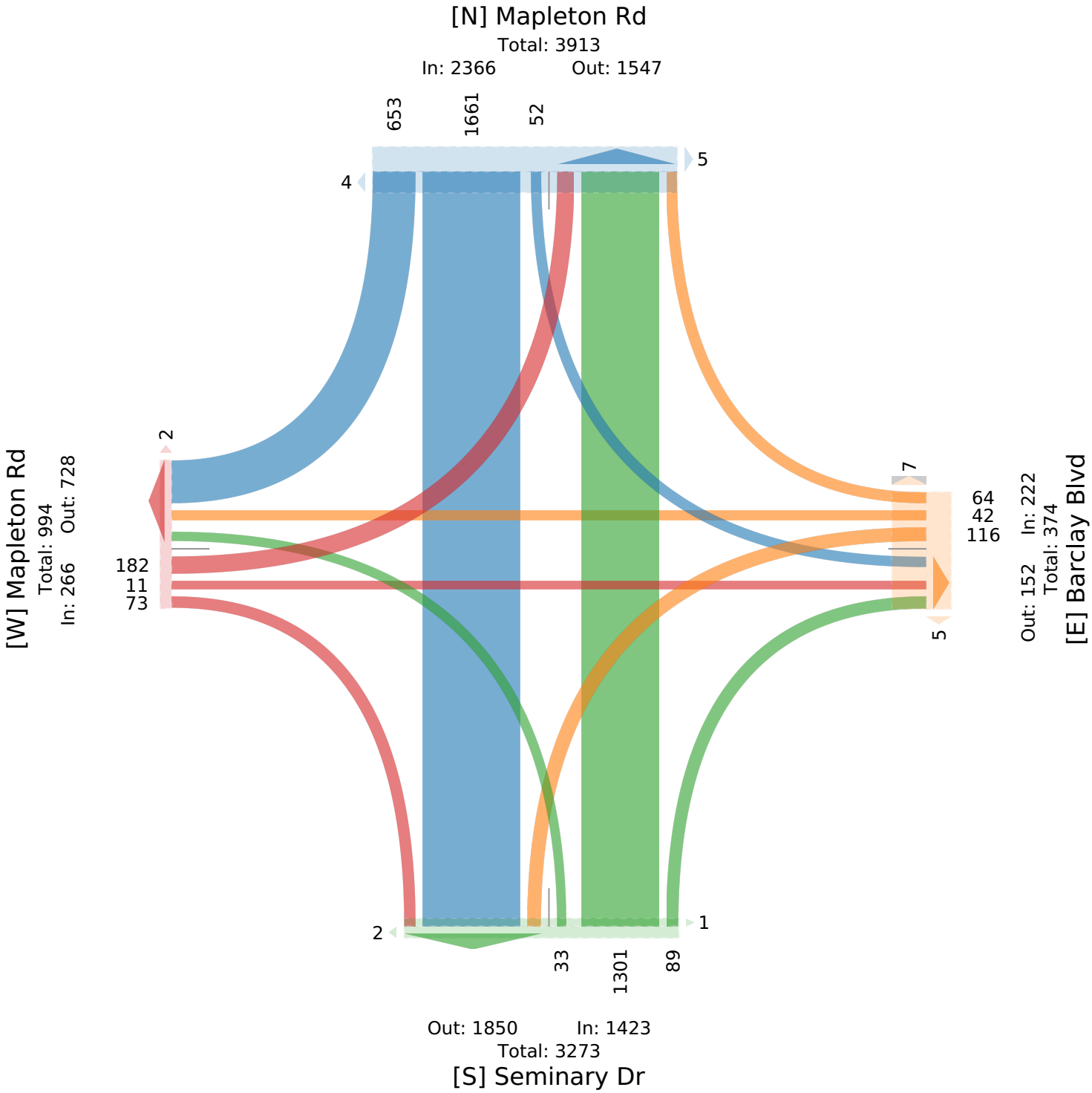
Leg	Seminary Dr							Mapleton Rd							
Direction	Northbound							Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-02-29 7:00AM	0	42	2	0	1	**45**	0	1	66	30	0	1	**98**	0	**164**
7:15AM	4	36	3	0	0	**43**	0	0	65	40	0	7	**112**	0	**178**
7:30AM	3	68	2	0	0	**73**	0	0	118	39	0	4	**161**	0	**260**
7:45AM	2	67	5	0	0	**74**	1	2	135	39	0	9	**185**	0	**310**
Hourly Total	9	213	12	0	1	**235**	1	3	384	148	0	21	**556**	0	**912**
8:00AM	2	51	7	0	1	**61**	0	4	146	55	0	5	**210**	0	**334**
8:15AM	1	43	2	0	1	**47**	0	4	160	27	0	3	**194**	0	**312**
8:30AM	1	41	4	0	0	**46**	0	3	135	28	0	0	**166**	1	**241**
8:45AM	2	61	5	0	1	**69**	0	3	116	32	0	2	**153**	0	**246**
Hourly Total	6	196	18	0	3	**223**	0	14	557	142	0	10	**723**	1	**1133**
9:00AM	0	56	2	0	0	**58**	0	2	97	36	0	0	**135**	0	**203**
9:15AM	1	31	4	0	0	**36**	0	1	90	19	0	1	**111**	1	**162**
9:30AM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Hourly Total	1	87	6	0	0	**94**	0	3	187	55	0	1	**246**	1	**365**
4:00PM	0	96	6	0	3	**105**	0	5	59	38	0	5	**107**	1	**231**
4:15PM	3	88	2	0	1	**94**	0	3	68	36	0	1	**108**	1	**225**
4:30PM	1	105	2	0	2	**110**	1	4	72	32	0	2	**110**	2	**243**
4:45PM	3	101	4	0	0	**108**	1	3	51	30	0	2	**86**	0	**215**
Hourly Total	7	390	14	0	6	**417**	2	15	250	136	0	10	**411**	4	**914**
5:00PM	3	111	6	0	2	**122**	0	5	67	32	0	0	**104**	3	**250**
5:15PM	2	102	9	0	0	**113**	0	6	58	36	0	1	**101**	0	**225**
5:30PM	3	106	6	0	0	**115**	0	1	78	33	0	2	**114**	0	**245**
5:45PM	2	96	6	0	0	**104**	0	5	80	25	0	1	**111**	0	**233**
Hourly Total	10	415	27	0	2	**454**	0	17	283	126	0	4	**430**	3	**953**
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Total	33	1301	77	0	12	**1423**	3	52	1661	607	0	46	**2366**	9	**4277**
% Approach	2.3%	91.4%	5.4%	0%	0.8%	**-**	-	2.2%	70.2%	25.7%	0%	1.9%	**-**	-	-
% Total	0.8%	30.4%	1.8%	0%	0.3%	**33.3%**	-	1.2%	38.8%	14.2%	0%	1.1%	**55.3%**	-	-
Lights	32	1283	66	0	10	**1391**	-	52	1646	605	0	45	**2348**	-	4214
% Lights	97.0%	98.6%	85.7%	0%	83.3%	**97.8%**	-	100%	99.1%	99.7%	0%	97.8%	**99.2%**	-	98.5%
Articulated Trucks and Single-Unit Trucks	1	13	1	0	1	**16**	-	0	6	1	0	0	**7**	-	25
% Articulated Trucks and Single-Unit Trucks	3.0%	1.0%	1.3%	0%	8.3%	**1.1%**	-	0%	0.4%	0.2%	0%	0%	**0.3%**	-	0.6%
Buses	0	5	10	0	1	**16**	-	0	9	1	0	1	**11**	-	38
% Buses	0%	0.4%	13.0%	0%	8.3%	**1.1%**	-	0%	0.5%	0.2%	0%	2.2%	**0.5%**	-	0.9%
Pedestrians	-	-	-	-	-	-	3	-	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Mapleton Rd							Barclay Blvd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*
2024-02-29 7:30AM	5	0	2	0	1	**8**	0	4	5	5	0	4	**18**	0
7:45AM	22	1	8	0	2	**33**	0	10	3	5	0	0	**18**	0
8:00AM	28	2	9	0	2	**41**	0	9	8	4	0	1	**22**	0
8:15AM	27	3	9	0	1	**40**	0	18	4	6	0	3	**31**	0
Total	82	6	28	0	6	**122**	0	41	20	20	0	8	**89**	0
% Approach	67.2%	4.9%	23.0%	0%	4.9%	**-**	-	46.1%	22.5%	22.5%	0%	9.0%	**-**	-
% Total	6.7%	0.5%	2.3%	0%	0.5%	**10.0%**	-	3.4%	1.6%	1.6%	0%	0.7%	**7.3%**	-
PHF	0.732	0.500	0.778	-	0.750	**0.744**	-	0.569	0.625	0.833	-	0.500	**0.718**	-
Lights	82	6	28	0	6	**122**	-	34	20	20	0	8	**82**	-
% Lights	100%	100%	100%	0%	100%	**100%**	-	82.9%	100%	100%	0%	100%	**92.1%**	-
Articulated Trucks and Single-Unit Trucks	0	0	0	0	0	**0**	-	1	0	0	0	0	**1**	-
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	2.4%	0%	0%	0%	0%	**1.1%**	-
Buses	0	0	0	0	0	**0**	-	6	0	0	0	0	**6**	-
% Buses	0%	0%	0%	0%	0%	**0%**	-	14.6%	0%	0%	0%	0%	**6.7%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

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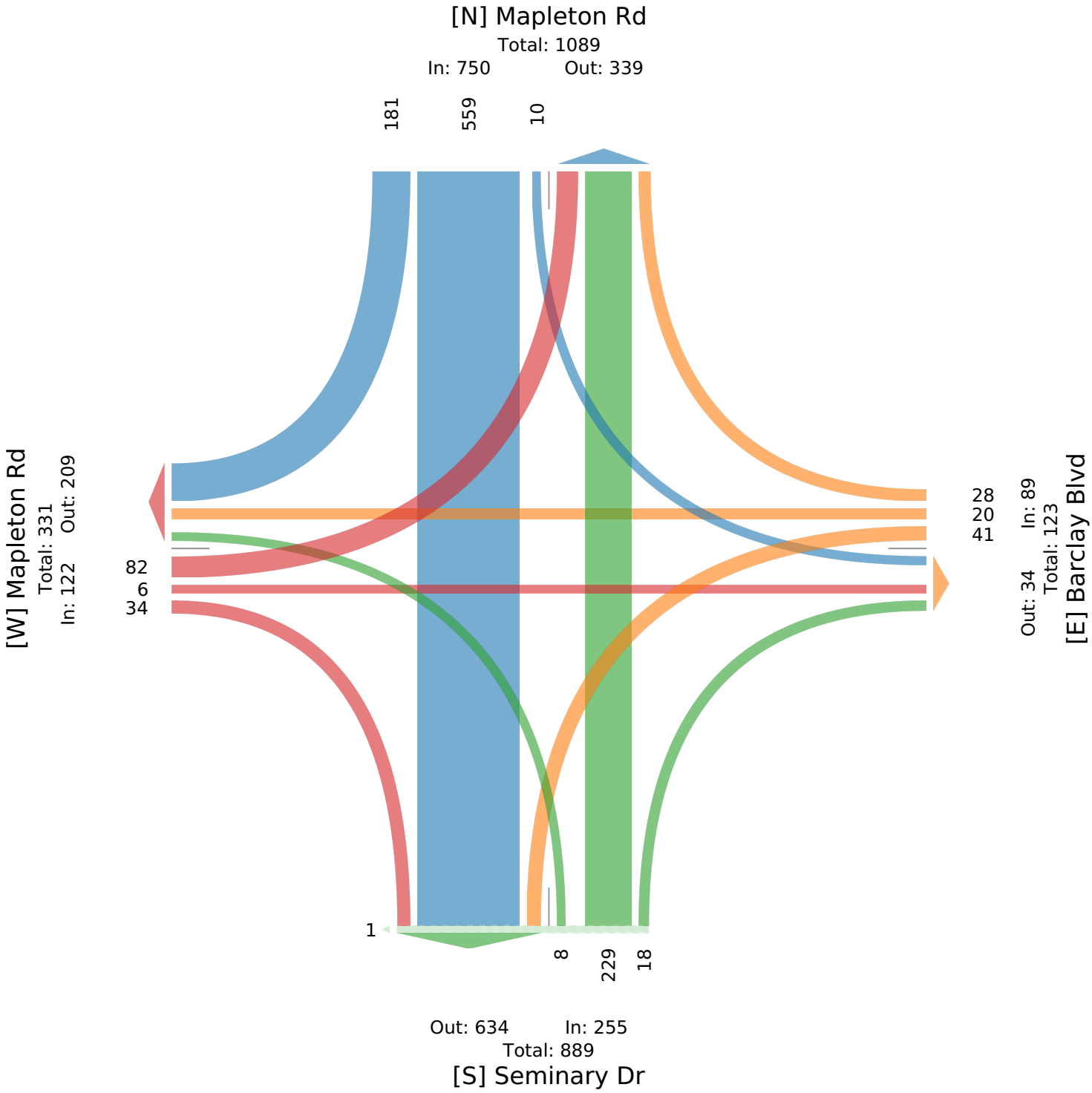
Leg	Seminary Dr							Mapleton Rd							
Direction	Northbound							Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-02-29 7:30AM	3	68	2	0	0	**73**	0	0	118	39	0	4	**161**	0	**260**
7:45AM	2	67	5	0	0	**74**	1	2	135	39	0	9	**185**	0	**310**
8:00AM	2	51	7	0	1	**61**	0	4	146	55	0	5	**210**	0	**334**
8:15AM	1	43	2	0	1	**47**	0	4	160	27	0	3	**194**	0	**312**
Total	8	229	16	0	2	**255**	1	10	559	160	0	21	**750**	0	**1216**
% Approach	3.1%	89.8%	6.3%	0%	0.8%	**-**	-	1.3%	74.5%	21.3%	0%	2.8%	**-**	-	-
% Total	0.7%	18.8%	1.3%	0%	0.2%	**21.0%**	-	0.8%	46.0%	13.2%	0%	1.7%	**61.7%**	-	-
PHF	0.667	0.842	0.571	-	0.500	**0.861**	-	0.625	0.873	0.727	-	0.583	**0.893**	-	0.910
Lights	8	227	10	0	1	**246**	-	10	556	160	0	20	**746**	-	1196
% Lights	100%	99.1%	62.5%	0%	50.0%	**96.5%**	-	100%	99.5%	100%	0%	95.2%	**99.5%**	-	98.4%
Articulated Trucks and Single-Unit Trucks	0	2	0	0	1	**3**	-	0	2	0	0	0	**2**	-	6
% Articulated Trucks and Single-Unit Trucks	0%	0.9%	0%	0%	50.0%	**1.2%**	-	0%	0.4%	0%	0%	0%	**0.3%**	-	0.5%
Buses	0	0	6	0	0	**6**	-	0	1	0	0	1	**2**	-	14
% Buses	0%	0%	37.5%	0%	0%	**2.4%**	-	0%	0.2%	0%	0%	4.8%	**0.3%**	-	1.2%
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

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Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003



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Leg	Mapleton Rd							Barclay Blvd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-02-29 4:45PM	6	1	2	0	0	**9**	0	9	1	1	0	1	**12**	1
5:00PM	8	0	2	0	2	**12**	0	7	2	1	0	2	**12**	2
5:15PM	4	0	1	0	1	**6**	0	3	0	1	0	1	**5**	0
5:30PM	8	0	0	0	2	**10**	0	4	2	0	0	0	**6**	0
Total	26	1	5	0	5	**37**	0	23	5	3	0	4	**35**	3
% Approach	70.3%	2.7%	13.5%	0%	13.5%	**-**	-	65.7%	14.3%	8.6%	0%	11.4%	**-**	-
% Total	2.8%	0.1%	0.5%	0%	0.5%	**4.0%**	-	2.5%	0.5%	0.3%	0%	0.4%	**3.7%**	-
PHF	0.813	0.250	0.625	-	0.625	**0.771**	-	0.639	0.625	0.750	-	0.500	**0.729**	-
Lights	26	1	5	0	5	**37**	-	22	5	3	0	4	**34**	-
% Lights	100%	100%	100%	0%	100%	**100%**	-	95.7%	100%	100%	0%	100%	**97.1%**	-
Articulated Trucks and Single-Unit Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-
Buses	0	0	0	0	0	**0**	-	1	0	0	0	0	**1**	-
% Buses	0%	0%	0%	0%	0%	**0%**	-	4.3%	0%	0%	0%	0%	**2.9%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	1
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	33.3%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	2
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	66.7%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

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Coatesville, PA, 19320, US

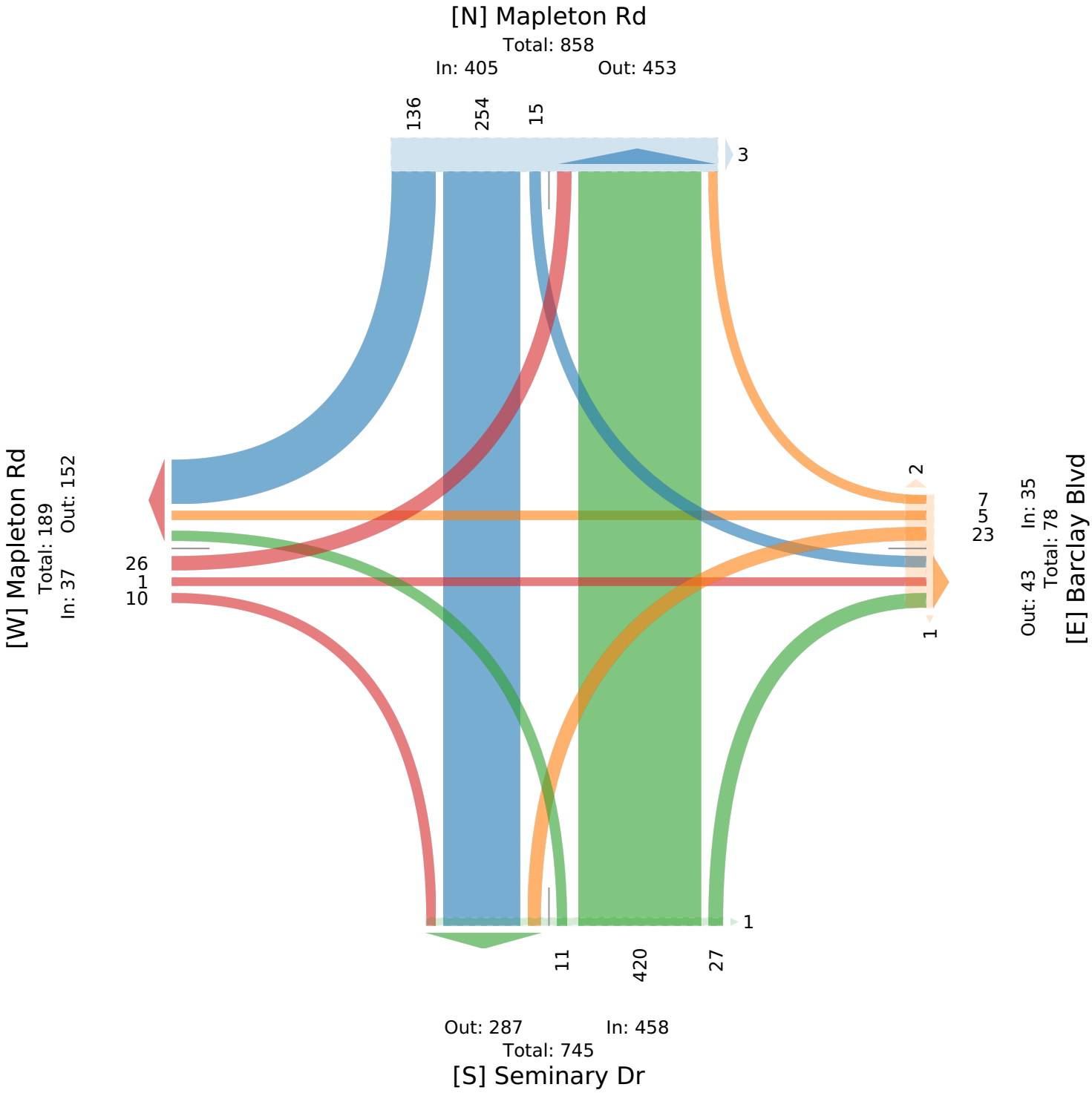
Leg	Seminary Dr							Mapleton Rd							
Direction	Northbound							Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-02-29 4:45PM	3	101	4	0	0	**108**	1	3	51	30	0	2	**86**	0	**215**
5:00PM	3	111	6	0	2	**122**	0	5	67	32	0	0	**104**	3	**250**
5:15PM	2	102	9	0	0	**113**	0	6	58	36	0	1	**101**	0	**225**
5:30PM	3	106	6	0	0	**115**	0	1	78	33	0	2	**114**	0	**245**
Total	11	420	25	0	2	**458**	1	15	254	131	0	5	**405**	3	**935**
% Approach	2.4%	91.7%	5.5%	0%	0.4%	**-**	-	3.7%	62.7%	32.3%	0%	1.2%	**-**	-	-
% Total	1.2%	44.9%	2.7%	0%	0.2%	**49.0%**	-	1.6%	27.2%	14.0%	0%	0.5%	**43.3%**	-	-
PHF	0.917	0.946	0.694	-	0.250	**0.939**	-	0.625	0.814	0.910	-	0.625	**0.888**	-	0.935
Lights	11	418	23	0	2	**454**	-	15	252	130	0	5	**402**	-	927
% Lights	100%	99.5%	92.0%	0%	100%	**99.1%**	-	100%	99.2%	99.2%	0%	100%	**99.3%**	-	99.1%
Articulated Trucks and Single-Unit Trucks	0	2	1	0	0	**3**	-	0	1	1	0	0	**2**	-	5
% Articulated Trucks and Single-Unit Trucks	0%	0.5%	4.0%	0%	0%	**0.7%**	-	0%	0.4%	0.8%	0%	0%	**0.5%**	-	0.5%
Buses	0	0	1	0	0	**1**	-	0	1	0	0	0	**1**	-	3
% Buses	0%	0%	4.0%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	0%	**0.2%**	-	0.3%
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Seminary Rd & Mapleton Rd/Barclay Blvd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160869, Location: 40.360509, -74.621003

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Plainsboro, NJ
Seminary Rd & Mapleton Rd/Barclay Blvd
Saturday, February 3, 2024
Location: 40.360509, -74.621003

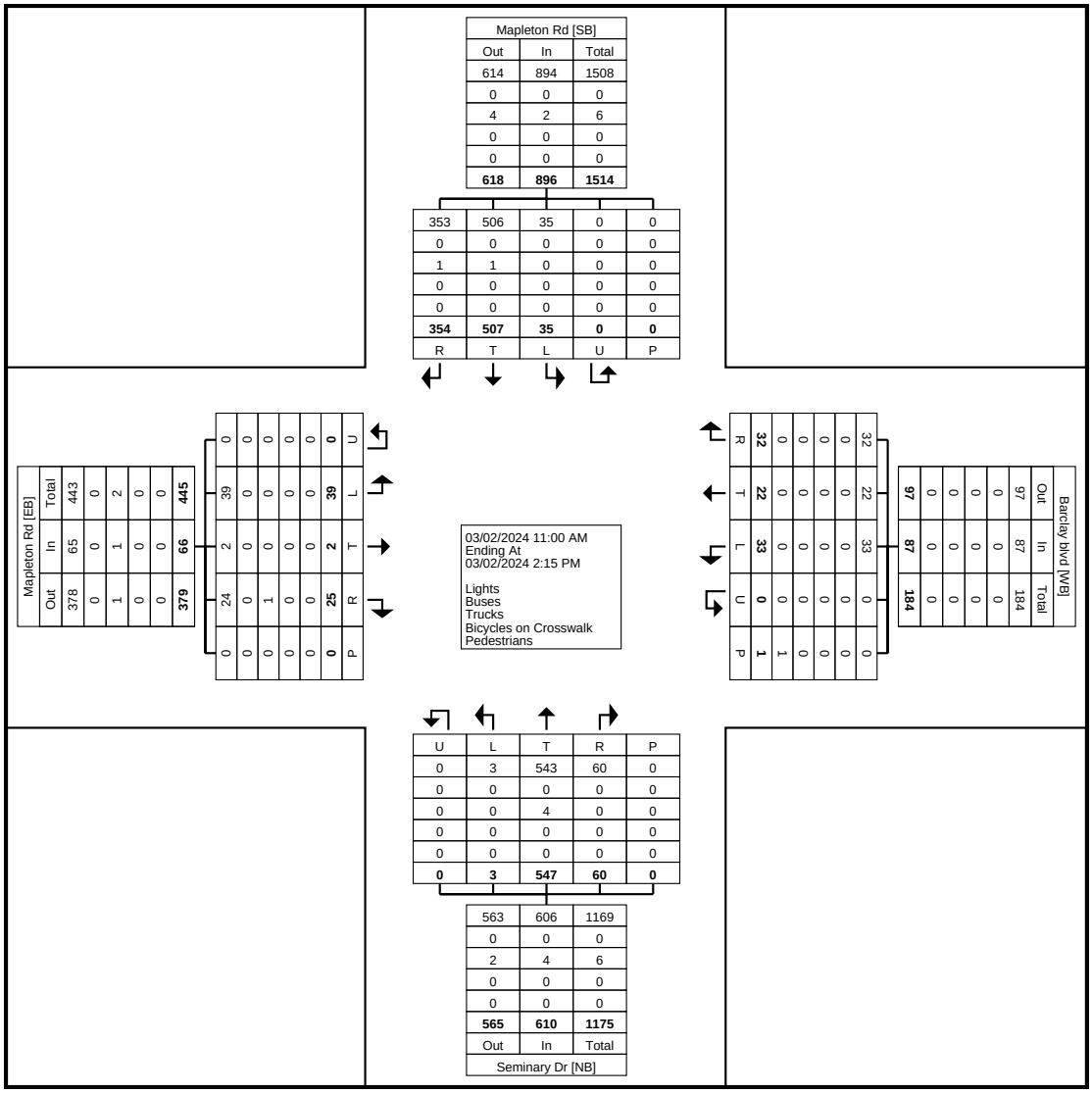
Count Name: Seminary Rd & Mapleton Rd/Barclay Blvd (3/2)
Site Code:
Start Date: 03/02/2024

Turning Movement Data

Start Time	Mapleton Rd Eastbound							Barclay blvd Westbound							Seminary Dr Northbound							Mapleton Rd Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
11:00 AM	3	0	0	1	0	0	4	3	4	1	1	0	0	9	0	45	3	0	0	0	48	3	33	12	2	0	0	50	111
11:15 AM	3	0	0	2	0	0	5	4	2	2	3	0	1	11	1	37	3	3	0	0	44	7	33	19	0	0	0	59	119
11:30 AM	0	0	0	0	0	0	0	1	1	2	1	0	0	5	0	60	3	1	0	0	64	2	47	33	0	0	0	82	151
11:45 AM	1	2	0	1	0	0	4	4	2	1	2	0	0	9	1	52	1	1	0	0	55	1	60	27	1	0	0	89	157
Hourly Total	7	2	0	4	0	0	13	12	9	6	7	0	1	34	2	194	10	5	0	0	211	13	173	91	3	0	0	280	538
12:00 PM	5	0	1	2	0	0	8	3	1	2	0	0	0	6	1	45	7	1	0	0	54	5	42	26	10	0	0	83	151
12:15 PM	4	0	0	1	0	0	5	4	3	0	1	0	0	8	0	55	9	0	0	0	64	3	52	26	4	0	0	85	162
12:30 PM	4	0	1	2	0	0	7	1	1	4	0	0	0	6	0	36	9	0	0	0	45	2	38	30	15	0	0	85	143
12:45 PM	3	0	0	0	0	0	3	3	1	2	1	0	0	7	0	36	5	0	0	0	41	4	37	27	7	0	0	75	126
Hourly Total	16	0	2	5	0	0	23	11	6	8	2	0	0	27	1	172	30	1	0	0	204	14	169	109	36	0	0	328	582
1:00 PM	4	0	1	0	0	0	5	2	3	4	0	0	0	9	0	55	3	0	0	0	58	1	31	31	0	0	0	63	135
1:15 PM	1	0	4	1	0	0	6	1	2	0	1	0	0	4	0	46	0	0	0	0	46	4	33	26	1	0	0	64	120
1:30 PM	4	0	1	3	0	0	8	5	1	2	0	0	0	8	0	32	3	2	0	0	37	1	52	29	0	0	0	82	135
1:45 PM	7	0	2	2	0	0	11	2	1	2	0	0	0	5	0	48	6	0	0	0	54	2	49	24	4	0	0	79	149
Hourly Total	16	0	8	6	0	0	30	10	7	8	1	0	0	26	0	181	12	2	0	0	195	8	165	110	5	0	0	288	539
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	39	2	10	15	0	0	66	33	22	22	10	0	1	87	3	547	52	8	0	0	610	35	507	310	44	0	0	896	1659
Approach %	59.1	3.0	15.2	22.7	0.0	-	-	37.9	25.3	25.3	11.5	0.0	-	-	0.5	89.7	8.5	1.3	0.0	-	-	3.9	56.6	34.6	4.9	0.0	-	-	-
Total %	2.4	0.1	0.6	0.9	0.0	-	4.0	2.0	1.3	1.3	0.6	0.0	-	5.2	0.2	33.0	3.1	0.5	0.0	-	36.8	2.1	30.6	18.7	2.7	0.0	-	54.0	-
Lights	39	2	9	15	0	-	65	33	22	22	10	0	-	87	3	543	52	8	0	-	606	35	506	309	44	0	-	894	1652
% Lights	100.0	100.0	90.0	100.0	-	-	98.5	100.0	100.0	100.0	100.0	-	-	100.0	100.0	99.3	100.0	100.0	-	-	99.3	100.0	99.8	99.7	100.0	-	-	99.8	99.6
Buses	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	1	0	0	-	1	0	0	0	0	0	-	0	0	4	0	0	0	-	4	0	1	1	0	0	-	2	7
% Trucks	0.0	0.0	10.0	0.0	-	-	1.5	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.0	0.0	-	-	0.7	0.0	0.2	0.3	0.0	-	-	0.2	0.4
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	1	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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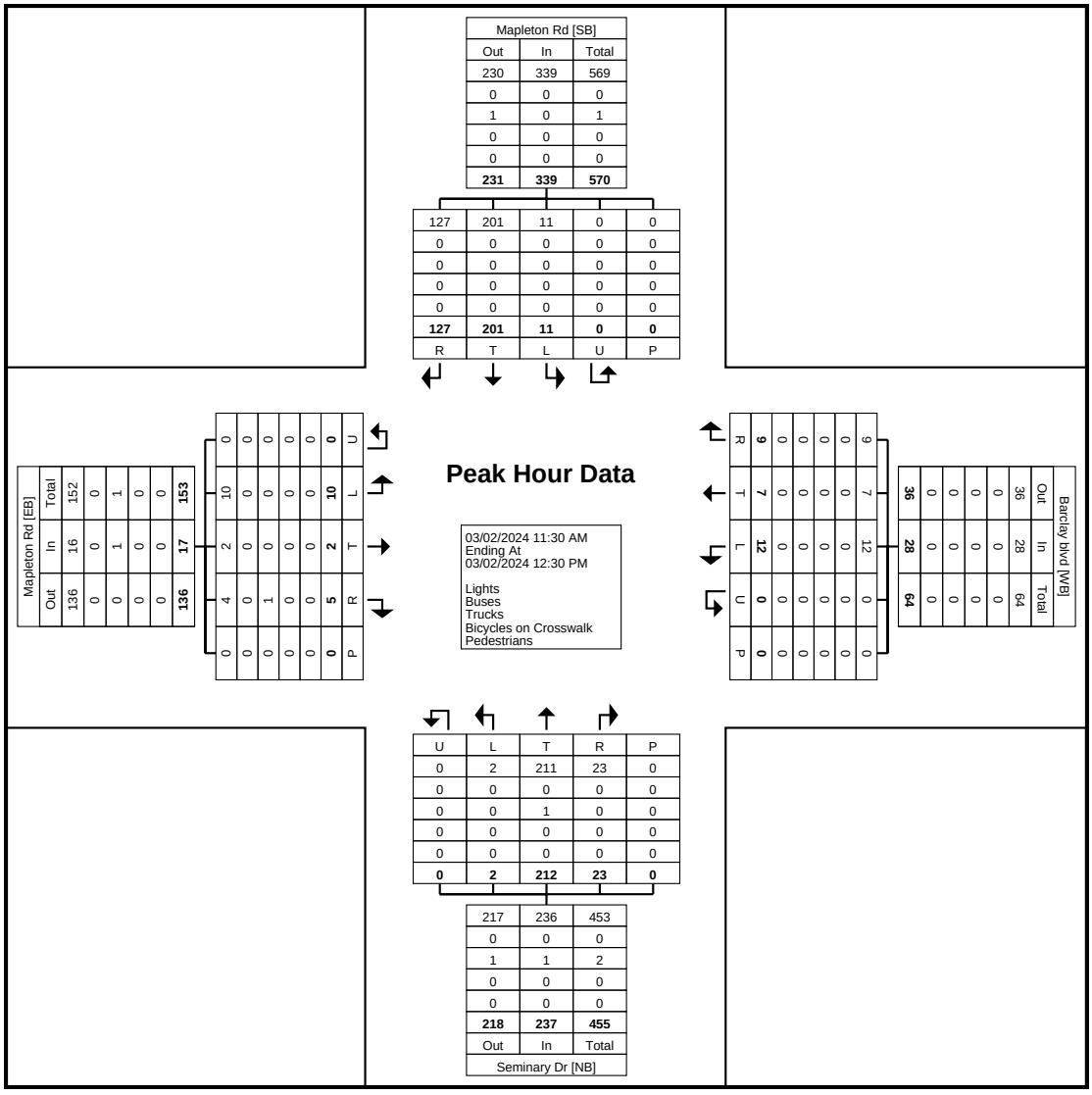
Turning Movement Data Plot

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Turning Movement Peak Hour Data (11:30 AM)

Start Time	Mapleton Rd Eastbound							Barclay blvd Westbound							Seminary Dr Northbound							Mapleton Rd Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
11:30 AM	0	0	0	0	0	0	0	1	1	2	1	0	0	5	0	60	3	1	0	0	64	2	47	33	0	0	0	82	151
11:45 AM	1	2	0	1	0	0	4	4	2	1	2	0	0	9	1	52	1	1	0	0	55	1	60	27	1	0	0	89	157
12:00 PM	5	0	1	2	0	0	8	3	1	2	0	0	0	6	1	45	7	1	0	0	54	5	42	26	10	0	0	83	151
12:15 PM	4	0	0	1	0	0	5	4	3	0	1	0	0	8	0	55	9	0	0	0	64	3	52	26	4	0	0	85	162
Total	10	2	1	4	0	0	17	12	7	5	4	0	0	28	2	212	20	3	0	0	237	11	201	112	15	0	0	339	621
Approach %	58.8	11.8	5.9	23.5	0.0	-	-	42.9	25.0	17.9	14.3	0.0	-	-	0.8	89.5	8.4	1.3	0.0	-	-	3.2	59.3	33.0	4.4	0.0	-	-	-
Total %	1.6	0.3	0.2	0.6	0.0	-	2.7	1.9	1.1	0.8	0.6	0.0	-	4.5	0.3	34.1	3.2	0.5	0.0	-	38.2	1.8	32.4	18.0	2.4	0.0	-	54.6	-
PHF	0.500	0.250	0.250	0.500	0.000	-	0.531	0.750	0.583	0.625	0.500	0.000	-	0.778	0.500	0.883	0.556	0.750	0.000	-	0.926	0.550	0.838	0.848	0.375	0.000	-	0.952	0.958
Lights	10	2	0	4	0	-	16	12	7	5	4	0	-	28	2	211	20	3	0	-	236	11	201	112	15	0	-	339	619
% Lights	100.0	100.0	0.0	100.0	-	-	94.1	100.0	100.0	100.0	100.0	-	-	100.0	100.0	99.5	100.0	100.0	-	-	99.6	100.0	100.0	100.0	100.0	-	-	100.0	99.7
Buses	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	1	0	0	-	1	0	0	0	0	0	-	0	0	1	0	0	0	-	1	0	0	0	0	0	-	0	2
% Trucks	0.0	0.0	100.0	0.0	-	-	5.9	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.5	0.0	0.0	-	-	0.4	0.0	0.0	0.0	0.0	-	-	0.0	0.3
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (11:30 AM)

College Rd & Research Way (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160860, Location: 40.353215, -74.59426

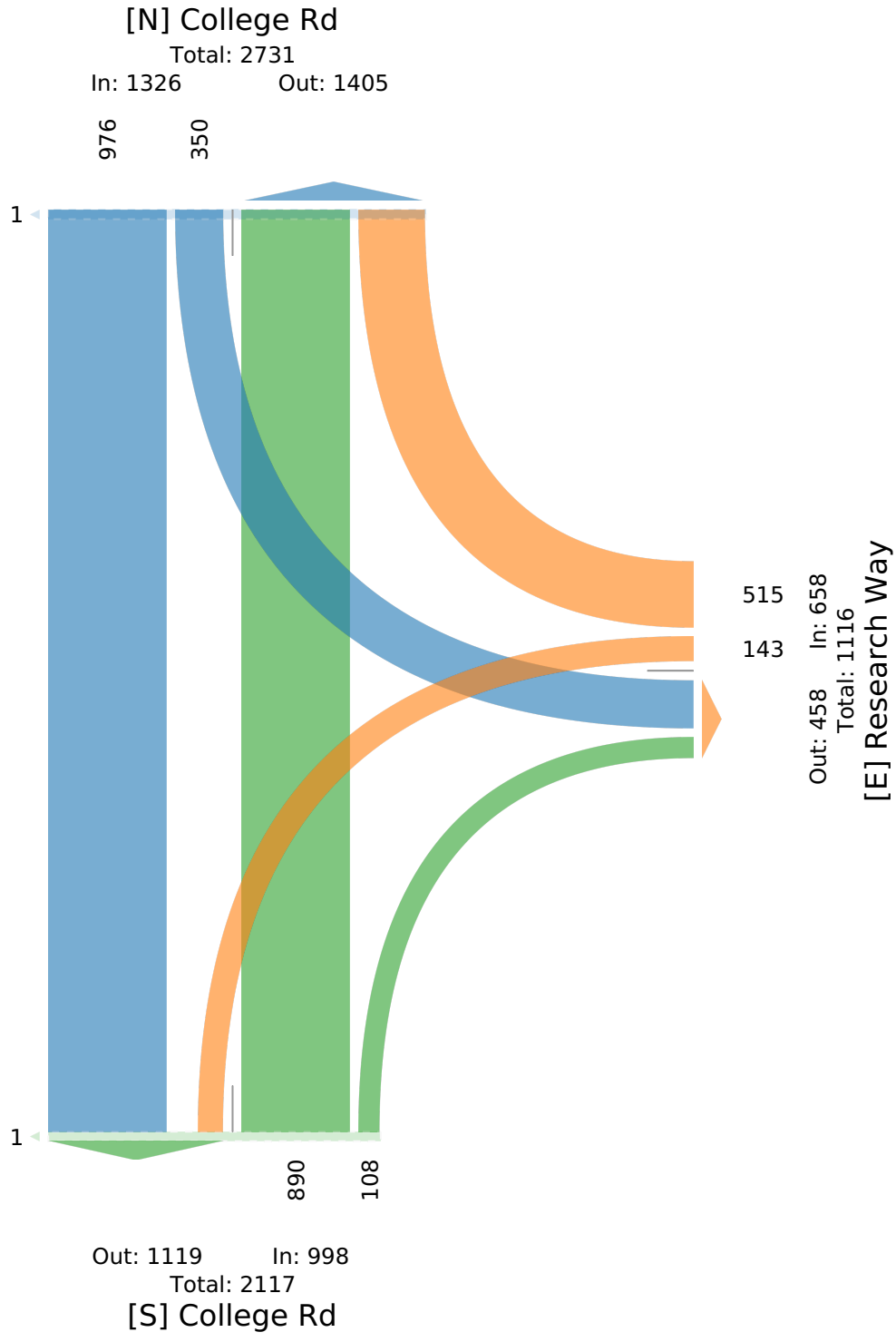
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	Research Way Westbound					College Rd Northbound					College Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-02-29 7:00AM	3	24	0	**27**	0	11	2	0	**13**	0	6	31	0	**37**	0	**77**
7:15AM	11	16	0	**27**	0	32	0	0	**32**	0	9	33	0	**42**	0	**101**
7:30AM	9	42	0	**51**	0	29	2	0	**31**	0	6	50	0	**56**	0	**138**
7:45AM	15	48	0	**63**	0	74	1	0	**75**	0	11	69	0	**80**	0	**218**
Hourly Total	38	130	0	**168**	0	146	5	0	**151**	0	32	183	0	**215**	0	**534**
8:00AM	11	36	0	**47**	0	50	3	0	**53**	0	14	76	0	**90**	0	**190**
8:15AM	9	50	0	**59**	0	51	6	0	**57**	0	16	75	0	**91**	0	**207**
8:30AM	15	36	0	**51**	0	43	0	0	**43**	0	14	84	0	**98**	0	**192**
8:45AM	14	51	0	**65**	0	70	4	0	**74**	0	14	76	0	**90**	0	**229**
Hourly Total	49	173	0	**222**	0	214	13	0	**227**	0	58	311	0	**369**	0	**818**
9:00AM	11	35	0	**46**	0	44	3	0	**47**	0	7	64	0	**71**	0	**164**
9:15AM	15	30	0	**45**	0	55	1	0	**56**	0	13	46	0	**59**	0	**160**
Hourly Total	26	65	0	**91**	0	99	4	0	**103**	0	20	110	0	**130**	0	**324**
4:00PM	3	15	0	**18**	0	58	7	0	**65**	1	26	31	0	**57**	0	**140**
4:15PM	2	18	0	**20**	0	44	10	0	**54**	0	21	39	0	**60**	0	**134**
4:30PM	2	25	0	**27**	0	54	14	0	**68**	0	39	58	0	**97**	0	**192**
4:45PM	4	15	0	**19**	0	50	16	0	**66**	0	28	54	0	**82**	0	**167**
Hourly Total	11	73	0	**84**	0	206	47	0	**253**	1	114	182	0	**296**	0	**633**
5:00PM	3	15	0	**18**	0	67	11	0	**78**	0	40	55	0	**95**	0	**191**
5:15PM	8	12	0	**20**	0	64	9	0	**73**	0	34	48	0	**82**	1	**175**
5:30PM	4	21	0	**25**	0	42	10	0	**52**	0	27	44	0	**71**	0	**148**
5:45PM	4	26	0	**30**	0	52	9	0	**61**	0	25	43	0	**68**	0	**159**
Hourly Total	19	74	0	**93**	0	225	39	0	**264**	0	126	190	0	**316**	1	**673**
Total	143	515	0	**658**	0	890	108	0	**998**	1	350	976	0	**1326**	1	**2982**
% Approach	21.7%	78.3%	0%	**-**	-	89.2%	10.8%	0%	**-**	-	26.4%	73.6%	0%	**-**	-	-
% Total	4.8%	17.3%	0%	**22.1%**	-	29.8%	3.6%	0%	**33.5%**	-	11.7%	32.7%	0%	**44.5%**	-	-
Lights	142	507	0	**649**	-	878	107	0	**985**	-	345	960	0	**1305**	-	2939
% Lights	99.3%	98.4%	0%	**98.6%**	-	98.7%	99.1%	0%	**98.7%**	-	98.6%	98.4%	0%	**98.4%**	-	98.6%
Articulated Trucks and Single-Unit Trucks	1	3	0	**4**	-	2	0	0	**2**	-	3	5	0	**8**	-	14
% Articulated Trucks and Single-Unit Trucks	0.7%	0.6%	0%	**0.6%**	-	0.2%	0%	0%	**0.2%**	-	0.9%	0.5%	0%	**0.6%**	-	0.5%
Buses	0	5	0	**5**	-	10	1	0	**11**	-	2	11	0	**13**	-	29
% Buses	0%	1.0%	0%	**0.8%**	-	1.1%	0.9%	0%	**1.1%**	-	0.6%	1.1%	0%	**1.0%**	-	1.0%
Pedestrians	-	-	-	-	0	-	-	-	-	1	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Research Way (2/29) - TMC
Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160860, Location: 40.353215, -74.59426

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Research Way (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160860, Location: 40.353215, -74.59426

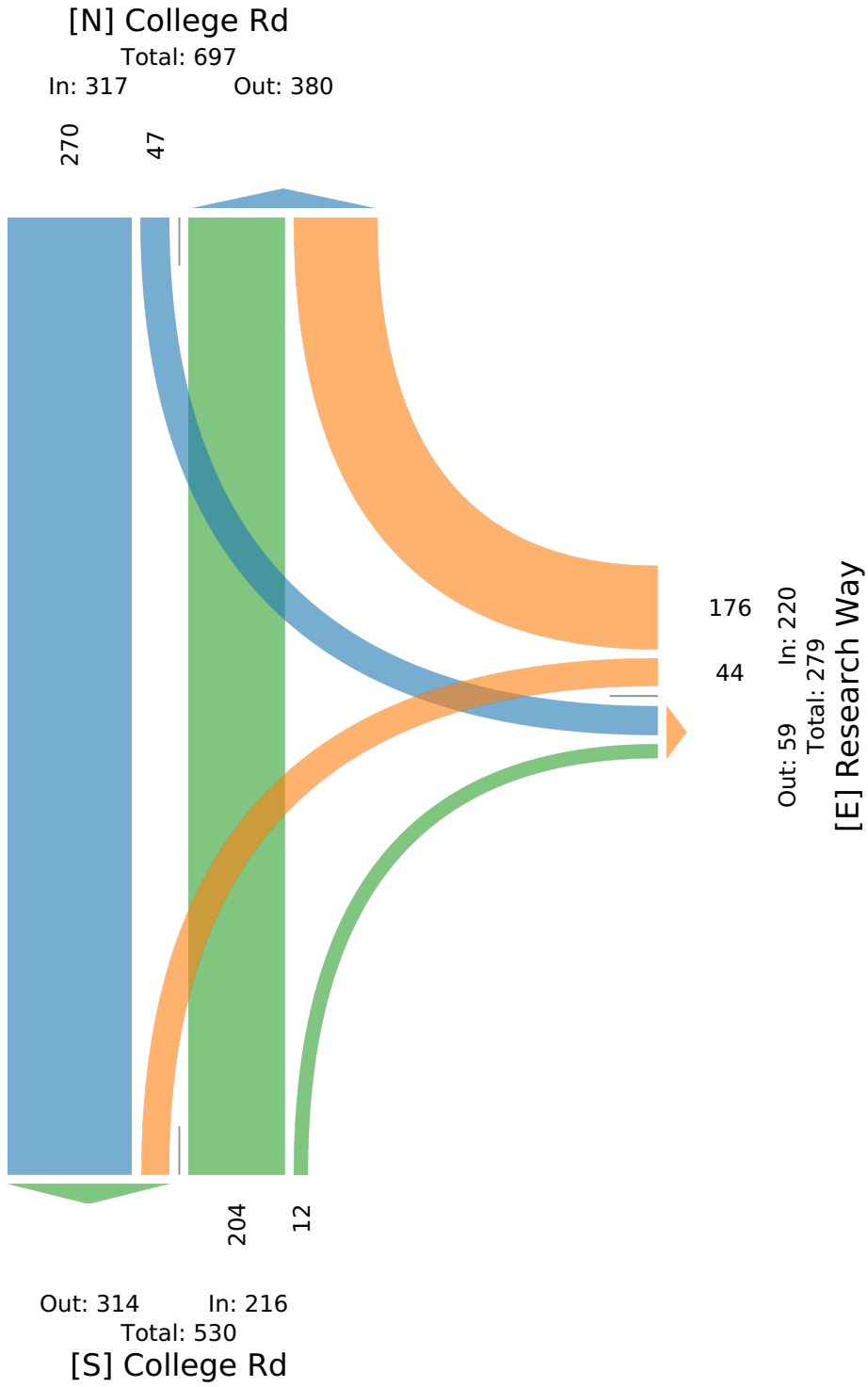
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Research Way Westbound					College Rd Northbound					College Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-02-29 7:30AM	9	42	0	**51**	0	29	2	0	**31**	0	6	50	0	**56**	0	**138**
7:45AM	15	48	0	**63**	0	74	1	0	**75**	0	11	69	0	**80**	0	**218**
8:00AM	11	36	0	**47**	0	50	3	0	**53**	0	14	76	0	**90**	0	**190**
8:15AM	9	50	0	**59**	0	51	6	0	**57**	0	16	75	0	**91**	0	**207**
Total	44	176	0	**220**	0	204	12	0	**216**	0	47	270	0	**317**	0	**753**
% Approach	20.0%	80.0%	0%	**-**	-	94.4%	5.6%	0%	**-**	-	14.8%	85.2%	0%	**-**	-	**-**
% Total	5.8%	23.4%	0%	**29.2%**	-	27.1%	1.6%	0%	**28.7%**	-	6.2%	35.9%	0%	**42.1%**	-	**-**
PHF	0.733	0.880	-	**0.873**	-	0.689	0.500	-	**0.720**	-	0.734	0.888	-	**0.871**	-	0.864
Lights	44	173	0	**217**	-	200	12	0	**212**	-	46	266	0	**312**	-	741
% Lights	100%	98.3%	0%	**98.6%**	-	98.0%	100%	0%	**98.1%**	-	97.9%	98.5%	0%	**98.4%**	-	98.4%
Articulated Trucks and Single-Unit Trucks	0	1	0	**1**	-	1	0	0	**1**	-	0	1	0	**1**	-	3
% Articulated Trucks and Single-Unit Trucks	0%	0.6%	0%	**0.5%**	-	0.5%	0%	0%	**0.5%**	-	0%	0.4%	0%	**0.3%**	-	0.4%
Buses	0	2	0	**2**	-	3	0	0	**3**	-	1	3	0	**4**	-	9
% Buses	0%	1.1%	0%	**0.9%**	-	1.5%	0%	0%	**1.4%**	-	2.1%	1.1%	0%	**1.3%**	-	1.2%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Research Way (2/29) - TMC
Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160860, Location: 40.353215, -74.59426

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Research Way (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160860, Location: 40.353215, -74.59426

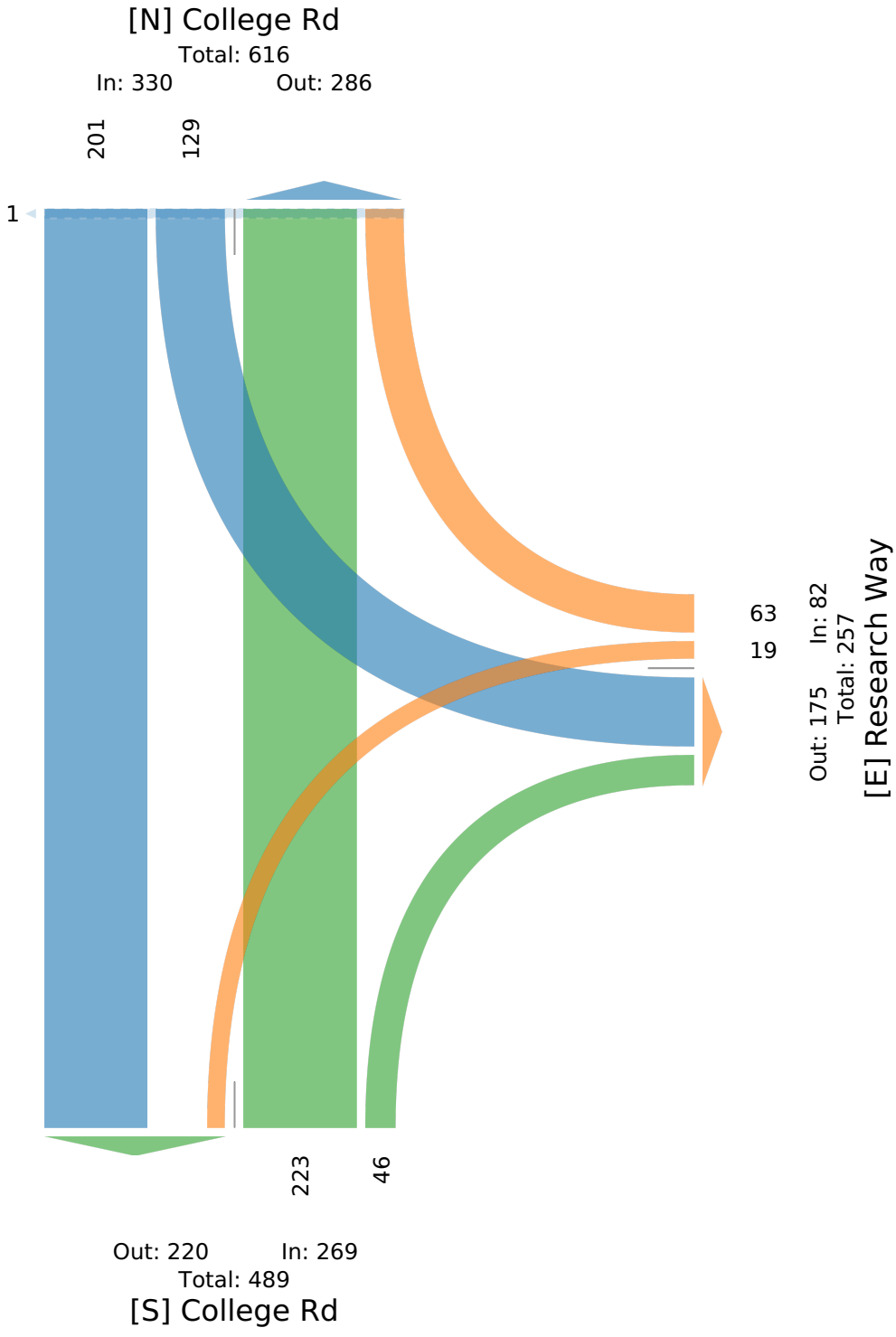
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

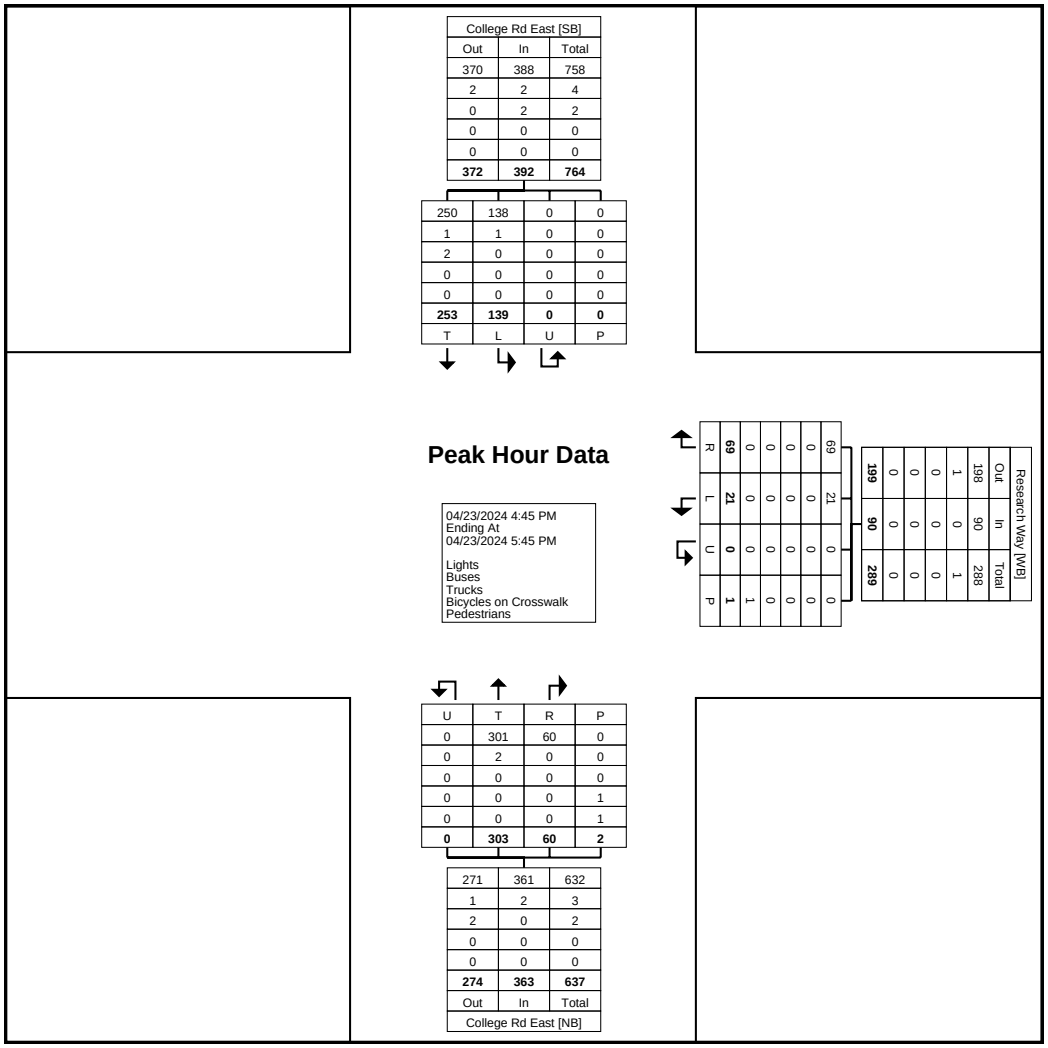
Leg / Direction	Research Way Westbound					College Rd Northbound					College Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-02-29 4:45PM	4	15	0	**19**	0	50	16	0	**66**	0	28	54	0	**82**	0	**167**
5:00PM	3	15	0	**18**	0	67	11	0	**78**	0	40	55	0	**95**	0	**191**
5:15PM	8	12	0	**20**	0	64	9	0	**73**	0	34	48	0	**82**	1	**175**
5:30PM	4	21	0	**25**	0	42	10	0	**52**	0	27	44	0	**71**	0	**148**
Total	19	63	0	**82**	0	223	46	0	**269**	0	129	201	0	**330**	1	**681**
% Approach	23.2%	76.8%	0%	**-**	-	82.9%	17.1%	0%	**-**	-	39.1%	60.9%	0%	**-**	-	**-**
% Total	2.8%	9.3%	0%	**12.0%**	-	32.7%	6.8%	0%	**39.5%**	-	18.9%	29.5%	0%	**48.5%**	-	**-**
PHF	0.594	0.750	**-**	**0.820**	-	0.832	0.719	**-**	**0.862**	-	0.806	0.914	**-**	**0.868**	-	0.891
Lights	18	63	0	**81**	-	222	46	0	**268**	-	127	199	0	**326**	-	675
% Lights	94.7%	100%	0%	**98.8%**	-	99.6%	100%	0%	**99.6%**	-	98.4%	99.0%	0%	**98.8%**	-	99.1%
Articulated Trucks and Single-Unit Trucks	1	0	0	**1**	-	0	0	0	**0**	-	1	1	0	**2**	-	3
% Articulated Trucks and Single-Unit Trucks	5.3%	0%	0%	**1.2%**	-	0%	0%	0%	**0%**	-	0.8%	0.5%	0%	**0.6%**	-	0.4%
Buses	0	0	0	**0**	-	1	0	0	**1**	-	1	1	0	**2**	-	3
% Buses	0%	0%	0%	**0%**	-	0.4%	0%	0%	**0.4%**	-	0.8%	0.5%	0%	**0.6%**	-	0.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Research Way (2/29) - TMC
Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160860, Location: 40.353215, -74.59426

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US





Turning Movement Peak Hour Data Plot (4:45 PM)

College Rd & Research Way (3/2) - TMC

Sat Mar 2, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160861, Location: 40.353215, -74.59426

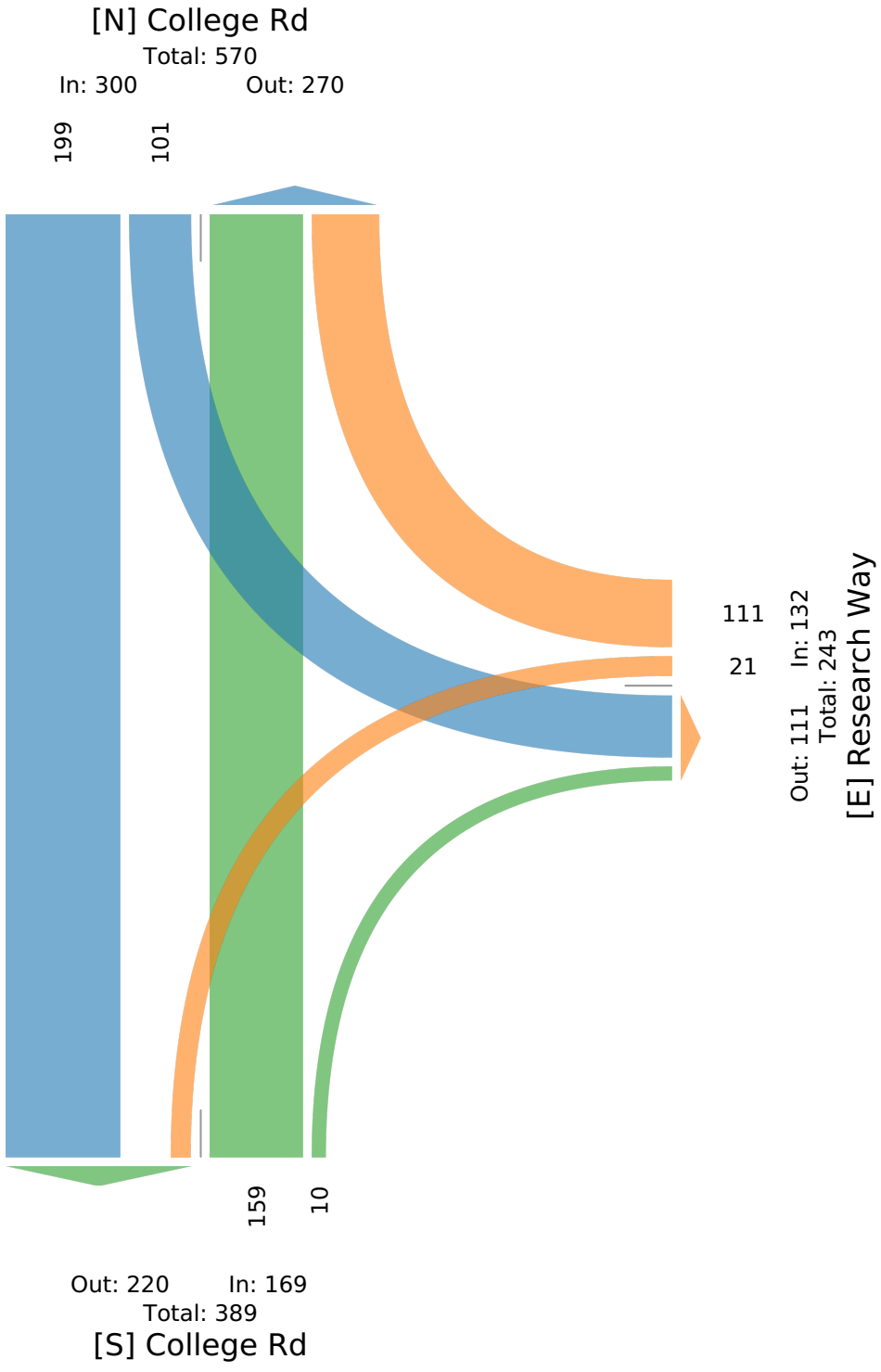
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	Research Way Westbound					College Rd Northbound					College Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-03-02 11:00AM	0	12	0	**12**	0	15	0	0	**15**	0	7	23	0	**30**	0	**57**
11:15AM	1	10	0	**11**	0	14	0	0	**14**	0	9	15	0	**24**	0	**49**
11:30AM	3	13	0	**16**	0	19	2	0	**21**	0	9	8	0	**17**	0	**54**
11:45AM	4	6	0	**10**	0	10	0	0	**10**	0	8	20	0	**28**	0	**48**
Hourly Total	8	41	0	**49**	0	58	2	0	**60**	0	33	66	0	**99**	0	**208**
12:00PM	1	8	0	**9**	0	9	1	0	**10**	0	3	19	0	**22**	0	**41**
12:15PM	3	15	0	**18**	0	11	0	0	**11**	0	9	19	0	**28**	0	**57**
12:30PM	2	9	0	**11**	0	8	0	0	**8**	0	5	10	0	**15**	0	**34**
12:45PM	1	9	0	**10**	0	19	2	0	**21**	0	8	17	0	**25**	0	**56**
Hourly Total	7	41	0	**48**	0	47	3	0	**50**	0	25	65	0	**90**	0	**188**
1:00PM	2	12	0	**14**	0	18	0	0	**18**	0	13	18	0	**31**	0	**63**
1:15PM	2	8	0	**10**	0	19	1	0	**20**	0	13	9	0	**22**	0	**52**
1:30PM	2	4	0	**6**	0	6	0	0	**6**	0	7	22	0	**29**	0	**41**
1:45PM	0	5	0	**5**	0	11	4	0	**15**	0	10	19	0	**29**	0	**49**
Hourly Total	6	29	0	**35**	0	54	5	0	**59**	0	43	68	0	**111**	0	**205**
2:00PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	21	111	0	**132**	0	159	10	0	**169**	0	101	199	0	**300**	0	**601**
% Approach	15.9%	84.1%	0%	**-**	-	94.1%	5.9%	0%	**-**	-	33.7%	66.3%	0%	**-**	-	-
% Total	3.5%	18.5%	0%	**22.0%**	-	26.5%	1.7%	0%	**28.1%**	-	16.8%	33.1%	0%	**49.9%**	-	-
Lights	21	108	0	**129**	-	156	10	0	**166**	-	99	197	0	**296**	-	591
% Lights	100%	97.3%	0%	**97.7%**	-	98.1%	100%	0%	**98.2%**	-	98.0%	99.0%	0%	**98.7%**	-	98.3%
Articulated Trucks and Single-Unit Trucks	0	3	0	**3**	-	1	0	0	**1**	-	1	0	0	**1**	-	5
% Articulated Trucks and Single-Unit Trucks	0%	2.7%	0%	**2.3%**	-	0.6%	0%	0%	**0.6%**	-	1.0%	0%	0%	**0.3%**	-	0.8%
Buses	0	0	0	**0**	-	2	0	0	**2**	-	1	2	0	**3**	-	5
% Buses	0%	0%	0%	**0%**	-	1.3%	0%	0%	**1.2%**	-	1.0%	1.0%	0%	**1.0%**	-	0.8%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Research Way (3/2) - TMC
Sat Mar 2, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160861, Location: 40.353215, -74.59426

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Research Way (3/2) - TMC

Sat Mar 2, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160861, Location: 40.353215, -74.59426

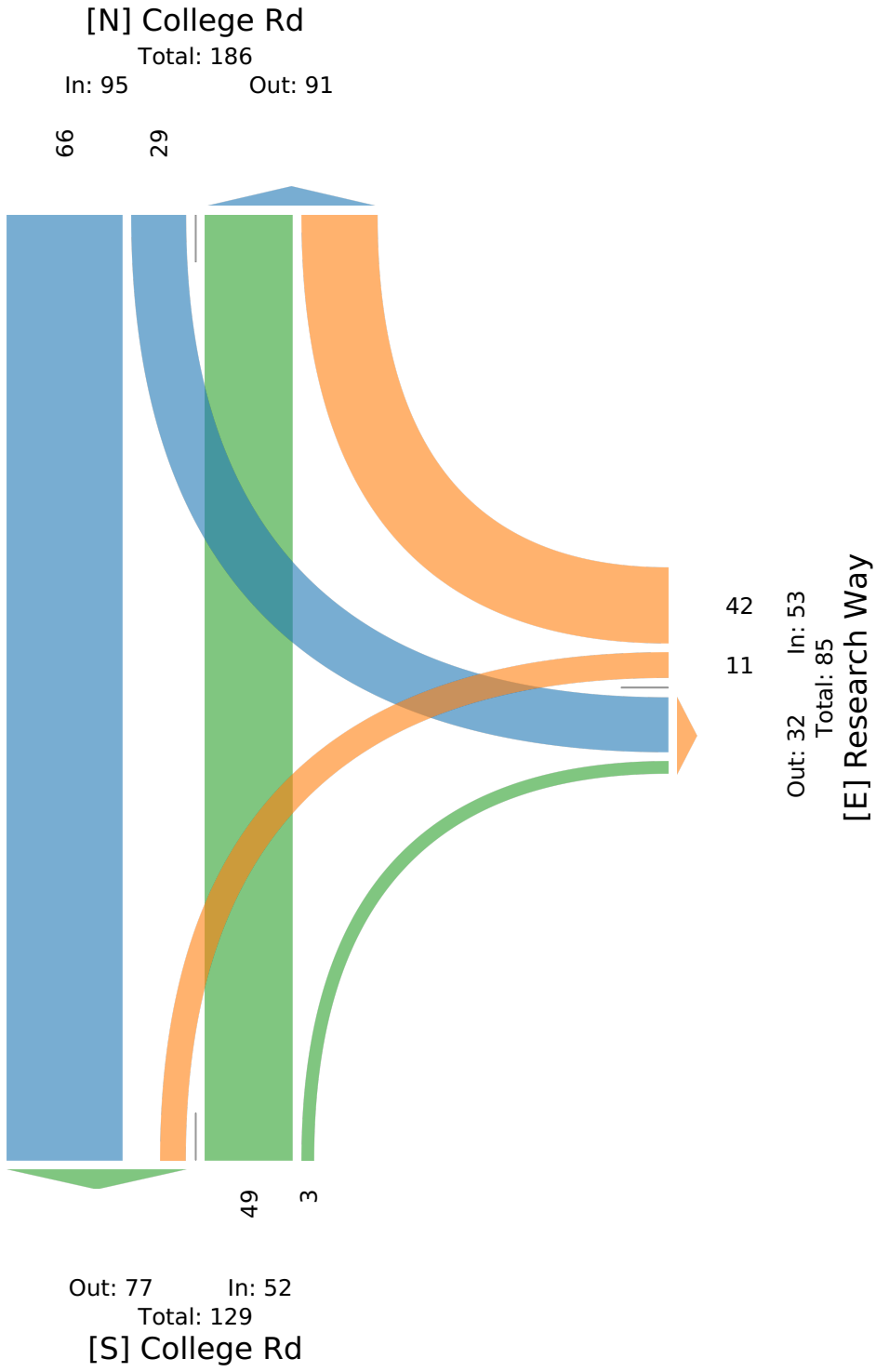
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	Research Way Westbound					College Rd Northbound					College Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2024-03-02 11:30AM	3	13	0	**16**	0	19	2	0	**21**	0	9	8	0	**17**	0	**54**
11:45AM	4	6	0	**10**	0	10	0	0	**10**	0	8	20	0	**28**	0	**48**
12:00PM	1	8	0	**9**	0	9	1	0	**10**	0	3	19	0	**22**	0	**41**
12:15PM	3	15	0	**18**	0	11	0	0	**11**	0	9	19	0	**28**	0	**57**
Total	11	42	0	**53**	0	49	3	0	**52**	0	29	66	0	**95**	0	**200**
% Approach	20.8%	79.2%	0%	**-**	-	94.2%	5.8%	0%	**-**	-	30.5%	69.5%	0%	**-**	-	**-**
% Total	5.5%	21.0%	0%	**26.5%**	-	24.5%	1.5%	0%	**26.0%**	-	14.5%	33.0%	0%	**47.5%**	-	**-**
PHF	0.688	0.700	-	**0.736**	-	0.645	0.375	-	**0.619**	-	0.806	0.825	-	**0.848**	-	0.877
Lights	11	42	0	**53**	-	48	3	0	**51**	-	28	65	0	**93**	-	197
% Lights	100%	100%	0%	**100%**	-	98.0%	100%	0%	**98.1%**	-	96.6%	98.5%	0%	**97.9%**	-	98.5%
Articulated Trucks and Single-Unit Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Buses	0	0	0	**0**	-	1	0	0	**1**	-	1	1	0	**2**	-	3
% Buses	0%	0%	0%	**0%**	-	2.0%	0%	0%	**1.9%**	-	3.4%	1.5%	0%	**2.1%**	-	1.5%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

College Rd & Research Way (3/2) - TMC
Sat Mar 2, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160861, Location: 40.353215, -74.59426

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



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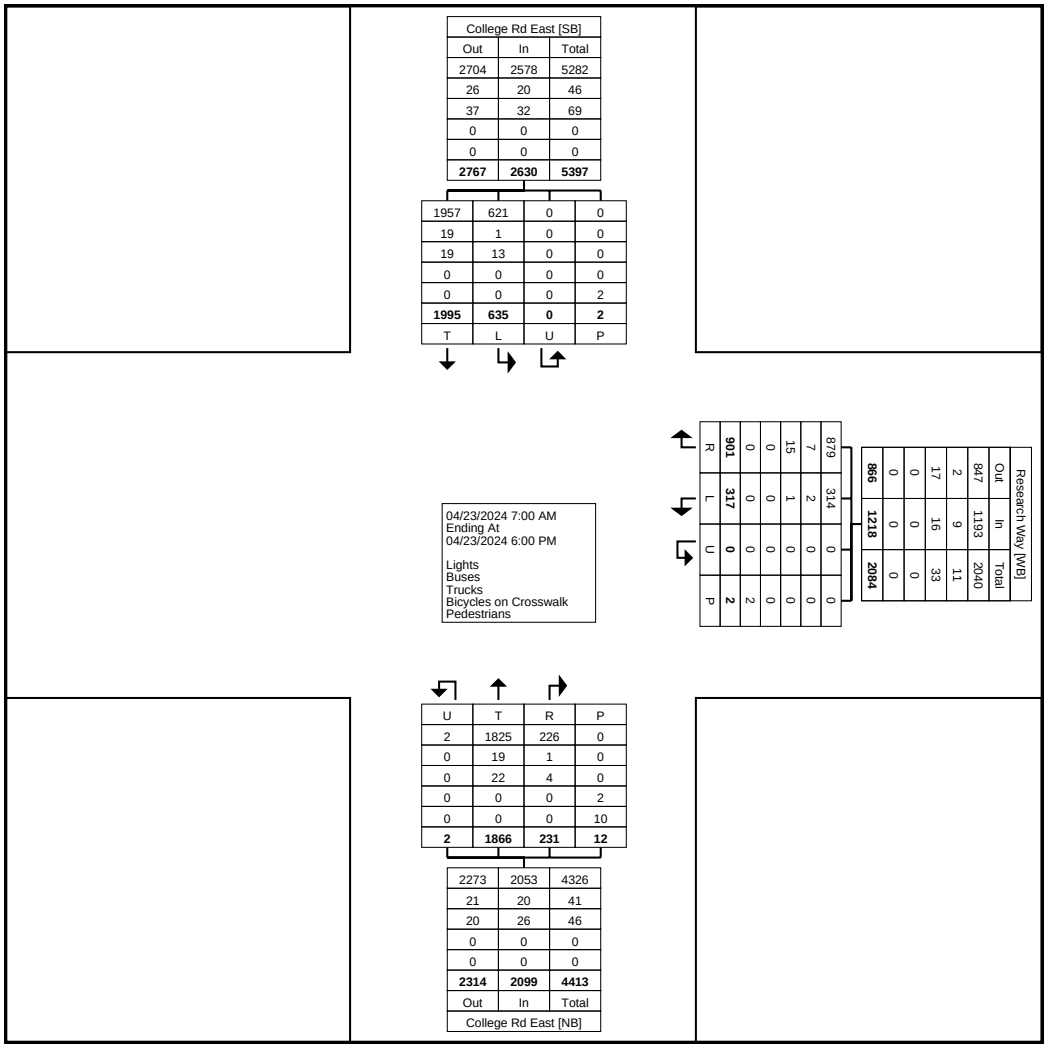
Plainsboro, NJ
College Rd East & Research Rd
Tuesday, April 23, 2024
Location: 40.353215, -74.59426

Count Name: College Rd East & Research Way
Site Code:
Start Date: 04/23/2024

Turning Movement Data

Start Time	Research Way Westbound					College Rd East Northbound					College Rd East Southbound					Int. Total
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
7:00 AM	6	13	0	0	19	23	1	0	0	24	5	36	0	0	41	84
7:15 AM	10	24	0	0	34	21	2	0	0	23	3	41	0	0	44	101
7:30 AM	7	38	0	0	45	49	2	0	0	51	3	74	0	0	77	173
7:45 AM	21	36	0	0	57	56	0	0	0	56	3	71	0	0	74	187
Hourly Total	44	111	0	0	155	149	5	0	0	154	14	222	0	0	236	545
8:00 AM	20	40	0	0	60	65	4	0	0	69	11	106	0	0	117	246
8:15 AM	18	48	0	0	66	74	3	1	0	78	12	89	0	0	101	245
8:30 AM	16	39	0	0	55	62	3	0	0	65	16	98	0	0	114	234
8:45 AM	21	37	0	0	58	71	3	0	0	74	12	93	0	0	105	237
Hourly Total	75	164	0	0	239	272	13	1	0	286	51	386	0	0	437	962
9:00 AM	11	36	0	0	47	59	2	0	0	61	12	91	0	1	103	211
9:15 AM	16	31	0	0	47	60	2	0	1	62	11	42	0	0	53	162
9:30 AM	10	23	0	0	33	48	2	0	0	50	6	37	0	0	43	126
9:45 AM	11	17	0	0	28	33	1	0	0	34	8	35	0	0	43	105
Hourly Total	48	107	0	0	155	200	7	0	1	207	37	205	0	1	242	604
10:00 AM	6	20	0	0	26	16	1	0	0	17	9	24	0	0	33	76
10:15 AM	3	15	0	0	18	16	2	0	0	18	4	22	0	0	26	62
10:30 AM	3	20	0	0	23	22	2	0	1	24	6	30	0	0	36	83
10:45 AM	6	20	0	0	26	22	0	0	0	22	12	18	0	0	30	78
Hourly Total	18	75	0	0	93	76	5	0	1	81	31	94	0	0	125	299
11:00 AM	3	12	0	1	15	17	2	0	2	19	6	22	0	0	28	62
11:15 AM	7	14	0	0	21	15	2	0	0	17	9	17	0	0	26	64
11:30 AM	6	16	0	0	22	19	4	0	0	23	8	32	0	0	40	85
11:45 AM	4	16	0	0	20	23	4	0	0	27	10	30	0	0	40	87
Hourly Total	20	58	0	1	78	74	12	0	2	86	33	101	0	0	134	298
12:00 PM	10	7	0	0	17	35	5	0	0	40	12	42	0	0	54	111
12:15 PM	2	13	0	0	15	32	2	0	0	34	16	33	0	1	49	98
12:30 PM	5	23	0	0	28	33	3	0	0	36	12	49	0	0	61	125
12:45 PM	7	19	0	0	26	26	7	0	0	33	12	37	0	0	49	108
Hourly Total	24	62	0	0	86	126	17	0	0	143	52	161	0	1	213	442
1:00 PM	8	20	0	0	28	35	3	1	0	39	12	38	0	0	50	117
1:15 PM	6	18	0	0	24	24	2	0	0	26	13	26	0	0	39	89
1:30 PM	5	13	0	0	18	33	6	0	0	39	9	24	0	0	33	90
1:45 PM	5	24	0	0	29	27	1	0	2	28	17	24	0	0	41	98
Hourly Total	24	75	0	0	99	119	12	1	2	132	51	112	0	0	163	394
2:00 PM	4	17	0	0	21	37	4	0	0	41	10	26	0	0	36	98
2:15 PM	2	14	0	0	16	28	2	0	3	30	16	27	0	0	43	89
2:30 PM	3	15	0	0	18	27	3	0	0	30	11	31	0	0	42	90
2:45 PM	4	10	0	0	14	26	5	0	0	31	17	19	0	0	36	81
Hourly Total	13	56	0	0	69	118	14	0	3	132	54	103	0	0	157	358
3:00 PM	4	7	0	0	11	37	6	0	0	43	17	27	0	0	44	98
3:15 PM	3	14	0	0	17	36	10	0	0	46	22	51	0	0	73	136
3:30 PM	0	13	0	0	13	45	7	0	0	52	18	46	0	0	64	129
3:45 PM	2	14	0	0	16	45	12	0	0	57	17	36	0	0	53	126
Hourly Total	9	48	0	0	57	163	35	0	0	198	74	160	0	0	234	489
4:00 PM	4	7	0	0	11	69	11	0	0	80	20	45	0	0	65	156
4:15 PM	7	24	0	0	31	80	11	0	0	91	23	47	0	0	70	192
4:30 PM	5	13	0	0	18	67	13	0	0	80	33	62	0	0	95	193
4:45 PM	6	18	0	0	24	76	14	0	0	90	20	59	0	0	79	193
Hourly Total	22	62	0	0	84	292	49	0	0	341	96	213	0	0	309	734
5:00 PM	6	22	0	0	28	87	22	0	0	109	49	66	0	0	115	252
5:15 PM	6	11	0	0	17	65	11	0	0	76	38	73	0	0	111	204
5:30 PM	3	18	0	1	21	75	13	0	2	88	32	55	0	0	87	196
5:45 PM	5	32	0	0	37	50	16	0	1	66	23	44	0	0	67	170
Hourly Total	20	83	0	1	103	277	62	0	3	339	142	238	0	0	380	822
Grand Total	317	901	0	2	1218	1866	231	2	12	2099	635	1995	0	2	2630	5947
Approach %	26.0	74.0	0.0	-	-	88.9	11.0	0.1	-	-	24.1	75.9	0.0	-	-	-
Total %	5.3	15.2	0.0	-	20.5	31.4	3.9	0.0	-	35.3	10.7	33.5	0.0	-	44.2	-
Lights	314	879	0	-	1193	1825	226	2	-	2053	621	1957	0	-	2578	5824

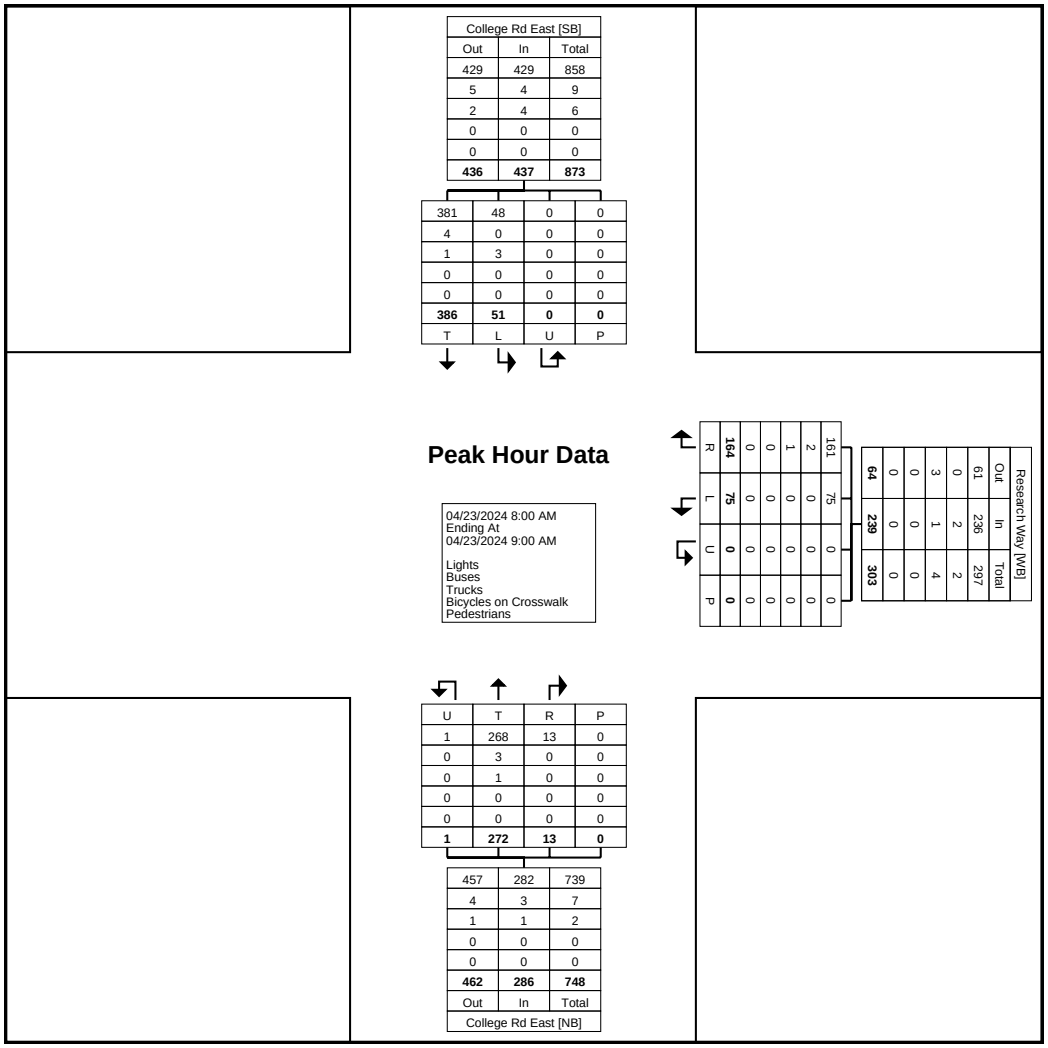
% Lights	99.1	97.6	-	-	97.9	97.8	97.8	100.0	-	97.8	97.8	98.1	-	-	98.0	97.9
Buses	2	7	0	-	9	19	1	0	-	20	1	19	0	-	20	49
% Buses	0.6	0.8	-	-	0.7	1.0	0.4	0.0	-	1.0	0.2	1.0	-	-	0.8	0.8
Trucks	1	15	0	-	16	22	4	0	-	26	13	19	0	-	32	74
% Trucks	0.3	1.7	-	-	1.3	1.2	1.7	0.0	-	1.2	2.0	1.0	-	-	1.2	1.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	16.7	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	2	-	-	-	-	10	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	83.3	-	-	-	-	100.0	-	-



Turning Movement Data Plot

Turning Movement Peak Hour Data (8:00 AM)

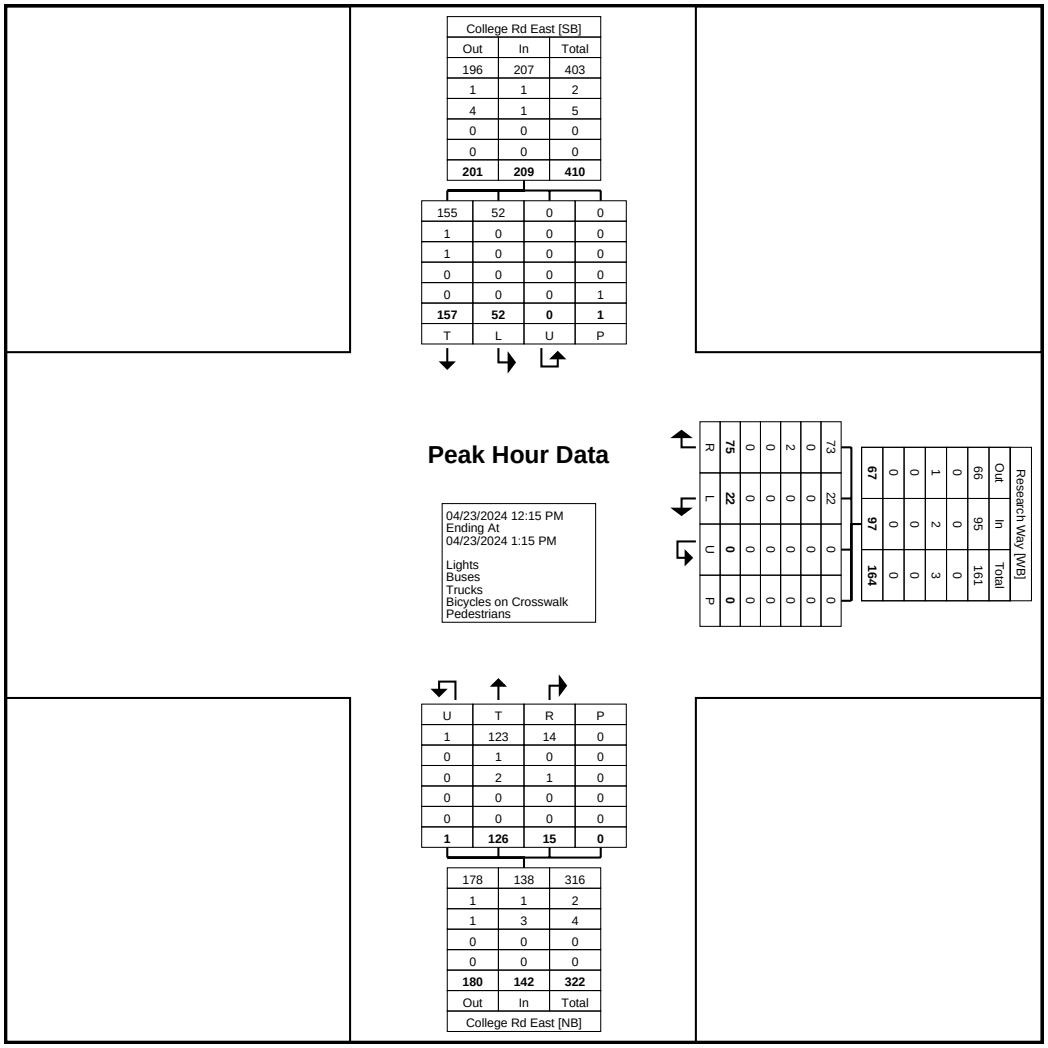
Start Time	Research Way Westbound					College Rd East Northbound					College Rd East Southbound					
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Int. Total
8:00 AM	20	40	0	0	60	65	4	0	0	69	11	106	0	0	117	246
8:15 AM	18	48	0	0	66	74	3	1	0	78	12	89	0	0	101	245
8:30 AM	16	39	0	0	55	62	3	0	0	65	16	98	0	0	114	234
8:45 AM	21	37	0	0	58	71	3	0	0	74	12	93	0	0	105	237
Total	75	164	0	0	239	272	13	1	0	286	51	386	0	0	437	962
Approach %	31.4	68.6	0.0	-	-	95.1	4.5	0.3	-	-	11.7	88.3	0.0	-	-	-
Total %	7.8	17.0	0.0	-	24.8	28.3	1.4	0.1	-	29.7	5.3	40.1	0.0	-	45.4	-
PHF	0.893	0.854	0.000	-	0.905	0.919	0.813	0.250	-	0.917	0.797	0.910	0.000	-	0.934	0.978
Lights	75	161	0	-	236	268	13	1	-	282	48	381	0	-	429	947
% Lights	100.0	98.2	-	-	98.7	98.5	100.0	100.0	-	98.6	94.1	98.7	-	-	98.2	98.4
Buses	0	2	0	-	2	3	0	0	-	3	0	4	0	-	4	9
% Buses	0.0	1.2	-	-	0.8	1.1	0.0	0.0	-	1.0	0.0	1.0	-	-	0.9	0.9
Trucks	0	1	0	-	1	1	0	0	-	1	3	1	0	-	4	6
% Trucks	0.0	0.6	-	-	0.4	0.4	0.0	0.0	-	0.3	5.9	0.3	-	-	0.9	0.6
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (8:00 AM)

Turning Movement Peak Hour Data (12:15 PM)

Start Time	Research Way Westbound					College Rd East Northbound					College Rd East Southbound					
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Int. Total
12:15 PM	2	13	0	0	15	32	2	0	0	34	16	33	0	1	49	98
12:30 PM	5	23	0	0	28	33	3	0	0	36	12	49	0	0	61	125
12:45 PM	7	19	0	0	26	26	7	0	0	33	12	37	0	0	49	108
1:00 PM	8	20	0	0	28	35	3	1	0	39	12	38	0	0	50	117
Total	22	75	0	0	97	126	15	1	0	142	52	157	0	1	209	448
Approach %	22.7	77.3	0.0	-	-	88.7	10.6	0.7	-	-	24.9	75.1	0.0	-	-	-
Total %	4.9	16.7	0.0	-	21.7	28.1	3.3	0.2	-	31.7	11.6	35.0	0.0	-	46.7	-
PHF	0.688	0.815	0.000	-	0.866	0.900	0.536	0.250	-	0.910	0.813	0.801	0.000	-	0.857	0.896
Lights	22	73	0	-	95	123	14	1	-	138	52	155	0	-	207	440
% Lights	100.0	97.3	-	-	97.9	97.6	93.3	100.0	-	97.2	100.0	98.7	-	-	99.0	98.2
Buses	0	0	0	-	0	1	0	0	-	1	0	1	0	-	1	2
% Buses	0.0	0.0	-	-	0.0	0.8	0.0	0.0	-	0.7	0.0	0.6	-	-	0.5	0.4
Trucks	0	2	0	-	2	2	1	0	-	3	0	1	0	-	1	6
% Trucks	0.0	2.7	-	-	2.1	1.6	6.7	0.0	-	2.1	0.0	0.6	-	-	0.5	1.3
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Peak Hour Data Plot (12:15 PM)

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Plainsboro, NJ
College Rd East & Research Rd
Tuesday, April 23, 2024
Location: 40.353215, -74.59426

Count Name: College Rd East & Research Way
Site Code:
Start Date: 04/23/2024

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Research Way Westbound					College Rd East Northbound					College Rd East Southbound					
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Int. Total
4:45 PM	6	18	0	0	24	76	14	0	0	90	20	59	0	0	79	193
5:00 PM	6	22	0	0	28	87	22	0	0	109	49	66	0	0	115	252
5:15 PM	6	11	0	0	17	65	11	0	0	76	38	73	0	0	111	204
5:30 PM	3	18	0	1	21	75	13	0	2	88	32	55	0	0	87	196
Total	21	69	0	1	90	303	60	0	2	363	139	253	0	0	392	845
Approach %	23.3	76.7	0.0	-	-	83.5	16.5	0.0	-	-	35.5	64.5	0.0	-	-	-
Total %	2.5	8.2	0.0	-	10.7	35.9	7.1	0.0	-	43.0	16.4	29.9	0.0	-	46.4	-
PHF	0.875	0.784	0.000	-	0.804	0.871	0.682	0.000	-	0.833	0.709	0.866	0.000	-	0.852	0.838
Lights	21	69	0	-	90	301	60	0	-	361	138	250	0	-	388	839
% Lights	100.0	100.0	-	-	100.0	99.3	100.0	-	-	99.4	99.3	98.8	-	-	99.0	99.3
Buses	0	0	0	-	0	2	0	0	-	2	1	1	0	-	2	4
% Buses	0.0	0.0	-	-	0.0	0.7	0.0	-	-	0.6	0.7	0.4	-	-	0.5	0.5
Trucks	0	0	0	-	0	0	0	0	-	0	0	2	0	-	2	2
% Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.8	-	-	0.5	0.2
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	50.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	50.0	-	-	-	-	-	-	-

College Rd & Scudders Mill Rd (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Scudders Mill Rd							Scudders Mill Rd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*
2024-02-29 7:00AM	3	76	1	0	0	**80**	0	0	139	19	0	3	**161**	0
7:15AM	4	96	3	0	1	**104**	0	1	184	29	0	13	**227**	0
7:30AM	9	115	2	0	0	**126**	0	0	235	25	0	15	**275**	0
7:45AM	5	98	1	0	0	**104**	0	1	248	77	0	24	**350**	0
Hourly Total	21	385	7	0	1	**414**	0	2	806	150	0	55	**1013**	0
8:00AM	6	111	3	0	0	**120**	0	0	241	53	0	20	**314**	0
8:15AM	11	113	0	0	0	**124**	0	0	270	37	0	28	**335**	0
8:30AM	10	114	0	0	0	**124**	0	1	295	47	0	25	**368**	0
8:45AM	9	117	0	0	0	**126**	0	1	265	70	0	41	**377**	0
Hourly Total	36	455	3	0	0	**494**	0	2	1071	207	0	114	**1394**	0
9:00AM	12	89	0	0	0	**101**	0	2	219	66	0	11	**298**	0
9:15AM	8	114	0	0	0	**122**	0	1	215	60	0	2	**278**	0
Hourly Total	20	203	0	0	0	**223**	0	3	434	126	0	13	**576**	0
4:00PM	18	219	2	0	0	**239**	0	2	128	15	1	8	**154**	0
4:15PM	17	248	0	0	0	**265**	0	2	118	19	0	2	**141**	0
4:30PM	17	208	3	0	0	**228**	1	2	134	17	0	3	**156**	0
4:45PM	13	229	0	0	0	**242**	0	4	136	19	0	10	**169**	0
Hourly Total	65	904	5	0	0	**974**	1	10	516	70	1	23	**620**	0
5:00PM	19	248	1	0	0	**268**	0	4	138	20	0	5	**167**	0
5:15PM	16	214	1	0	0	**231**	0	1	150	18	0	3	**172**	0
5:30PM	14	222	2	0	1	**239**	1	4	156	15	0	7	**182**	0
5:45PM	8	218	1	0	2	**229**	0	2	162	25	0	5	**194**	0
Hourly Total	57	902	5	0	3	**967**	1	11	606	78	0	20	**715**	0
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Total	199	2849	20	0	4	**3072**	2	28	3433	631	1	225	**4318**	0
% Approach	6.5%	92.7%	0.7%	0%	0.1%	**-**	-	0.6%	79.5%	14.6%	0%	5.2%	**-**	-
% Total	2.3%	33.6%	0.2%	0%	0%	**36.3%**	-	0.3%	40.5%	7.4%	0%	2.7%	**51.0%**	-
Lights	198	2765	20	0	4	**2987**	-	27	3350	621	1	223	**4222**	-
% Lights	99.5%	97.1%	100%	0%	100%	**97.2%**	-	96.4%	97.6%	98.4%	100%	99.1%	**97.8%**	-
Articulated Trucks and Single-Unit Trucks	0	55	0	0	0	**55**	-	1	57	1	0	1	**60**	-
% Articulated Trucks and Single-Unit Trucks	0%	1.9%	0%	0%	0%	**1.8%**	-	3.6%	1.7%	0.2%	0%	0.4%	**1.4%**	-
Buses	1	29	0	0	0	**30**	-	0	26	9	0	1	**36**	-
% Buses	0.5%	1.0%	0%	0%	0%	**1.0%**	-	0%	0.8%	1.4%	0%	0.4%	**0.8%**	-
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (2/29) - TMC

Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

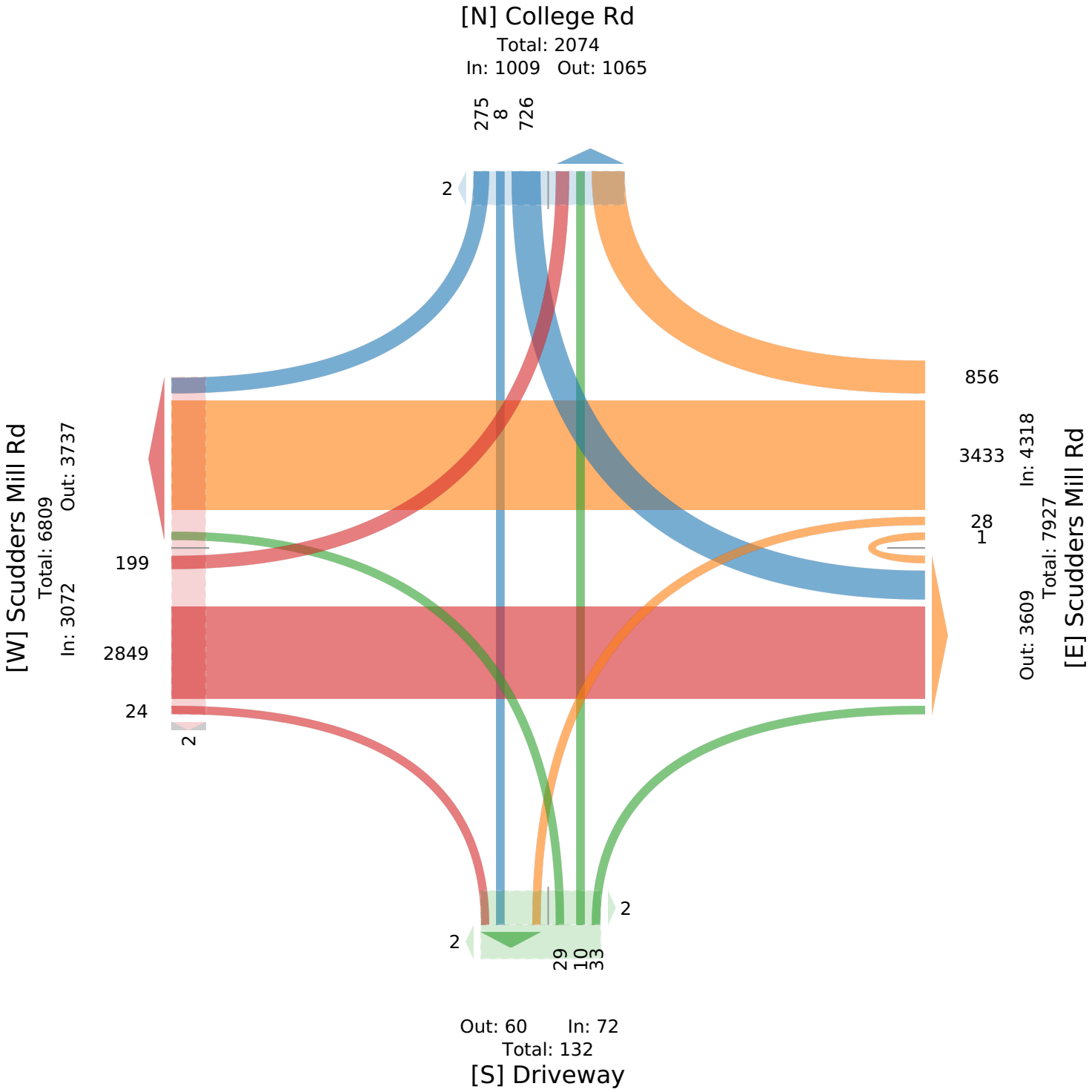
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Driveway							College Rd							
Direction	Northbound							Southbound							
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*	Int
2024-02-29 7:00AM	0	1	1	0	0	**2**	1	14	2	6	0	4	**26**	0	**269**
7:15AM	5	1	0	0	0	**6**	0	11	0	6	0	2	**19**	0	**356**
7:30AM	2	0	0	0	2	**4**	0	19	0	5	0	7	**31**	0	**436**
7:45AM	0	1	0	0	1	**2**	0	21	0	12	0	16	**49**	0	**505**
Hourly Total	7	3	1	0	3	**14**	1	65	2	29	0	29	**125**	0	**1566**
8:00AM	5	0	0	0	0	**5**	0	35	0	8	0	14	**57**	0	**496**
8:15AM	2	1	0	0	0	**3**	1	26	0	8	0	14	**48**	1	**510**
8:30AM	0	0	0	0	0	**0**	0	33	0	11	0	14	**58**	0	**550**
8:45AM	2	2	2	0	0	**6**	0	17	0	7	0	24	**48**	0	**557**
Hourly Total	9	3	2	0	0	**14**	1	111	0	34	0	66	**211**	1	**2113**
9:00AM	0	0	0	0	2	**2**	0	24	0	10	0	11	**45**	0	**446**
9:15AM	0	0	0	0	0	**0**	0	12	0	4	0	6	**22**	1	**422**
Hourly Total	0	0	0	0	2	**2**	0	36	0	14	0	17	**67**	1	**868**
4:00PM	2	1	4	0	1	**8**	0	45	0	6	0	1	**52**	0	**453**
4:15PM	3	0	4	0	1	**8**	0	52	0	1	0	6	**59**	0	**473**
4:30PM	1	0	3	0	1	**5**	1	70	3	5	0	4	**82**	0	**471**
4:45PM	2	1	2	0	1	**6**	0	73	0	2	0	6	**81**	0	**498**
Hourly Total	8	2	13	0	4	**27**	1	240	3	14	0	17	**274**	0	**1895**
5:00PM	0	0	1	0	1	**2**	0	78	0	2	0	8	**88**	0	**525**
5:15PM	1	1	0	0	0	**2**	0	85	1	10	0	9	**105**	0	**510**
5:30PM	2	0	2	0	2	**6**	1	52	2	7	0	7	**68**	0	**495**
5:45PM	2	1	0	0	2	**5**	0	59	0	2	0	10	**71**	0	**499**
Hourly Total	5	2	3	0	5	**15**	1	274	3	21	0	34	**332**	0	**2029**
6:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Total	29	10	19	0	14	**72**	4	726	8	112	0	163	**1009**	2	**8471**
% Approach	40.3%	13.9%	26.4%	0%	19.4%	**-**	-	72.0%	0.8%	11.1%	0%	16.2%	**-**	-	-
% Total	0.3%	0.1%	0.2%	0%	0.2%	**0.8%**	-	8.6%	0.1%	1.3%	0%	1.9%	**11.9%**	-	-
Lights	28	10	19	0	14	**71**	-	709	8	109	0	163	**989**	-	8269
% Lights	96.6%	100%	100%	0%	100%	**98.6%**	-	97.7%	100%	97.3%	0%	100%	**98.0%**	-	97.6%
Articulated Trucks and Single-Unit Trucks	1	0	0	0	0	**1**	-	6	0	2	0	0	**8**	-	124
% Articulated Trucks and Single-Unit Trucks	3.4%	0%	0%	0%	0%	**1.4%**	-	0.8%	0%	1.8%	0%	0%	**0.8%**	-	1.5%
Buses	0	0	0	0	0	**0**	-	11	0	1	0	0	**12**	-	78
% Buses	0%	0%	0%	0%	0%	**0%**	-	1.5%	0%	0.9%	0%	0%	**1.2%**	-	0.9%
Pedestrians	-	-	-	-	-	-	2	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	-	2	-	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (2/29) - TMC
Thu Feb 29, 2024
Full Length (7 AM-9:30 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Scudders Mill Rd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Scudders Mill Rd							Scudders Mill Rd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-02-29 7:30AM	9	115	2	0	0	**126**	0	0	235	25	0	15	**275**	0
7:45AM	5	98	1	0	0	**104**	0	1	248	77	0	24	**350**	0
8:00AM	6	111	3	0	0	**120**	0	0	241	53	0	20	**314**	0
8:15AM	11	113	0	0	0	**124**	0	0	270	37	0	28	**335**	0
Total	31	437	6	0	0	**474**	0	1	994	192	0	87	**1274**	0
% Approach	6.5%	92.2%	1.3%	0%	0%	**-**	-	0.1%	78.0%	15.1%	0%	6.8%	**-**	-
% Total	1.6%	22.4%	0.3%	0%	0%	**24.3%**	-	0.1%	51.1%	9.9%	0%	4.5%	**65.4%**	-
PHF	0.705	0.950	0.500	-	-	**0.940**	-	0.250	0.920	0.623	-	0.777	**0.910**	-
Lights	31	416	6	0	0	**453**	-	1	974	189	0	87	**1251**	-
% Lights	100%	95.2%	100%	0%	0%	**95.6%**	-	100%	98.0%	98.4%	0%	100%	**98.2%**	-
Articulated Trucks and Single-Unit Trucks	0	9	0	0	0	**9**	-	0	11	0	0	0	**11**	-
% Articulated Trucks and Single-Unit Trucks	0%	2.1%	0%	0%	0%	**1.9%**	-	0%	1.1%	0%	0%	0%	**0.9%**	-
Buses	0	12	0	0	0	**12**	-	0	9	3	0	0	**12**	-
% Buses	0%	2.7%	0%	0%	0%	**2.5%**	-	0%	0.9%	1.6%	0%	0%	**0.9%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

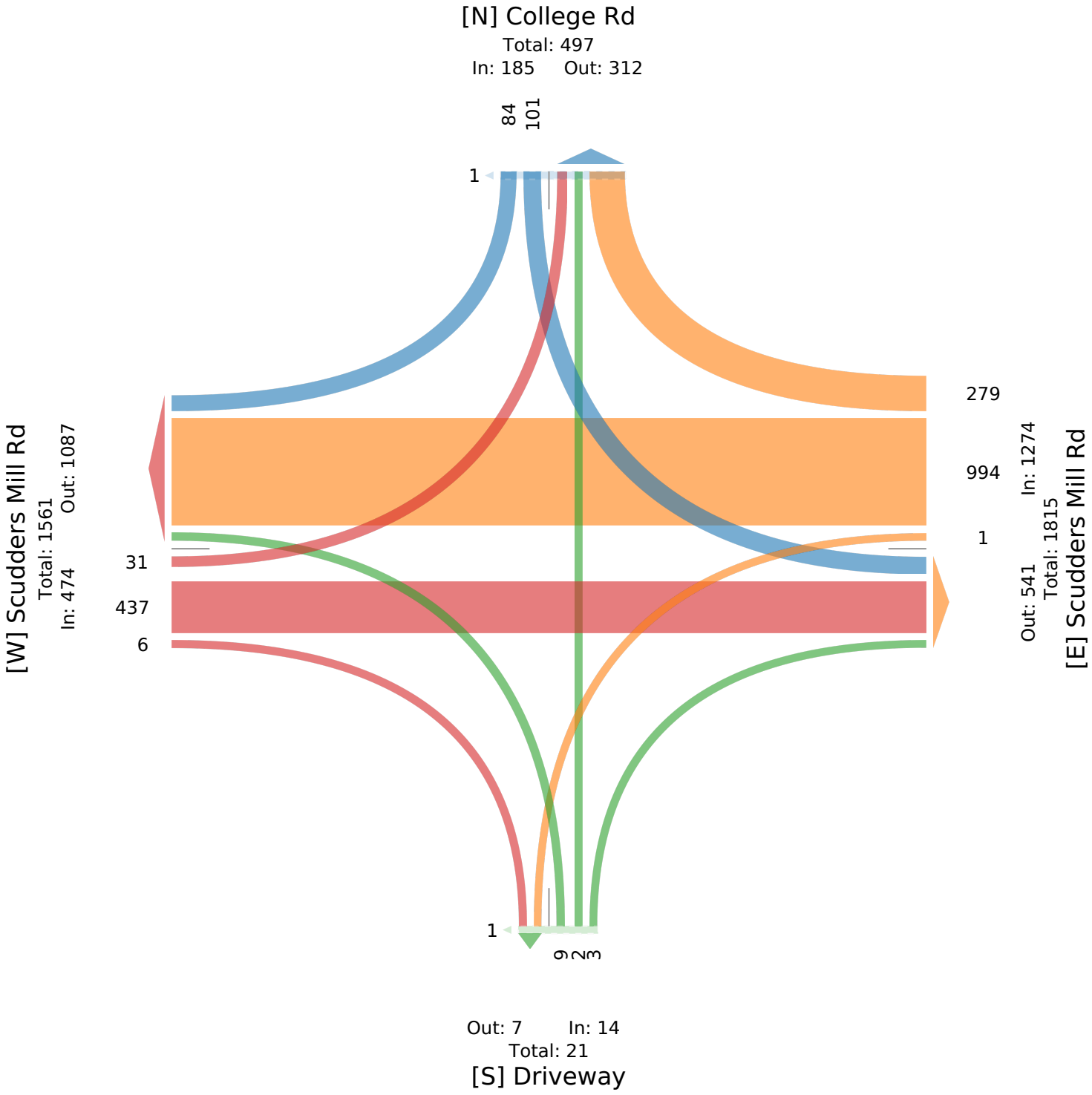
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Driveway Northbound							College Rd Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-02-29 7:30AM	2	0	0	0	2	**4**	0	19	0	5	0	7	**31**	0	**436**
7:45AM	0	1	0	0	1	**2**	0	21	0	12	0	16	**49**	0	**505**
8:00AM	5	0	0	0	0	**5**	0	35	0	8	0	14	**57**	0	**496**
8:15AM	2	1	0	0	0	**3**	1	26	0	8	0	14	**48**	1	**510**
Total	9	2	0	0	3	**14**	1	101	0	33	0	51	**185**	1	**1947**
% Approach	64.3%	14.3%	0%	0%	21.4%	**-**	-	54.6%	0%	17.8%	0%	27.6%	**-**	-	**-**
% Total	0.5%	0.1%	0%	0%	0.2%	**0.7%**	-	5.2%	0%	1.7%	0%	2.6%	**9.5%**	-	**-**
PHF	0.450	0.500	-	-	0.375	**0.700**	-	0.721	-	0.688	-	0.797	**0.811**	-	0.954
Lights	9	2	0	0	3	**14**	-	94	0	33	0	51	**178**	-	1896
% Lights	100%	100%	0%	0%	100%	**100%**	-	93.1%	0%	100%	0%	100%	**96.2%**	-	97.4%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	0	**0**	-	4	0	0	0	0	**4**	-	24
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	4.0%	0%	0%	0%	0%	**2.2%**	-	1.2%
Buses	0	0	0	0	0	**0**	-	3	0	0	0	0	**3**	-	27
% Buses	0%	0%	0%	0%	0%	**0%**	-	3.0%	0%	0%	0%	0%	**1.6%**	-	1.4%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (2/29) - TMC
Thu Feb 29, 2024
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Scudders Mill Rd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Scudders Mill Rd Eastbound							Scudders Mill Rd Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-02-29 4:45PM	13	229	0	0	0	**242**	0	4	136	19	0	10	**169**	0
5:00PM	19	248	1	0	0	**268**	0	4	138	20	0	5	**167**	0
5:15PM	16	214	1	0	0	**231**	0	1	150	18	0	3	**172**	0
5:30PM	14	222	2	0	1	**239**	1	4	156	15	0	7	**182**	0
Total	62	913	4	0	1	**980**	1	13	580	72	0	25	**690**	0
% Approach	6.3%	93.2%	0.4%	0%	0.1%	**-**	-	1.9%	84.1%	10.4%	0%	3.6%	**-**	-
% Total	3.1%	45.0%	0.2%	0%	0%	**48.3%**	-	0.6%	28.6%	3.6%	0%	1.2%	**34.0%**	-
PHF	0.816	0.920	0.500	-	0.250	**0.914**	-	0.813	0.929	0.900	-	0.625	**0.948**	-
Lights	62	905	4	0	1	**972**	-	13	572	71	0	25	**681**	-
% Lights	100%	99.1%	100%	0%	100%	**99.2%**	-	100%	98.6%	98.6%	0%	100%	**98.7%**	-
Articulated Trucks and Single-Unit Trucks	0	7	0	0	0	**7**	-	0	7	0	0	0	**7**	-
% Articulated Trucks and Single-Unit Trucks	0%	0.8%	0%	0%	0%	**0.7%**	-	0%	1.2%	0%	0%	0%	**1.0%**	-
Buses	0	1	0	0	0	**1**	-	0	1	1	0	0	**2**	-
% Buses	0%	0.1%	0%	0%	0%	**0.1%**	-	0%	0.2%	1.4%	0%	0%	**0.3%**	-
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (2/29) - TMC

Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

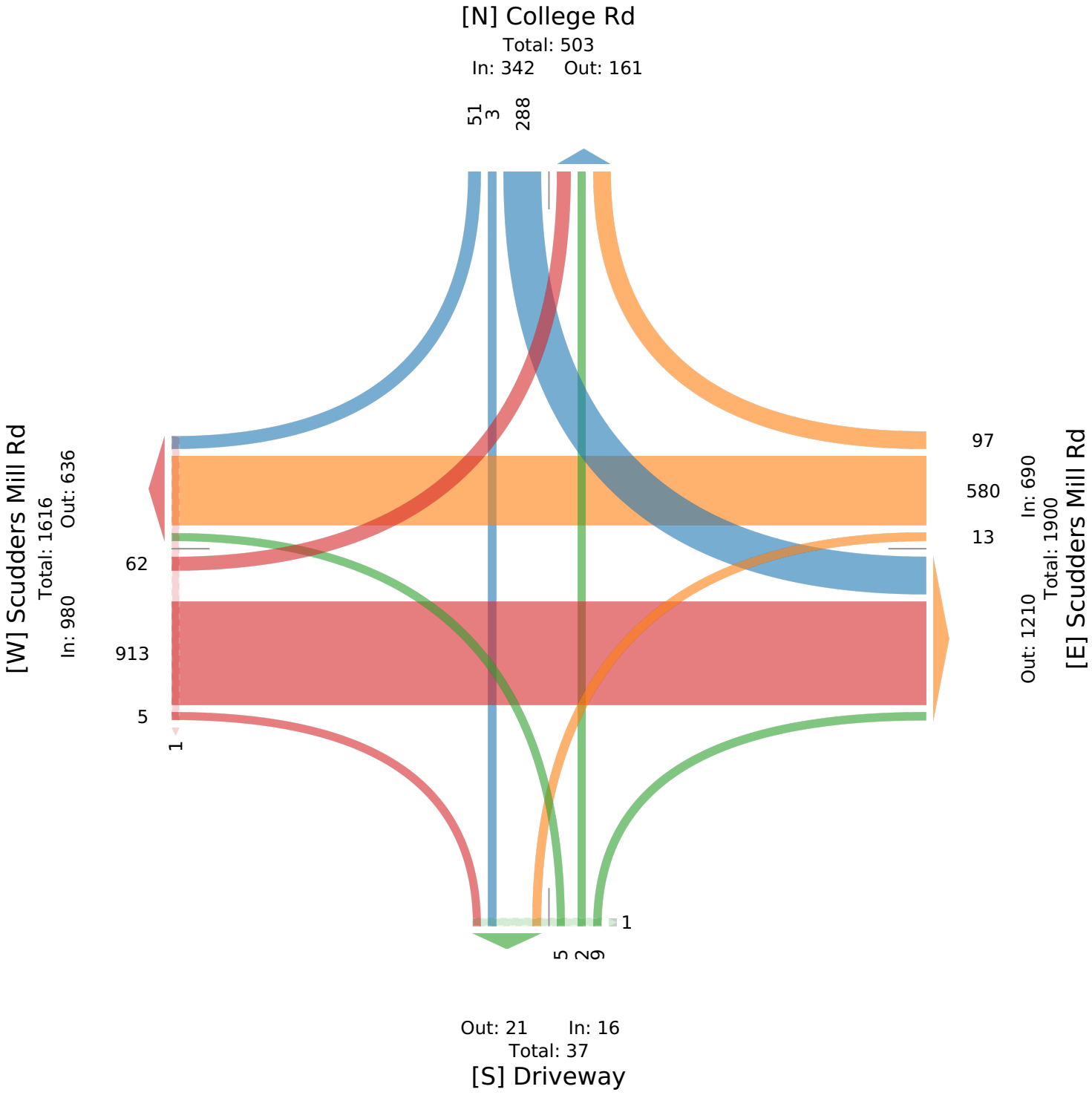
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Driveway Northbound							College Rd Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-02-29 4:45PM	2	1	2	0	1	**6**	0	73	0	2	0	6	**81**	0	**498**
5:00PM	0	0	1	0	1	**2**	0	78	0	2	0	8	**88**	0	**525**
5:15PM	1	1	0	0	0	**2**	0	85	1	10	0	9	**105**	0	**510**
5:30PM	2	0	2	0	2	**6**	1	52	2	7	0	7	**68**	0	**495**
Total	5	2	5	0	4	**16**	1	288	3	21	0	30	**342**	0	**2028**
% Approach	31.3%	12.5%	31.3%	0%	25.0%	**-**	-	84.2%	0.9%	6.1%	0%	8.8%	**-**	-	**-**
% Total	0.2%	0.1%	0.2%	0%	0.2%	**0.8%**	-	14.2%	0.1%	1.0%	0%	1.5%	**16.9%**	-	**-**
PHF	0.625	0.500	0.625	-	0.500	**0.667**	-	0.847	0.375	0.525	-	0.833	**0.814**	-	0.966
Lights	5	2	5	0	4	**16**	-	286	3	20	0	30	**339**	-	2008
% Lights	100%	100%	100%	0%	100%	**100%**	-	99.3%	100%	95.2%	0%	100%	**99.1%**	-	99.0%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	0	**0**	-	1	0	1	0	0	**2**	-	16
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	0.3%	0%	4.8%	0%	0%	**0.6%**	-	0.8%
Buses	0	0	0	0	0	**0**	-	1	0	0	0	0	**1**	-	4
% Buses	0%	0%	0%	0%	0%	**0%**	-	0.3%	0%	0%	0%	0%	**0.3%**	-	0.2%
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (2/29) - TMC
Thu Feb 29, 2024
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160865, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Scudders Mill Rd (3/2) - TMC

Sat Mar 2, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160866, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Scudders Mill Rd							Scudders Mill Rd						
Direction	Eastbound							Westbound						
Time	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*
2024-03-02 11:00AM	1	110	2	0	0	**113**	0	7	117	13	1	2	**140**	0
11:15AM	3	132	3	0	2	**140**	0	8	127	12	0	1	**148**	0
11:30AM	1	121	2	0	0	**124**	0	4	143	16	0	0	**163**	0
11:45AM	0	133	2	0	1	**136**	0	2	128	12	0	1	**143**	0
Hourly Total	5	496	9	0	3	**513**	0	21	515	53	1	4	**594**	0
12:00PM	0	149	6	0	0	**155**	0	3	125	4	0	1	**133**	0
12:15PM	0	131	2	0	1	**134**	0	1	126	3	0	6	**136**	0
12:30PM	0	125	5	1	0	**131**	0	3	118	11	1	0	**133**	0
12:45PM	2	115	7	0	2	**126**	0	4	127	18	0	3	**152**	0
Hourly Total	2	520	20	1	3	**546**	0	11	496	36	1	10	**554**	0
1:00PM	0	130	2	0	0	**132**	0	1	134	13	0	0	**148**	0
1:15PM	2	117	2	0	2	**123**	0	4	148	7	0	6	**165**	0
1:30PM	0	114	5	0	0	**119**	0	4	111	5	0	0	**120**	0
1:45PM	3	106	1	0	0	**110**	0	4	140	6	0	6	**156**	0
Hourly Total	5	467	10	0	2	**484**	0	13	533	31	0	12	**589**	0
2:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0
Total	12	1483	39	1	8	**1543**	0	45	1544	120	2	26	**1737**	0
% Approach	0.8%	96.1%	2.5%	0.1%	0.5%	**-**	-	2.6%	88.9%	6.9%	0.1%	1.5%	**-**	-
% Total	0.3%	41.1%	1.1%	0%	0.2%	**42.8%**	-	1.2%	42.8%	3.3%	0.1%	0.7%	**48.1%**	-
Lights	12	1465	37	1	8	**1523**	-	45	1528	118	2	26	**1719**	-
% Lights	100%	98.8%	94.9%	100%	100%	**98.7%**	-	100%	99.0%	98.3%	100%	100%	**99.0%**	-
Articulated Trucks and Single-Unit Trucks	0	9	0	0	0	**9**	-	0	13	0	0	0	**13**	-
% Articulated Trucks and Single-Unit Trucks	0%	0.6%	0%	0%	0%	**0.6%**	-	0%	0.8%	0%	0%	0%	**0.7%**	-
Buses	0	9	2	0	0	**11**	-	0	3	2	0	0	**5**	-
% Buses	0%	0.6%	5.1%	0%	0%	**0.7%**	-	0%	0.2%	1.7%	0%	0%	**0.3%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (3/2) - TMC

Sat Mar 2, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160866, Location: 40.33993, -74.598207

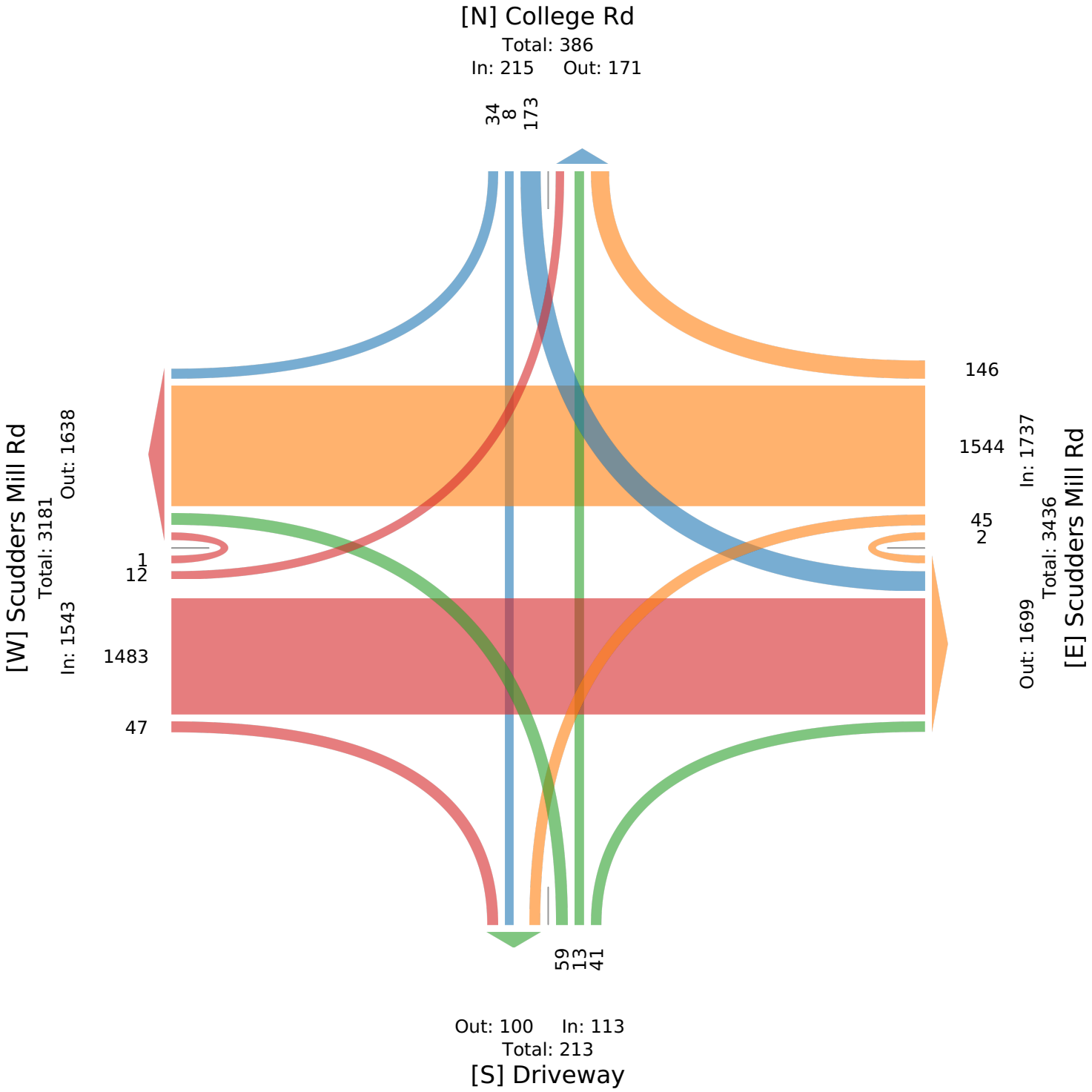
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	Driveway Northbound							College Rd Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-03-02 11:00AM	4	2	2	0	0	**8**	0	23	0	1	0	2	**26**	0	**287**
11:15AM	2	1	0	0	1	**4**	0	16	0	2	0	2	**20**	0	**312**
11:30AM	4	1	0	0	0	**5**	0	7	0	0	0	2	**9**	0	**301**
11:45AM	6	0	1	0	0	**7**	0	16	1	2	0	1	**20**	0	**306**
Hourly Total	16	4	3	0	1	**24**	0	62	1	5	0	7	**75**	0	**1206**
12:00PM	3	4	4	0	3	**14**	0	15	1	1	0	0	**17**	0	**319**
12:15PM	10	0	3	0	1	**14**	0	23	0	4	0	1	**28**	0	**312**
12:30PM	2	0	3	0	0	**5**	0	6	0	1	0	3	**10**	0	**279**
12:45PM	4	0	1	0	1	**6**	0	15	0	1	0	0	**16**	0	**300**
Hourly Total	19	4	11	0	5	**39**	0	59	1	7	0	4	**71**	0	**1210**
1:00PM	6	1	2	0	2	**11**	0	18	1	1	0	1	**21**	0	**312**
1:15PM	8	3	3	0	3	**17**	0	5	1	3	0	1	**10**	0	**315**
1:30PM	2	1	2	0	0	**5**	0	16	3	3	0	1	**23**	0	**267**
1:45PM	8	0	8	0	1	**17**	0	13	1	1	0	0	**15**	0	**298**
Hourly Total	24	5	15	0	6	**50**	0	52	6	8	0	3	**69**	0	**1192**
2:00PM	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	**0**
Total	59	13	29	0	12	**113**	0	173	8	20	0	14	**215**	0	**3608**
% Approach	52.2%	11.5%	25.7%	0%	10.6%	**-**	-	80.5%	3.7%	9.3%	0%	6.5%	**-**	-	-
% Total	1.6%	0.4%	0.8%	0%	0.3%	**3.1%**	-	4.8%	0.2%	0.6%	0%	0.4%	**6.0%**	-	-
Lights	58	13	29	0	12	**112**	-	171	8	20	0	14	**213**	-	3567
% Lights	98.3%	100%	100%	0%	100%	**99.1%**	-	98.8%	100%	100%	0%	100%	**99.1%**	-	98.9%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	22
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0.6%
Buses	1	0	0	0	0	**1**	-	2	0	0	0	0	**2**	-	19
% Buses	1.7%	0%	0%	0%	0%	**0.9%**	-	1.2%	0%	0%	0%	0%	**0.9%**	-	0.5%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (3/2) - TMC
Sat Mar 2, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160866, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



College Rd & Scudders Mill Rd (3/2) - TMC

Sat Mar 2, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160866, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg / Direction	Scudders Mill Rd Eastbound							Scudders Mill Rd Westbound						
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*
2024-03-02 11:30AM	1	121	2	0	0	**124**	0	4	143	16	0	0	**163**	0
11:45AM	0	133	2	0	1	**136**	0	2	128	12	0	1	**143**	0
12:00PM	0	149	6	0	0	**155**	0	3	125	4	0	1	**133**	0
12:15PM	0	131	2	0	1	**134**	0	1	126	3	0	6	**136**	0
Total	1	534	12	0	2	**549**	0	10	522	35	0	8	**575**	0
% Approach	0.2%	97.3%	2.2%	0%	0.4%	**-**	-	1.7%	90.8%	6.1%	0%	1.4%	**-**	-
% Total	0.1%	43.1%	1.0%	0%	0.2%	**44.3%**	-	0.8%	42.2%	2.8%	0%	0.6%	**46.4%**	-
PHF	0.250	0.896	0.500	-	0.500	**0.885**	-	0.625	0.913	0.547	-	0.333	**0.882**	-
Lights	1	530	11	0	2	**544**	-	10	515	34	0	8	**567**	-
% Lights	100%	99.3%	91.7%	0%	100%	**99.1%**	-	100%	98.7%	97.1%	0%	100%	**98.6%**	-
Articulated Trucks and Single-Unit Trucks	0	4	0	0	0	**4**	-	0	5	0	0	0	**5**	-
% Articulated Trucks and Single-Unit Trucks	0%	0.7%	0%	0%	0%	**0.7%**	-	0%	1.0%	0%	0%	0%	**0.9%**	-
Buses	0	0	1	0	0	**1**	-	0	2	1	0	0	**3**	-
% Buses	0%	0%	8.3%	0%	0%	**0.2%**	-	0%	0.4%	2.9%	0%	0%	**0.5%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (3/2) - TMC

Sat Mar 2, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160866, Location: 40.33993, -74.598207

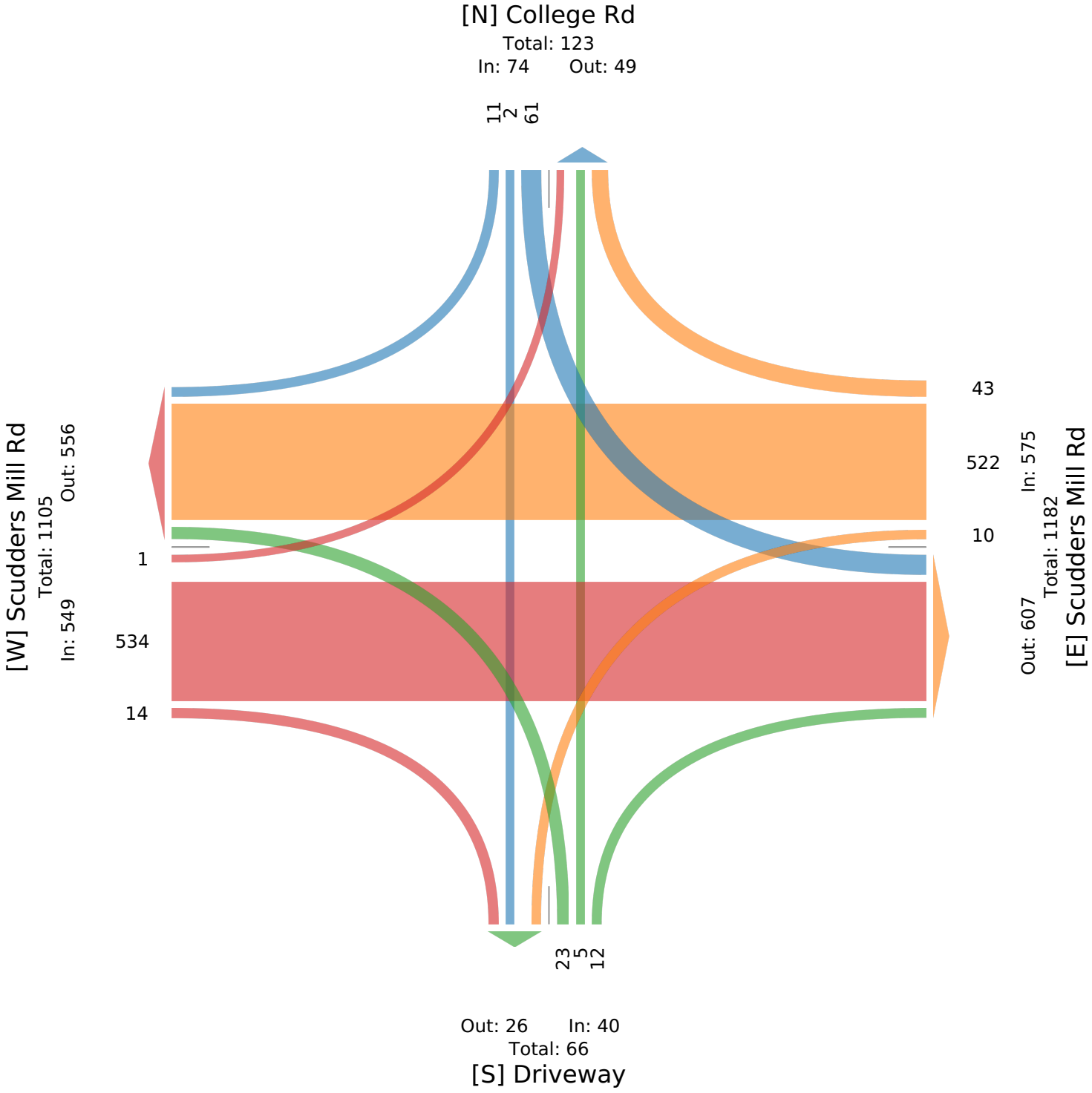
Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg Direction	Driveway Northbound							College Rd Southbound							
Time	L	T	R	U	RR	**App**	Ped*	L	T	R	U	RR	**App**	Ped*	**Int**
2024-03-02 11:30AM	4	1	0	0	0	**5**	0	7	0	0	0	2	**9**	0	**301**
11:45AM	6	0	1	0	0	**7**	0	16	1	2	0	1	**20**	0	**306**
12:00PM	3	4	4	0	3	**14**	0	15	1	1	0	0	**17**	0	**319**
12:15PM	10	0	3	0	1	**14**	0	23	0	4	0	1	**28**	0	**312**
Total	23	5	8	0	4	**40**	0	61	2	7	0	4	**74**	0	**1238**
% Approach	57.5%	12.5%	20.0%	0%	10.0%	**-**	-	82.4%	2.7%	9.5%	0%	5.4%	**-**	-	**-**
% Total	1.9%	0.4%	0.6%	0%	0.3%	**3.2%**	-	4.9%	0.2%	0.6%	0%	0.3%	**6.0%**	-	**-**
PHF	0.575	0.313	0.500	-	0.333	**0.714**	-	0.663	0.500	0.438	-	0.500	**0.661**	-	0.970
Lights	22	5	8	0	4	**39**	-	60	2	7	0	4	**73**	-	1223
% Lights	95.7%	100%	100%	0%	100%	**97.5%**	-	98.4%	100%	100%	0%	100%	**98.6%**	-	98.8%
Articulated Trucks and Single-Unit Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	9
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0.7%
Buses	1	0	0	0	0	**1**	-	1	0	0	0	0	**1**	-	6
% Buses	4.3%	0%	0%	0%	0%	**2.5%**	-	1.6%	0%	0%	0%	0%	**1.4%**	-	0.5%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

College Rd & Scudders Mill Rd (3/2) - TMC
Sat Mar 2, 2024
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1160866, Location: 40.33993, -74.598207

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Road: Rt. 1 NB Off Ramp to College Rd EB
Location: 310 ft E of Rt. 1
Counter: 40575

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 1
Station ID:
NB Off Ramp

Latitude: 40' 21.3502 North
Longitude: 74' 36.4776 West

Start Time	Mon 5/6/2024	Tue 5/7/2024	Wed 5/8/2024	Thu 5/9/2024	Fri 5/10/2024		Average Day		Sat 5/11/2024	Sun 5/12/2024		Week Average
12:00 AM	*	1	3	7	1		3		4	3		3
01:00	*	2	0	2	6		2		4	2		3
02:00	*	3	0	0	3		2		1	3		2
03:00	*	1	2	1	1		1		4	2		2
04:00	*	8	3	7	3		5		1	1		4
05:00	*	22	22	23	16		21		8	4		16
06:00	*	69	61	56	35		55		11	11		40
07:00	*	179	144	127	90		135		23	10		96
08:00	*	**231**	**213**	**207**	**110**		**190**		43	16		**137**
09:00	*	147	127	125	98		124		29	24		92
10:00	*	57	57	51	49		54		48	**44**		51
11:00	**38**	45	56	63	52		51		**59**	31		49
12:00 PM	55	64	64	64	50		59		40	41		54
01:00	54	69	72	64	49		62		**68**	39		59
02:00	52	46	51	48	53		50		66	**47**		52
03:00	52	72	46	47	59		55		52	39		52
04:00	**82**	71	**98**	70	**78**		**80**		58	36		**70**
05:00	78	**92**	90	**81**	59		80		56	34		70
06:00	58	64	71	53	55		60		49	26		54
07:00	34	41	53	45	36		42		42	21		39
08:00	35	55	49	32	23		39		32	18		35
09:00	31	38	54	31	23		35		27	21		32
10:00	16	10	10	18	22		15		29	8		16
11:00	5	13	7	7	10		8		12	6		9
Day Total	590	1400	1353	1229	981		1228		766	487		1037
% Avg. WkDay	48.0%	114.0%	110.2%	100.1%	79.9%							
% Avg. Week	56.9%	135.0%	130.5%	118.5%	94.6%		118.4%		73.9%	47.0%		
AM Peak	11:00	08:00	08:00	08:00	08:00	-	08:00	-	11:00	10:00	-	08:00
Vol.	38	231	213	207	110	-	190	-	59	44	-	137
PM Peak	16:00	17:00	16:00	17:00	16:00	-	16:00	-	13:00	14:00	-	16:00
Vol.	82	92	98	81	78	-	80	-	68	47	-	70

Road: Rt. 1 NB Off Ramp to College Rd EB
Location: 310 ft E of Rt. 1
Counter: 40575

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 1
Station ID:
NB Off Ramp

Latitude: 40' 21.3502 North
Longitude: 74' 36.4776 West

Start Time	Mon 5/13/2024	Tue 5/14/2024	Wed 5/15/2024	Thu 5/16/2024	Fri 5/17/2024	Average Day	Sat 5/18/2024	Sun 5/19/2024	Week Average
12:00 AM	2	1	2	3	*	2	*	*	2
01:00	0	3	1	1	*	1	*	*	1
02:00	1	1	1	1	*	1	*	*	1
03:00	0	0	3	3	*	2	*	*	2
04:00	4	7	2	3	*	4	*	*	4
05:00	20	32	27	20	*	25	*	*	25
06:00	55	57	60	55	*	57	*	*	57
07:00	117	182	154	141	*	148	*	*	148
08:00	**197**	**277**	**235**	**194**	*	**226**	*	*	**226**
09:00	115	206	153	136	*	152	*	*	152
10:00	54	80	88	73	*	74	*	*	74
11:00	51	48	68	77	*	61	*	*	61
12:00 PM	71	72	79	**87**	*	77	*	*	77
01:00	76	73	60	66	*	69	*	*	69
02:00	51	80	65	56	*	63	*	*	63
03:00	54	67	58	*	*	60	*	*	60
04:00	65	79	70	*	*	71	*	*	71
05:00	**92**	**96**	**119**	*	*	**102**	*	*	**102**
06:00	60	72	61	*	*	64	*	*	64
07:00	51	68	52	*	*	57	*	*	57
08:00	44	40	56	*	*	47	*	*	47
09:00	23	33	38	*	*	31	*	*	31
10:00	10	18	17	*	*	15	*	*	15
11:00	9	7	13	*	*	10	*	*	10
Day Total	1222	1599	1482	916	0	1419	0	0	1419
% Avg. WkDay	86.1%	112.7%	104.4%	64.6%	0.0%				
% Avg. Week	86.1%	112.7%	104.4%	64.6%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	-	08:00	-	-	08:00
Vol.	197	277	235	194	-	226	-	-	226
PM Peak	17:00	17:00	17:00	12:00	-	17:00	-	-	17:00
Vol.	92	96	119	87	-	102	-	-	102
Grand Total	1812	2999	2835	2145	981	2647	766	487	2456

ADT	ADT 1,179	AADT 1,179

Road: Rt. 1 NB Off Ramp to College Rd WB
Location: 300 ft E of Rt. 1
Counter: 40598

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 5
Station ID:
NB Off Ramp

Latitude: 40' 21.4659 North
Longitude: 74' 36.3539 West

Start Time	Mon 5/6/2024	Tue 5/7/2024	Wed 5/8/2024	Thu 5/9/2024	Fri 5/10/2024	Average Day	Sat 5/11/2024	Sun 5/12/2024	Week Average
12:00 AM	*	18	16	15	13	16	34	18	19
01:00	*	3	2	8	8	5	16	16	9
02:00	*	10	6	1	7	6	3	7	6
03:00	*	7	9	10	8	8	5	2	7
04:00	*	24	28	29	28	27	12	4	21
05:00	*	55	47	52	49	51	21	14	40
06:00	*	151	152	148	118	142	54	31	109
07:00	*	414	380	**457**	**380**	**408**	113	50	299
08:00	*	**458**	**392**	420	358	407	151	73	**309**
09:00	*	301	308	280	234	281	172	153	241
10:00	*	232	216	225	245	230	216	191	221
11:00	*	262	227	292	235	254	**287**	**261**	261
12:00 PM	*	242	281	259	261	261	**357**	246	274
01:00	*	262	256	272	278	267	314	282	277
02:00	317	331	412	346	353	352	303	**294**	337
03:00	338	**388**	383	391	**425**	385	272	267	352
04:00	**416**	365	**432**	**408**	372	**399**	280	260	**362**
05:00	330	358	346	345	292	334	299	214	312
06:00	194	283	277	346	294	279	249	167	259
07:00	169	242	204	219	212	209	191	150	198
08:00	142	159	173	133	142	150	150	107	144
09:00	87	92	91	94	93	91	111	73	92
10:00	34	41	56	50	90	54	63	42	54
11:00	21	22	28	27	53	30	57	20	33
Day Total	2048	4720	4722	4827	4548	4646	3730	2942	4236
% Avg. WkDay	44.1%	101.6%	101.6%	103.9%	97.9%				
% Avg. Week	48.3%	111.4%	111.5%	114.0%	107.4%	109.7%	88.1%	69.5%	
AM Peak	-	08:00	08:00	07:00	07:00	- 07:00	- 11:00	11:00	- 08:00 - -
Vol.	-	458	392	457	380	- 408	- 287	261	- 309 - -
PM Peak	16:00	15:00	16:00	16:00	15:00	- 16:00	- 12:00	14:00	- 16:00 - -
Vol.	416	388	432	408	425	- 399	- 357	294	- 362 - -

Road: Rt. 1 NB Off Ramp to College Rd WB
Location: 300 ft E of Rt. 1
Counter: 40598

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 5
Station ID:
NB Off Ramp

Latitude: 40' 21.4659 North
Longitude: 74' 36.3539 West

Start Time	Mon 5/13/2024	Tue 5/14/2024	Wed 5/15/2024	Thu 5/16/2024	Fri 5/17/2024	Average Day	Sat 5/18/2024	Sun 5/19/2024	Week Average
12:00 AM	13	9	7	13	*	10	*	*	10
01:00	7	4	2	2	*	4	*	*	4
02:00	3	3	1	2	*	2	*	*	2
03:00	8	8	8	12	*	9	*	*	9
04:00	24	21	26	20	*	23	*	*	23
05:00	46	44	52	37	*	45	*	*	45
06:00	135	158	145	178	*	154	*	*	154
07:00	353	**433**	364	**419**	*	392	*	*	392
08:00	**383**	419	**413**	389	*	**401**	*	*	**401**
09:00	226	301	244	294	*	266	*	*	266
10:00	232	226	196	228	*	220	*	*	220
11:00	208	259	223	230	*	230	*	*	230
12:00 PM	216	250	249	268	*	246	*	*	246
01:00	217	290	233	249	*	247	*	*	247
02:00	336	343	372	**426**	*	369	*	*	369
03:00	319	359	350	*	*	343	*	*	343
04:00	**394**	**444**	**430**	*	*	**423**	*	*	**423**
05:00	375	336	364	*	*	358	*	*	358
06:00	238	291	280	*	*	270	*	*	270
07:00	178	255	212	*	*	215	*	*	215
08:00	151	169	142	*	*	154	*	*	154
09:00	76	92	88	*	*	85	*	*	85
10:00	60	50	57	*	*	56	*	*	56
11:00	37	36	40	*	*	38	*	*	38
Day Total	4235	4800	4498	2767	0	4560	0	0	4560
% Avg. WkDay	92.9%	105.3%	98.6%	60.7%	0.0%				
% Avg. Week	92.9%	105.3%	98.6%	60.7%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	07:00	08:00	07:00	-	08:00	-	-	08:00
Vol.	383	433	413	419	-	401	-	-	401
PM Peak	16:00	16:00	16:00	14:00	-	16:00	-	-	16:00
Vol.	394	444	430	426	-	423	-	-	423
Grand Total	6283	9520	9220	7594	4548	9206	3730	2942	8796

ADT ADT 4,350 AADT 4,350

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Road: Rt. 1 NB On Ramp from College Rd WB
Location: 205 ft E of Rt. 1
Counter: 40620

Site Code: 2
Station ID:
NB On Ramp

Latitude: 40' 21.5108 North
Longitude: 74' 36.2848 West

Start Time	Mon 5/6/2024	Tue 5/7/2024	Wed 5/8/2024	Thu 5/9/2024	Fri 5/10/2024	Average Day	Sat 5/11/2024	Sun 5/12/2024	Week Average
12:00 AM	*	6	4	6	10	6	15	8	8
01:00	*	2	3	6	1	3	4	4	3
02:00	*	1	2	3	1	2	0	1	1
03:00	*	1	1	6	4	3	1	2	2
04:00	*	0	4	6	4	4	5	1	3
05:00	*	5	12	13	7	9	7	4	8
06:00	*	29	29	32	24	28	6	10	22
07:00	*	73	68	82	58	70	20	17	53
08:00	*	**141**	**126**	**111**	**83**	**115**	26	25	**85**
09:00	*	93	104	107	59	91	**54**	31	75
10:00	*	64	79	68	51	66	35	34	55
11:00	**57**	63	99	69	77	73	48	**49**	66
12:00 PM	81	102	109	104	109	101	45	53	86
01:00	94	104	102	91	79	94	49	43	80
02:00	101	108	101	109	84	101	**95**	**66**	95
03:00	108	122	144	126	74	115	67	59	100
04:00	143	169	157	168	103	148	49	47	119
05:00	**170**	**198**	**186**	**170**	**125**	**170**	52	52	**136**
06:00	84	106	93	102	57	88	72	43	80
07:00	64	74	82	77	60	71	66	55	68
08:00	51	69	78	84	59	68	52	55	64
09:00	31	37	43	79	44	47	43	31	44
10:00	26	38	31	28	36	32	41	27	32
11:00	15	18	18	19	20	18	25	21	19
Day Total	1025	1623	1675	1666	1229	1523	877	738	1304
% Avg. WkDay	67.3%	106.6%	110.0%	109.4%	80.7%				
% Avg. Week	78.6%	124.5%	128.5%	127.8%	94.2%	116.8%	67.3%	56.6%	
AM Peak	11:00	08:00	08:00	08:00	08:00	- 08:00	- 09:00	11:00	- 08:00 - -
Vol.	57	141	126	111	83	- 115	- 54	49	- 85 - -
PM Peak	17:00	17:00	17:00	17:00	17:00	- 17:00	- 14:00	14:00	- 17:00 - -
Vol.	170	198	186	170	125	- 170	- 95	66	- 136 - -

Road: Rt. 1 NB On Ramp from College Rd WB
Location: 205 ft E of Rt. 1
Counter: 40620

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 2
Station ID:
NB On Ramp

Latitude: 40' 21.5108 North
Longitude: 74' 36.2848 West

Start Time	Mon 5/13/2024	Tue 5/14/2024	Wed 5/15/2024	Thu 5/16/2024	Fri 5/17/2024	Average Day	Sat 5/18/2024	Sun 5/19/2024	Week Average
12:00 AM	7	6	8	5	*	6	*	*	6
01:00	1	4	2	4	*	3	*	*	3
02:00	0	2	0	0	*	0	*	*	0
03:00	2	1	6	4	*	3	*	*	3
04:00	2	3	3	5	*	3	*	*	3
05:00	4	13	7	9	*	8	*	*	8
06:00	22	31	25	33	*	28	*	*	28
07:00	64	86	86	78	*	78	*	*	78
08:00	**115**	**156**	**129**	**152**	*	**138**	*	*	**138**
09:00	87	106	112	109	*	104	*	*	104
10:00	56	66	70	66	*	64	*	*	64
11:00	60	71	83	75	*	72	*	*	72
12:00 PM	77	97	97	**109**	*	95	*	*	95
01:00	74	105	113	101	*	98	*	*	98
02:00	86	108	114	105	*	103	*	*	103
03:00	118	144	112	106	*	120	*	*	120
04:00	135	212	197	*	*	181	*	*	181
05:00	**189**	**225**	**202**	*	*	**205**	*	*	**205**
06:00	93	111	98	*	*	101	*	*	101
07:00	62	83	76	*	*	74	*	*	74
08:00	74	72	79	*	*	75	*	*	75
09:00	57	51	49	*	*	52	*	*	52
10:00	33	32	29	*	*	31	*	*	31
11:00	10	14	15	*	*	13	*	*	13
Day Total	1428	1799	1712	961	0	1655	0	0	1655
% Avg. WkDay	86.3%	108.7%	103.4%	58.1%	0.0%				
% Avg. Week	86.3%	108.7%	103.4%	58.1%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	-	08:00	-	-	08:00
Vol.	115	156	129	152	-	138	-	-	138
PM Peak	17:00	17:00	17:00	12:00	-	17:00	-	-	17:00
Vol.	189	225	202	109	-	205	-	-	205
Grand Total	2453	3422	3387	2627	1229	3178	877	738	2959

ADT	ADT 1,430	AADT 1,430

Road: Rt. 1 SB Off Ramp to College Ave WB
Location: 560 ft N of College Rd WB
Counter: 40588

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 3
Station ID:
SB Off Ramp

Latitude: 40' 21.4978 North
Longitude: 74' 36.6359 West

Start Time	Mon 5/13/2024	Tue 5/14/2024	Wed 5/15/2024	Thu 5/16/2024	Fri 5/17/2024	Average Day	Sat 5/18/2024	Sun 5/19/2024	Week Average
12:00 AM	*	*	*	*	3	3	3	7	4
01:00	*	*	*	*	5	5	3	3	4
02:00	*	*	*	*	0	0	0	3	1
03:00	*	*	*	*	0	0	1	3	1
04:00	*	*	*	*	6	6	1	0	2
05:00	*	*	*	*	21	21	15	5	14
06:00	*	*	*	*	31	31	23	21	25
07:00	*	*	*	*	48	48	19	19	29
08:00	*	*	*	*	**67**	**67**	29	22	39
09:00	*	*	*	*	50	50	**45**	33	**43**
10:00	*	*	*	*	35	35	29	**34**	33
11:00	*	*	*	*	45	45	45	20	37
12:00 PM	*	*	*	*	39	39	32	**37**	36
01:00	*	*	*	*	60	60	**45**	33	46
02:00	*	*	*	*	62	62	25	29	39
03:00	*	*	*	*	61	61	37	26	41
04:00	*	*	*	56	**74**	65	43	26	**50**
05:00	*	*	*	**76**	69	**72**	27	20	48
06:00	*	*	*	57	61	59	28	20	42
07:00	*	*	*	34	37	36	26	26	31
08:00	*	*	*	22	28	25	27	23	25
09:00	*	*	*	15	20	18	24	19	20
10:00	*	*	*	14	15	14	10	12	13
11:00	*	*	*	14	9	12	6	9	10
Day Total	0	0	0	288	846	834	543	450	633
% Avg. WkDay	0.0%	0.0%	0.0%	34.5%	101.4%				
% Avg. Week	0.0%	0.0%	0.0%	45.5%	133.6%	131.8%	85.8%	71.1%	
AM Peak	-	-	-	-	08:00	- 08:00	- 09:00	10:00	- 09:00 - -
Vol.	-	-	-	-	67	- 67	- 45	34	- 43 - -
PM Peak	-	-	-	17:00	16:00	- 17:00	- 13:00	12:00	- 16:00 - -
Vol.	-	-	-	76	74	- 72	- 45	37	- 50 - -

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Road: Rt. 1 SB Off Ramp to College Ave WB
Location: 560 ft N of College Rd WB
Counter: 40588

Site Code: 3
Station ID:
SB Off Ramp

Latitude: 40' 21.4978 North
Longitude: 74' 36.6359 West

Start Time	Mon 5/20/2024	Tue 5/21/2024	Wed 5/22/2024	Thu 5/23/2024	Fri 5/24/2024	Average Day	Sat 5/25/2024	Sun 5/26/2024	Week Average
12:00 AM	6	6	4	3	4	5	*	*	5
01:00	4	2	2	0	2	2	*	*	2
02:00	1	1	1	3	3	2	*	*	2
03:00	0	0	2	2	2	1	*	*	1
04:00	3	4	3	4	3	3	*	*	3
05:00	15	17	15	12	16	15	*	*	15
06:00	26	25	31	28	24	27	*	*	27
07:00	37	65	60	73	49	57	*	*	57
08:00	**91**	**110**	**125**	**94**	**71**	**98**	*	*	**98**
09:00	57	78	68	73	*	69	*	*	69
10:00	47	43	57	40	*	47	*	*	47
11:00	42	38	42	39	*	40	*	*	40
12:00 PM	51	41	57	48	*	49	*	*	49
01:00	39	66	50	51	*	52	*	*	52
02:00	44	50	63	57	*	54	*	*	54
03:00	51	53	65	60	*	57	*	*	57
04:00	60	**69**	**67**	68	*	66	*	*	66
05:00	**72**	69	67	**90**	*	**74**	*	*	**74**
06:00	43	43	45	52	*	46	*	*	46
07:00	47	28	46	47	*	42	*	*	42
08:00	32	18	27	18	*	24	*	*	24
09:00	24	24	13	15	*	19	*	*	19
10:00	12	9	9	13	*	11	*	*	11
11:00	9	3	6	13	*	8	*	*	8
Day Total	813	862	925	903	174	868	0	0	868
% Avg. WkDay	93.7%	99.3%	106.6%	104.0%	20.0%				
% Avg. Week	93.7%	99.3%	106.6%	104.0%	20.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	-	-	08:00
Vol.	91	110	125	94	71	98	-	-	98
PM Peak	17:00	16:00	16:00	17:00	-	17:00	-	-	17:00
Vol.	72	69	67	90	-	74	-	-	74
Grand Total	813	862	925	1191	1020	1702	543	450	1501

ADT	ADT 767	AADT 767

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Road: Rt. 1 SB Off Ramp to College Rd EB
Location: 250 ft W of Rt. 1
Counter: 40599

Site Code: 7
Station ID:
SB Off Ramp

Latitude: 40' 21.3702 North
Longitude: 74' 36.5090 West

Start Time	Mon 5/6/2024	Tue 5/7/2024	Wed 5/8/2024	Thu 5/9/2024	Fri 5/10/2024	Average Day	Sat 5/11/2024	Sun 5/12/2024	Week Average
12:00 AM	*	5	3	5	4	4	3	3	4
01:00	*	0	3	3	0	2	2	0	1
02:00	*	2	2	2	2	2	2	1	2
03:00	*	0	0	3	0	1	0	1	1
04:00	*	2	2	4	1	2	2	0	2
05:00	*	11	14	8	8	10	2	3	8
06:00	*	22	24	23	13	20	3	2	14
07:00	*	55	54	63	27	50	13	0	35
08:00	*	76	**99**	**86**	54	**79**	**34**	10	**60**
09:00	*	**98**	89	70	**55**	78	17	11	57
10:00	*	51	51	40	39	45	21	11	36
11:00	*	27	27	38	21	28	13	**18**	24
12:00 PM	*	29	31	37	24	30	17	9	24
01:00	29	31	27	27	**34**	30	**21**	**18**	27
02:00	20	18	27	18	24	21	14	15	19
03:00	24	17	25	18	22	21	18	11	19
04:00	23	26	26	23	18	23	15	10	20
05:00	**30**	**44**	**38**	**42**	33	**37**	21	13	**32**
06:00	24	26	24	14	15	21	13	11	18
07:00	17	14	19	16	13	16	13	16	15
08:00	4	12	5	8	10	8	10	9	8
09:00	21	15	16	11	11	15	5	15	13
10:00	10	8	12	11	7	10	12	14	11
11:00	7	4	11	3	3	6	9	7	6
Day Total	209	593	629	573	438	559	280	208	456
% Avg. WkDay	37.4%	106.1%	112.5%	102.5%	78.4%				
% Avg. Week	45.8%	130.0%	137.9%	125.7%	96.1%	122.6%	61.4%	45.6%	
AM Peak	-	09:00	08:00	08:00	09:00	- 08:00	- 08:00	11:00	- 08:00 - -
Vol.	-	98	99	86	55	- 79	- 34	18	- 60 - -
PM Peak	17:00	17:00	17:00	17:00	13:00	- 17:00	- 13:00	13:00	- 17:00 - -
Vol.	30	44	38	42	34	- 37	- 21	18	- 32 - -

Road: Rt. 1 SB Off Ramp to College Rd EB
Location: 250 ft W of Rt. 1
Counter: 40599

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 7
Station ID:
SB Off Ramp

Latitude: 40' 21.3702 North
Longitude: 74' 36.5090 West

Start Time	Mon 5/13/2024	Tue 5/14/2024	Wed 5/15/2024	Thu 5/16/2024	Fri 5/17/2024	Average Day	Sat 5/18/2024	Sun 5/19/2024	Week Average
12:00 AM	4	6	2	1	*	3	*	*	3
01:00	0	1	1	1	*	1	*	*	1
02:00	1	2	1	2	*	2	*	*	2
03:00	2	1	2	1	*	2	*	*	2
04:00	2	0	3	2	*	2	*	*	2
05:00	12	14	12	11	*	12	*	*	12
06:00	18	24	24	19	*	21	*	*	21
07:00	57	77	70	63	*	67	*	*	67
08:00	81	**201**	**117**	**118**	*	**129**	*	*	**129**
09:00	**86**	123	115	90	*	104	*	*	104
10:00	42	54	53	53	*	50	*	*	50
11:00	26	41	32	33	*	33	*	*	33
12:00 PM	32	29	33	31	*	31	*	*	31
01:00	25	32	**54**	**34**	*	36	*	*	36
02:00	18	27	31	18	*	24	*	*	24
03:00	22	20	43	24	*	27	*	*	27
04:00	29	31	23	*	*	28	*	*	28
05:00	**46**	**44**	32	*	*	**41**	*	*	**41**
06:00	29	27	26	*	*	27	*	*	27
07:00	22	17	17	*	*	19	*	*	19
08:00	20	18	14	*	*	17	*	*	17
09:00	24	14	15	*	*	18	*	*	18
10:00	16	13	12	*	*	14	*	*	14
11:00	6	5	6	*	*	6	*	*	6
Day Total	620	821	738	501	0	714	0	0	714
% Avg. WkDay	86.8%	115.0%	103.4%	70.2%	0.0%				
% Avg. Week	86.8%	115.0%	103.4%	70.2%	0.0%	100.0%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00	08:00	-	08:00	-	-	-	08:00	-	-
Vol.	86	201	117	118	-	129	-	-	-	129	-	-
PM Peak	17:00	17:00	13:00	13:00	-	17:00	-	-	-	17:00	-	-
Vol.	46	44	54	34	-	41	-	-	-	41	-	-
Grand Total	829	1414	1367	1074	438	1273	280	208	1170			

ADT ADT 553 AADT 553

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Road: Rt. 1 SB On Ramp from College Rd EB
Location: 140 ft S of College Rd EB
Counter: 40600

Site Code: 4
Station ID:
SB On Ramp

Latitude: 40' 21.4571 North
Longitude: 74' 36.6221 West

Start Time	Mon 5/6/2024	Tue 5/7/2024	Wed 5/8/2024	Thu 5/9/2024	Fri 5/10/2024	Average Day	Sat 5/11/2024	Sun 5/12/2024	Week Average
12:00 AM	*	5	7	8	5	6	14	11	8
01:00	*	2	4	1	1	2	7	2	3
02:00	*	3	1	2	2	2	4	2	2
03:00	*	5	7	8	5	6	6	2	6
04:00	*	8	16	11	7	10	8	4	9
05:00	*	43	44	44	31	40	12	8	30
06:00	*	131	133	126	96	122	48	36	95
07:00	*	260	238	227	156	220	67	52	167
08:00	*	**271**	**244**	**298**	**204**	**254**	113	64	**199**
09:00	*	219	180	244	141	196	130	103	170
10:00	*	142	137	139	130	137	**174**	118	140
11:00	*	146	147	153	118	141	145	**119**	138
12:00 PM	148	164	177	179	**221**	178	181	154	175
01:00	139	152	171	149	152	153	217	**155**	162
02:00	134	180	155	187	169	165	184	152	166
03:00	**232**	**271**	**244**	**256**	162	**233**	**241**	147	**222**
04:00	176	191	230	217	191	201	177	109	184
05:00	214	206	219	207	184	206	134	105	181
06:00	159	187	215	167	189	183	111	87	159
07:00	75	120	124	84	119	104	83	86	99
08:00	54	136	91	109	83	95	68	87	90
09:00	51	54	49	83	77	63	62	57	62
10:00	29	45	40	43	45	40	52	36	41
11:00	23	23	26	18	41	26	34	18	26
Day Total	1434	2964	2899	2960	2529	2783	2272	1714	2534
% Avg. WkDay	51.5%	106.5%	104.2%	106.4%	90.9%				
% Avg. Week	56.6%	117.0%	114.4%	116.8%	99.8%	109.8%	89.7%	67.6%	
AM Peak	-	08:00	08:00	08:00	08:00	- 08:00	- 10:00	11:00	- 08:00 - -
Vol.	-	271	244	298	204	- 254	- 174	119	- 199 - -
PM Peak	15:00	15:00	15:00	15:00	12:00	- 15:00	- 15:00	13:00	- 15:00 - -
Vol.	232	271	244	256	221	- 233	- 241	155	- 222 - -

Road: Rt. 1 SB On Ramp from College Rd EB
Location: 140 ft S of College Rd EB
Counter: 40600

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 4
Station ID:
SB On Ramp

Latitude: 40' 21.4571 North
Longitude: 74' 36.6221 West

Start Time	Mon 5/13/2024	Tue 5/14/2024	Wed 5/15/2024	Thu 5/16/2024	Fri 5/17/2024	Average Day	Sat 5/18/2024	Sun 5/19/2024	Week Average
12:00 AM	6	4	3	6	*	5	*	*	5
01:00	5	3	0	2	*	2	*	*	2
02:00	1	1	3	4	*	2	*	*	2
03:00	3	7	7	3	*	5	*	*	5
04:00	6	12	9	5	*	8	*	*	8
05:00	37	42	44	42	*	41	*	*	41
06:00	102	129	120	136	*	122	*	*	122
07:00	198	**260**	238	**248**	*	**236**	*	*	**236**
08:00	**208**	224	**255**	229	*	229	*	*	229
09:00	143	175	168	177	*	166	*	*	166
10:00	120	134	125	124	*	126	*	*	126
11:00	114	141	122	130	*	127	*	*	127
12:00 PM	134	131	137	110	*	128	*	*	128
01:00	117	146	140	**114**	*	129	*	*	129
02:00	163	167	145	*	*	158	*	*	158
03:00	**236**	**260**	**217**	*	*	**238**	*	*	**238**
04:00	214	227	178	*	*	206	*	*	206
05:00	205	176	211	*	*	197	*	*	197
06:00	159	189	146	*	*	165	*	*	165
07:00	92	100	92	*	*	95	*	*	95
08:00	89	99	92	*	*	93	*	*	93
09:00	65	58	62	*	*	62	*	*	62
10:00	34	35	54	*	*	41	*	*	41
11:00	25	24	20	*	*	23	*	*	23
Day Total	2476	2744	2588	1330	0	2604	0	0	2604
% Avg. WkDay	95.1%	105.4%	99.4%	51.1%	0.0%				
% Avg. Week	95.1%	105.4%	99.4%	51.1%	0.0%	100.0%	0.0%	0.0%	
AM Peak	08:00	07:00	08:00	07:00	-	07:00	-	-	07:00
Vol.	208	260	255	248	-	236	-	-	236
PM Peak	15:00	15:00	15:00	13:00	-	15:00	-	-	15:00
Vol.	236	260	217	114	-	238	-	-	238
Grand Total	3910	5708	5487	4290	2529	5387	2272	1714	5138

ADT	ADT 2,561	AADT 2,561

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Road: Rt. 1 SB On Ramp from College Rd WB
Location: 240 ft W of Rt. 1
Counter: 39602

Site Code: 6
Station ID:
SB On Ramp

Latitude: 40' 21.5093 North
Longitude: 74' 36.3494 West

Start Time	Mon 5/6/2024	Tue 5/7/2024	Wed 5/8/2024	Thu 5/9/2024	Fri 5/10/2024	Average Day	Sat 5/11/2024	Sun 5/12/2024	Week Average
12:00 AM	*	3	5	7	7	6	6	6	6
01:00	*	3	3	3	9	4	6	2	4
02:00	*	8	7	7	1	6	0	1	4
03:00	*	1	0	0	1	0	0	1	0
04:00	*	4	1	1	2	2	1	2	2
05:00	*	6	10	11	6	8	3	5	7
06:00	*	19	19	16	16	18	4	5	13
07:00	*	82	80	**73**	42	69	24	11	52
08:00	*	**98**	**87**	70	51	**76**	46	22	**62**
09:00	*	49	65	47	47	52	**57**	33	50
10:00	*	36	44	41	51	43	43	43	43
11:00	*	54	56	57	**62**	57	49	**54**	55
12:00 PM	*	62	67	75	66	68	47	30	58
01:00	54	82	64	65	65	66	53	**57**	63
02:00	81	88	84	75	82	82	52	25	70
03:00	96	124	134	103	79	107	49	45	90
04:00	173	233	**178**	**189**	121	179	50	23	138
05:00	**182**	**258**	177	180	**128**	**185**	51	33	**144**
06:00	92	113	109	81	56	90	**55**	21	75
07:00	47	45	59	36	45	46	38	12	40
08:00	26	38	26	25	26	28	34	20	28
09:00	26	24	23	21	11	21	13	7	18
10:00	17	18	14	17	16	16	13	4	14
11:00	21	22	21	16	7	17	14	15	17
Day Total	815	1470	1333	1216	997	1246	708	477	1053
% Avg. WkDay	65.4%	118.0%	107.0%	97.6%	80.0%				
% Avg. Week	77.4%	139.6%	126.6%	115.5%	94.7%	118.3%	67.2%	45.3%	
AM Peak	-	08:00	08:00	07:00	11:00	- 08:00	- 09:00	11:00	- 08:00 - -
Vol.	-	98	87	73	62	- 76	- 57	54	- 62 - -
PM Peak	17:00	17:00	16:00	16:00	17:00	- 17:00	- 18:00	13:00	- 17:00 - -
Vol.	182	258	178	189	128	- 185	- 55	57	- 144 - -

Road: Rt. 1 SB On Ramp from College Rd WB
Location: 240 ft W of Rt. 1
Counter: 39602

Tri-State Traffic Data, Inc.
610-466-1469
TSTData.com

Site Code: 6
Station ID:
SB On Ramp

Latitude: 40' 21.5093 North
Longitude: 74' 36.3494 West

Start Time	Mon 5/13/2024	Tue 5/14/2024	Wed 5/15/2024	Thu 5/16/2024	Fri 5/17/2024	Average Day	Sat 5/18/2024	Sun 5/19/2024	Week Average
12:00 AM	3	6	4	9	*	6	*	*	6
01:00	2	4	4	1	*	3	*	*	3
02:00	1	2	1	2	*	2	*	*	2
03:00	0	0	0	1	*	0	*	*	0
04:00	1	1	0	3	*	1	*	*	1
05:00	2	5	8	6	*	5	*	*	5
06:00	16	36	39	42	*	33	*	*	33
07:00	**57**	**81**	**91**	**86**	*	**79**	*	*	**79**
08:00	54	52	81	84	*	68	*	*	68
09:00	42	53	63	54	*	53	*	*	53
10:00	41	51	38	47	*	44	*	*	44
11:00	52	57	55	57	*	55	*	*	55
12:00 PM	54	79	61	76	*	68	*	*	68
01:00	59	71	70	77	*	69	*	*	69
02:00	104	105	87	**80**	*	94	*	*	94
03:00	96	152	122	*	*	123	*	*	123
04:00	**173**	**261**	220	*	*	**218**	*	*	**218**
05:00	157	234	**236**	*	*	209	*	*	209
06:00	85	125	111	*	*	107	*	*	107
07:00	47	34	48	*	*	43	*	*	43
08:00	23	42	25	*	*	30	*	*	30
09:00	13	17	25	*	*	18	*	*	18
10:00	18	15	15	*	*	16	*	*	16
11:00	20	18	21	*	*	20	*	*	20
Day Total	1120	1501	1425	625	0	1364	0	0	1364
% Avg. WkDay	82.1%	110.0%	104.5%	45.8%	0.0%				
% Avg. Week	82.1%	110.0%	104.5%	45.8%	0.0%	100.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	07:00	-	07:00	-	-	07:00
Vol.	57	81	91	86	-	79	-	-	79
PM Peak	16:00	16:00	17:00	14:00	-	16:00	-	-	16:00
Vol.	173	261	236	80	-	218	-	-	218
Grand Total	1935	2971	2758	1841	997	2610	708	477	2417

ADT	ADT 1,154	AADT 1,154

Leg	Seminary Dr					Seminary Dr					Evergreen Dr						
Direction	Eastbound					Westbound					Northbound						
Start Time	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
2025-04-04 07:00:00	3	0	**3**	0	0	9	0	**9**	0	0	4	2	0	**6**	0	0	**18**
2025-04-04 07:15:00	2	0	**2**	0	0	8	0	**8**	0	0	1	6	0	**7**	0	0	**17**
2025-04-04 07:30:00	2	0	**2**	0	0	2	0	**2**	0	0	3	1	0	**4**	0	0	**8**
2025-04-04 07:45:00	3	0	**3**	0	0	3	0	**3**	0	0	1	1	0	**2**	0	0	**8**
2025-04-04 08:00:00	5	0	**5**	0	0	3	0	**3**	0	0	3	2	0	**5**	0	0	**13**
2025-04-04 08:15:00	1	0	**1**	0	0	4	0	**4**	0	0	0	0	0	**0**	0	0	**5**
2025-04-04 08:30:00	0	0	**0**	0	0	3	0	**3**	0	0	3	3	0	**6**	0	0	**9**
2025-04-04 08:45:00	4	0	**4**	0	0	2	0	**2**	0	0	1	3	0	**4**	0	0	**10**
2025-04-04 09:00:00	0	0	**0**	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	**0**
Grand Total	20	0	**20**	0	0	34	0	**34**	0	0	16	18	0	**34**	0	0	**88**
Peak Hour																	
2025-04-04 07:45:00	3	0	**3**	0	0	3	0	**3**	0	0	1	1	0	**2**	0	0	**8**
2025-04-04 08:00:00	5	0	**5**	0	0	3	0	**3**	0	0	3	2	0	**5**	0	0	**13**
2025-04-04 08:15:00	1	0	**1**	0	0	4	0	**4**	0	0	0	0	0	**0**	0	0	**5**
2025-04-04 08:30:00	0	0	**0**	0	0	3	0	**3**	0	0	3	3	0	**6**	0	0	**9**
Grand Total	9	0	**9**	0	0	13	0	**13**	0	0	7	6	0	**13**	0	0	**35**

Leg	Seminary Dr					Seminary Dr					Evergreen Dr						
Direction	Eastbound					Westbound					Northbound						
Start Time	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
2025-04-03 16:00:00	6	0	**6**	0	0	0	0	**0**	0	0	3	7	0	**10**	0	0	**16**
2025-04-03 16:15:00	9	0	**9**	0	0	1	0	**1**	0	0	2	5	0	**7**	3	0	**17**
2025-04-03 16:30:00	5	0	**5**	0	0	0	0	**0**	0	0	6	3	0	**9**	5	0	**14**
2025-04-03 16:45:00	1	0	**1**	0	0	2	0	**2**	0	0	2	5	0	**7**	0	0	**10**
2025-04-03 17:00:00	0	0	**0**	0	0	1	0	**1**	0	0	1	2	0	**3**	0	0	**4**
2025-04-03 17:15:00	2	0	**2**	0	0	2	0	**2**	0	0	4	5	0	**9**	0	0	**13**
2025-04-03 17:30:00	1	0	**1**	0	0	1	0	**1**	0	0	3	4	0	**7**	0	0	**9**
2025-04-03 17:45:00	2	0	**2**	0	0	1	0	**1**	0	0	1	2	0	**3**	0	0	**6**
Grand Total	26	0	**26**	0	0	8	0	**8**	0	0	22	33	0	**55**	8	0	**89**
Peak Hour																	
2025-04-03 16:30:00	5	0	**5**	0	0	0	0	**0**	0	0	6	3	0	**9**	5	0	**14**
2025-04-03 16:45:00	1	0	**1**	0	0	2	0	**2**	0	0	2	5	0	**7**	0	0	**10**
2025-04-03 17:00:00	0	0	**0**	0	0	1	0	**1**	0	0	1	2	0	**3**	0	0	**4**
2025-04-03 17:15:00	2	0	**2**	0	0	2	0	**2**	0	0	4	5	0	**9**	0	0	**13**
Grand Total	8	0	**8**	0	0	5	0	**5**	0	0	13	15	0	**28**	5	0	**41**

Leg	Seminary Dr					Seminary Dr					Evergreen Dr						
Direction	Eastbound					Westbound					Northbound						
Start Time	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
2025-04-05 11:00:00	3	0	**3**	0	0	2	0	**2**	0	0	3	1	0	**4**	0	0	**9**
2025-04-05 11:15:00	4	0	**4**	0	0	0	0	**0**	0	0	2	0	0	**2**	0	0	**6**
2025-04-05 11:30:00	3	0	**3**	0	0	3	0	**3**	0	0	3	1	0	**4**	0	0	**10**
2025-04-05 11:45:00	6	0	**6**	0	0	4	0	**4**	0	0	5	4	0	**9**	0	0	**19**
2025-04-05 12:00:00	5	0	**5**	0	0	4	0	**4**	0	0	4	2	0	**6**	0	0	**15**
2025-04-05 12:15:00	3	0	**3**	0	0	3	0	**3**	0	0	4	1	0	**5**	0	0	**11**
2025-04-05 12:30:00	2	0	**2**	0	0	3	0	**3**	0	0	4	1	0	**5**	0	0	**10**
2025-04-05 12:45:00	2	0	**2**	0	0	4	0	**4**	0	0	5	1	0	**6**	0	0	**12**
2025-04-05 13:00:00	8	0	**8**	0	0	2	0	**2**	0	0	1	1	0	**2**	0	0	**12**
2025-04-05 13:15:00	6	0	**6**	0	0	1	0	**1**	0	0	2	1	0	**3**	0	0	**10**
2025-04-05 13:30:00	2	0	**2**	0	0	3	0	**3**	0	0	4	2	0	**6**	0	0	**11**
2025-04-05 13:45:00	2	0	**2**	0	0	0	0	**0**	0	0	0	1	0	**1**	0	0	**3**
Grand Total	46	0	**46**	0	0	29	0	**29**	0	0	37	16	0	**53**	0	0	**128**
Peak Hour																	
2025-04-05 11:45:00	6	0	**6**	0	0	4	0	**4**	0	0	5	4	0	**9**	0	0	**19**
2025-04-05 12:00:00	5	0	**5**	0	0	4	0	**4**	0	0	4	2	0	**6**	0	0	**15**
2025-04-05 12:15:00	3	0	**3**	0	0	3	0	**3**	0	0	4	1	0	**5**	0	0	**11**
2025-04-05 12:30:00	2	0	**2**	0	0	3	0	**3**	0	0	4	1	0	**5**	0	0	**10**
Grand Total	16	0	**16**	0	0	14	0	**14**	0	0	17	8	0	**25**	0	0	**55**

APPENDIX C
TIMING DIRECTIVES

1201103p

Directive No. 310-14

Route US 1 and Ridge Road
South Brunswick Twp., Middlesex Co.

PHASE	SIGNAL INDICATIONS					NORMAL OPERATION	TIME (SECONDS) BACK UP TOD PLANS					
	1-4, 9,10	5,6	7,8	11-14	15-18	Adaptive Mode****	PLAN I (165)	PLAN II (110)	PLAN III (175)	PLAN IV (125)	PLAN V (90)	PLANS XI & XIII (175)
A) Route US 1 ROW	G	R	R	W	DW	7 min	112-75	57-33	122-79	72-47	37-21	122-92
Pedestrian Clearance	G	R	R	FDW	DW	24	24	24	24	24	24	24
Change	Y	R	R	DW	DW	6	6*	6**	6*	6*	6*	6*
Clearance	R	R	R	DW	DW	2	2	2	2	2	2	2
B) Ridge Road Lead Lefts	R	R/<-G-	R/<-G-	DW	DW	5-29	5-19	5-7	5-15	5-8	5-7	5-12
Change	R	R/<-Y-	R/<-Y-	DW	DW	3	3	3	3	3	3	3
C) Ridge Road ROW	R	G	G	DW	DW	7-50	7-30	7-29	7-40	7-29	7-21	7-30
Change	R	Y	Y	DW	DW	4	4	4	4	4	4	4
Clearance	R	R	R	DW	DW	2	2	2	2	2	2	2
Emergency Flash	Y	R	R	DARK	DARK		-	-	-	-	-	-

1201103p

Directive No. 310-14

Route US 1 and Ridge Road
South Brunswick Twp., Middlesex Co.

PHASE	SIGNAL INDICATIONS					WITH PEDESTRIAN ACTUATION	TIME (SECONDS) BACK UP TOD PLANS					
	1-4, 9,10	5,6	7,8	11-14	15-18	Adaptive Mode****	PLAN I (165)	PLAN II (110)	PLAN III (175)	PLAN IV (125)	PLAN V (90)	PLANS XI & XIII (175)
A) Route US 1 ROW	G	R	R	W	DW	7 min	90-75	35-33	100-79	50-47	15-13	100-92
Pedestrian Clearance	G	R	R	FDW	DW	24	24	24	24	24	24	24
Change	Y	R	R	DW	DW	6	6	6	6	6	6	6
Clearance	R	R	R	DW	DW	2	2	2	2	2	2	2
B) Ridge Road Lead Lefts	R	R/<-G-	R/<-G-	DW	DW	5-29	5-19	5-7	5-15	5-8	5-7	5-12
Change	R	R/<-Y-	R/<-Y-	DW	DW	3	3	3	3	3	3	3
C) Ridge Road ROW	R	G	G	DW	W	5	5	5	5	5	5	5
Pedestrian Clearance	R	G	G	DW	FDW	24	24	24	24	24	24**	24
Vehicle Extension	R	G	G	DW	DW	-	0-1	0	0-11	0	0	0-1
Change	R	Y	Y	DW	DW	4	4	4	4	4	4	4
Clearance	R	R	R	DW	DW	2	2	2	2	2	2	2
Emergency Flash	Y	R	R	DARK	DARK		-	-	-	-	-	-

1201103p

Directive No. 310-14

Route US 1 and Ridge Road
South Brunswick Twp., Middlesex Co.

BACK UP TOD PLANS

	HOURS OF OPERATION	CYCLE LENGTH (SECONDS)	OFFSET (SECONDS)
PLAN I:	6:00 A.M. - 9:30 A.M. Monday thru Friday	165	134*
PLAN II:	All Other Times	110	4*
PLAN III:	2:30 P.M. - 7:00 P.M. Monday thru Friday	175	146*
PLAN IV:	10:00 A.M. - 9:00 P.M. Saturday 10.00 A.M. - 8:00 P.M. Sunday	125	74*
PLAN V:	11:00 P.M. - 6:00 A.M. Monday thru Sunday	90	87*
PLAN XI:	Incident Management Northbound Progression - Soft Diversion	175	172*
PLAN XIII:	Incident Management Southbound Progression - Soft Diversion	175	145*

1201103p

Directive No. 310-14

Route US 1 and Ridge Road
South Brunswick Twp., Middlesex Co.

NOTES:

1. *Offsets are measured from the beginning of yellow to Route US 1 traffic at Independence Way to the beginning of yellow to Route US 1 traffic at this intersection.
2. Detector switching is to be employed so that the Phase B left-turn detection may extend Phase C.
3. **The Phase C Plan V maximum green times will be exceeded during pedestrian actuation using the pedestrian-override feature under TOD opertion
4. ****The maximum cycle length for adaptive mode shall be 240 seconds.
5. The manual control cord is to be removed.
6. The vehicle interval is to be 2 seconds in the InSync Processor
7. The memory circuit is to be off.
8. If adaptive system fails or is turned off, controller will manually revert to indicated back up TOD operation
9. Non-sequential operation shall not be permitted.
10. For fully actuated adaptive signal, CNA (Call to Non-Actuated) will be deactivated.
11. Dynamic recalls and detector switching shall remain as programmed in the controller, if applicable.
12. Any changes to passage time will be recorded on the timing directive.
13. When there is no actuation on the side street, the signal shall rest on the mainline.
14. Rest in Walk shall remain enabled if there are pedestrian heads for the non-actuated pedestrian phase(s).
15. Incident Management timings shall be developed and installed for all Adaptive Signals in accordance with NJDOT requirements
16. The Ridge Road left-turn slots are to be wired seperately but concurrently timed if acutation occurs in both slots. Each Slot shall have the capability of terminating or extending independently of the other during all hours of operation except the AM peak, thereby reverting the timing to the actuated, non-conflicting Phase C movements. Only the Ridge Road westbound left-turn slot shall have the capability of extending Phase B during the AM peak operation. When Phase B is actuated during the AM peak, the Ridge Road eastbound left-turn slot shall receive a maximum of 5 seconds of green.
17. If Phase B is called, Phase C must follow.
18. The "Red Signal Ahead" sign is to begin flashing 24 seconds before the beginning of yellow to Route US 1 traffic (Phase A) and stop flashing at the beginning of green to Route US 1 traffic (Phase A). When not flashing, the "Signal Ahead" message shall remain lit while the "Red" is blank.
19. The vehicle passage time is to be 1 second in the controller in adaptive mode and shall be manually reverted to 2 seconds upon implementation of the back up timings

1201119p

Directive No. 311-14

Route US 1 and Independence Way
South Brunswick Twp., Middlesex Co.

PHASE	SIGNAL INDICATIONS					NORMAL OPERATION	TIME (SECONDS) BACK UP TOD PLANS					
	1-8	9-11	12,13	14-16	17,18	Adaptive Mode****	PLAN I (165)	PLAN II (110)	PLAN III (175)	PLAN IV (125)	PLAN V (90)	PLANS XI & XIII (175)
A) Route US 1 ROW	G	<-R-	R	<-R-	DW	20 min	133-105	78-45	143-94	93-67	58-39	143-110
Change	Y	<-R-	R	<-R-	DW	6	6*	6*	6*	6*	6*	6*
Clearance	R	<-R-	R	<-R-	DW	2	2	2	2	2	2	2
B) Independence Way Lead Lefts	R	<-G-	R	<-G-	DW	5-43	5-12	5-17	5-33	5-10	5-10	5-17
Change	R	<-G-(17)	R	<-Y-	DW	4	4	4	4	4	4	4
Clearance	R	<-G-(18)	R	<-R-	DW	2	2	2	2	2	2	2
C) Independence Way EB ROW	R	<-G-	G	<-R-	DW	7-38	7-28	7-28	7-28	7-28	7-21	7-28
Change	R	<-Y-	Y	<-R-	DW	4	4	4	4	4	4	4
Clearance	R	<-R-	R	<-R-	DW	2	2	2	2	2	2	2
Emergency Flash	Y	<-R-	R	<-R-	DARK		-	-	-	-	-	-

1201119p

Directive No. 311-14

Route US 1 and Independence Way
South Brunswick Twp., Middlesex Co.

PHASE	SIGNAL INDICATIONS					WITH PEDESTRIAN ACTUATION	TIME (SECONDS) BACK UP TOD PLANS					
	1-8	9-11	12,13	14-16	17,18	Adaptive Mode****	PLAN I (165)	PLAN II (110)	PLAN III (175)	PLAN IV (125)	PLAN V (90)	PLANS XI & XIII (175)
A) Route US 1 ROW	G	<-R-	R	<-R-	DW	20 min	112-105	57-45	122-94	72-67	37-32	122-110
Change	Y	<-R-	R	<-R-	DW	6	6*	6*	6*	6*	6*	6*
Clearance	R	<-R-	R	<-R-	DW	2	2	2	2	2	2	2
B) Independence Way Lead Lefts	R	<-G-	R	<-G-	DW	5-43	5-12	5-17	5-33	5-10	5-10	5-17
Change	R	<-G-	R	<-Y-	DW	4	4	4	4	4	4	4
Clearance	R	<-G-	R	<-R-	DW	2	2	2	2	2	2	2
C) Independence Way EB ROW	R	<-G-	G	<-R-	W	5	5	5	5	5	5	5
Pedestrian Clearance	R	<-G-	G	<-R-	FDW	23	23	23	23	23	23**	23
Change	R	<-Y-	Y	<-R-	DW	4	4	4	4	4	4	4
Clearance	R	<-R-	R	<-R-	DW	2	2	2	2	2	2	2
Emergency Flash	Y	<-R-	R	<-R-	DARK		-	-	-	-	-	-

1201119p

Directive No. 311-14

Route US 1 and Independence Way
South Brunswick Twp., Middlesex Co.

BACK UP TOD PLANS

	HOURS OF OPERATION	CYCLE LENGTH (SECONDS)	OFFSET (SECONDS)
PLAN I:	6:00 A.M. - 9:30 A.M. Monday thru Friday	165	0*
PLAN II:	All Other Times	110	0*
PLAN III:	2:30 P.M. - 7:00 P.M. Monday thru Friday	175	0*
PLAN IV:	10:00 A.M. - 9:00 P.M. Saturday 10:00 A.M. - 8:00 P.M. Sunday	125	0*
PLAN V:	11:00 P.M. - 6:00 A.M. Monday thru Sunday	90	0*
PLAN XI:	Incident Management Northbound Progression - Soft Diversion	175	0*
PLAN XIII:	Incident Management Southbound Progression - Soft Diversion	175	0*

1201119p

Directive No. 311-14

Route US 1 and Independence Way
South Brunswick Twp., Middlesex Co.

NOTES:

1. Detector Switching is to be employed so that the Phase B eastbound left-turn detection may call and extend Phase C.
2. *Offsets are measured from the beginning of yellow to Route US 1 traffic at this intersection.
3. **The Phase C Plan V maximum green times will be exceeded during pedestrian actuation using the pedestrian-override feature under TOD opertion
4. ****The maximum cycle length for adaptive mode shall be 240 seconds.
5. The manual control cord is to be removed.
6. The vehicle interval is to be 2 seconds in the InSync Processor
7. The memory circuit is to be off.
8. If adaptive system fails or is turned off, controller will manually revert to indicated back up TOD operation
9. Non-sequential operation shall not be permitted.
10. For fully actuated adaptive signal, CNA (Call to Non-Actuated) will be deactivated.
11. Dynamic recalls and detector switching shall remain as programmed in the controller, if applicable.
12. Any changes to passage time will be recorded on the timing directive.
13. When there is no actuation on the side street, the signal shall rest on the mainline.
14. Rest in Walk shall remain enabled if there are pedestrian heads for the non-actuated pedestrian phase(s).
15. Incident Management timings shall be developed and installed for all Adaptive Signals in accordance with NJDOT requirements
16. The Independence Way left-turn slots are to be wired sperately but concurrently timed if actuation occurs in both slots. The westbound left-turn slot shall have the ability to terminate independently when a call is placed in the eastbound through-movement area of detection.
17. If Phase C is skipped, Signal Indications No. 9 - 11 shall display yellow arrow (<-Y-)
18. If Phase C is skipped, Signal Indications No. 9 - 11 shall display red arrow (<-R-)
19. The vehicle passage time is to be 1 second in the controller in adaptive mode and shall be manually reverted to 2 seconds upon implementation of the back up timings

1201123001

Directive #524-94

Route US 1 & College Road East
and Ramp "H"
Plainsboro Township
Middlesex County

36-87 SECOND VARIABLE CYCLE

PHASES	Signal Faces 1-3	4-6	7,8	9-12	TIME (SECONDS)
With Pedestrian Actuation					
1. EBD College Road Left Turn	R	<G-	G	DW	7-18
Left-Turn Change	R	<Y-	G	DW	3
Left-Turn Clearance	R	<R-	G	DW	3
2. College Road ROW	G	<R-	G	DW	17-29
College Road Change	Y	<R-	Y	DW	4
College Road Clearance	R	<R-	R	DW	2
3. NBD, SBD Pedestrian Walk	R	<R-	R	W	16
Pedestrian Clearance	R	<R-	R	FL-DW	9
Change	R	<R-	R	DW	3
Emergency Flash:	Y	<R-	Y	DARK	-
Without Pedestrian Actuation					
1. EBD College Road Left Turn	R	<G-	G	DW	7-18
Left-Turn Change	R	<Y-	G	DW	3
Left-Turn Clearance	R	<R-	G	DW	3
2. College Road ROW	G	<R-	G	DW	17-29
College Road Change	Y	<R-	Y	DW	4
College Road Clearance	R	<R-	R	DW	2
Emergency Flash:	Y	<R-	Y	DARK	-

Controller to skip non-actuated phases.

Vehicle recall in "ON" position for phase 2, "OFF" for Phase 1.

Vehicle interval set for 2 seconds.

Vehicle Memory is to be OFF.

1201124d

Directive No. 430-00

Effective: 11/1/2000

Route US 1 and College Road West / Ramp J / Entrance to Princeton Forrestal Village (Driveway B) Plainsboro Twp., Middlesex Co.

34-91 SECOND VARIABLE CYCLE

Phase	Signal Indications			Time (Seconds)
	1-7	8-13	14,15	
WITHOUT PEDESTRIAN ACTUATION				
1) College Road ROW	G	R	DW	15-50
College Road Change	Y	R	DW	4
College Road Clearance	R	R	DW	2
2) Driveway B / Ramp J ROW	R	G	DW	7-29
Driveway B / Ramp J Change	R	Y	DW	3
Driveway B / Ramp J Clearance	R	R	DW	3
WITH PEDESTRIAN ACTUATION				
1) College Road ROW	G	R	DW	15-50
College Road Change	Y	R	DW	4
College Road Clearance	R	R	DW	2
2) Driveway B / Ramp J ROW	R	G	W	8
Pedestrian Clearance	R	G	FDW	8
Vehicle Extension	R	G	DW	0-13
Driveway B / Ramp J Change	R	Y	DW	3
Driveway B / Ramp J Clearance	R	R	DW	3
Emergency Flash:	Y	R	DARK	-

Controller is to skip non-actuated phases.

Minimum vehicle recall in "On" position for Phase 1; "Off" for Phase 2.

Vehicle interval is to be set for 2 seconds.

Vehicle memory is to be "Off".

Prepared: APRIL 10, 2008
Current Date: APRIL 23, 2014

COLLEGE ROAD WEST AND
NURSERY ROAD / SEMINARY DRIVE
PLAINSBORO TOWNSHIP
MIDDLESEX COUNTY, NJ

TRAFFIC SIGNAL TIMINGS

WITHOUT PEDESTRIAN ACTUATION -- VARIABLE CYCLE LENGTH

PHASE	1,2	3	4,5	6,7,8	9,10	11	12,13	14,15	P1-P4	P5-P6	P7-P8	TIME (SECONDS) PROG 1	PROG 2
1. E College Rd/Seminary Dr Advance	R/<-G	R	R/<-G	R	R	R	R	R	DW	DW	DW	**5**	**5-11**
Change	R/<-Y	R	R/<-Y	R	R	R	R	R	DW	DW	DW	**3**	**3**
2. E College Rd/Seminary Rd ROW	G	G	G	G	R	R	R	R	DW	DW	DW	**30-61**	**30-55**
Change	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	**5**	**5**
Clearance	R	R	R	R	R	R	R	R	DW	DW	DW	**2**	**2**
3. SB Nursery Road	R	R	R	R	R	R	G/<-G	G	DW	DW	DW	**7-16**	**7-34**
Change	R	R	R	R	R	R	Y	Y	DW	DW	DW	**4**	**4**
Clearance	R	R	R	R	R	R	R	R	DW	DW	DW	**2**	**2**
4. NB College Road West	R	R	R	R	G/<-G	G	R	R	DW	DW	DW	**5-16**	**5-8**
Change	R	R	R	R	Y	Y	R	R	DW	DW	DW	**4**	**4**
Clearance	R	R	R	R	R	R	R	R	DW	DW	DW	**2**	**2**

WITH PEDESTRIAN ACTUATION -- VARIABLE CYCLE LENGTH

PHASE	1,2	3	4,5	6,7,8	9,10	11	12,13	14,15	P1-P4	P5-P6	P7-P8	TIME (SECONDS) PROG 1	PROG 2
1. E College Rd/Seminary Dr Advance	R/<-G	R	R/<-G	R	R	R	R	R	DW	DW	DW	**5**	**5-11**
Change	R/<-Y	R	R/<-Y	R	R	R	R	R	DW	DW	DW	**3**	**3**
2. E College Rd/Seminary Rd ROW	G	G	G	G	R	R	R	R	W	DW	DW	**7**	**7**
Pedestrian Clearance	G	G	G	G	R	R	R	R	FDW	DW	DW	**26**	**26**
Vehicle Extension	G	G	G	G	R	R	R	R	DW	DW	DW	**0-28**	**0-23**
Change	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	**5**	**5**
Clearance	R	R	R	R	R	R	R	R	DW	DW	DW	**2**	**2**
3. SB Nursery Road	R	R	R	R	R	R	G/<-G	G	DW	W	DW	**7**	**7**
Pedestrian Clearance	R	R	R	R	R	R	G/<-G	G	DW	FDW	DW	**16**	**16**
Vehicle Extension	R	R	R	R	R	R	G/<-G	G	DW	DW	DW	**0**	**0-11**
Change	R	R	R	R	R	R	Y	Y	DW	DW	DW	**4**	**4**
Clearance	R	R	R	R	R	R	R	R	DW	DW	DW	**2**	**2**
4. NB College Road West	R	R	R	R	G/<-G	G	R	R	DW	DW	W	**7**	**7**
Pedestrian Clearance	R	R	R	R	G/<-G	G	R	R	DW	DW	FDW	**15**	**15**
Change	R	R	R	R	Y	Y	R	R	DW	DW	DW	**4**	**4**
Clearance	R	R	R	R	R	R	R	R	DW	DW	DW	**2**	**2**
EMERGENCY FLASHING	FY	FY	FY	FY	FR	FR	FR	FR	OFF	OFF	OFF	**50-60 per minute**	

NOTES:

1. VEHICLE INTERVAL TO BE SET AT 2 SECONDS.
2. MEMORY CIRCUITS ARE TO BE DISCONNECTED.
3. THE LEFT TURN PHASES ON WESTBOUND COLLEGE ROAD WEST, AND EASTBOUND SEMINARY ROAD, SHALL BE CAPABLE OF TERMINATING OR EXTENDING INDEPENDENTLY, THEREBY REVERTING ANY UNUSED GREEN TIME OPPOSING NON-CONFLICTING GREEN PHASE.
4. PHASE 1 MUST BE FOLLOWED BY PHASE 2. PHASES 1, 3 AND 4, IF NOT ACTUATED, MAY BE SKIPPED
5. IF NO ACTUATION OCCURS, SIGNAL SHALL REST IN THE COLLEGE/SEMINARY ROAD ROW PHASE
6. PROGRAM 2 SHALL OPERATE BETWEEN 3:00 P.M. AND 7:00 P.M. MONDAY THROUGH FRIDAY. PROGRAM 1 SHALL OPERATE AT ALL OTHER TIMES.

1821101t

2016-02-C1-TEMP

Route 27 and Academy Street – Church Street
Franklin Twp., Somerset Co. /
South Brunswick Twp., Middlesex Co.

100-SECOND BACKGROUND CYCLE

Phase	Signal Indications						Time (Sec.)	
	1,2	3,4	5,6	9,10	7,8	11,12	I	II
VEHICLE ACTUATED								
1) Route 27 ROW	G	G	R	DW	W	W	59-45	59-38
Pedestrian Clearance	G	G	R	DW	FDW	FDW	14	14
Change	Y	Y	R	DW	DW	DW	4*	4*
Clearance	R	R	R	DW	DW	DW	2	2
2) Academy Street ROW	R	R	G	DW	DW	DW	7-21	7-28
Change	R	R	Y	DW	DW	DW	3	3
Clearance	R	R	R	DW	DW	DW	2	2
3) Route 27 S/B Lead	R	G/<G-	R	DW	DW	W	6	6
Lead Clearance	R	G/<Y-	R	DW	DW	W	3	3
Emergency Flash	Y	Y	R	DARK	DARK	DARK	-	-
WITH PEDESTRIAN ACTUATION								
1) Route 27 ROW	G	G	R	DW	W	W	59-45	49-38
Pedestrian Clearance	G	G	R	DW	FDW	FDW	14	14
Change	Y	Y	R	DW	DW	DW	4	4
Clearance	R	R	R	DW	DW	DW	2	2
2) Academy Street ROW	R	R	G	W	DW	DW	7	7
Pedestrian Clearance	R	R	G	FDW	DW	DW	10	10
Vehicle Extension	R	R	G	DW	DW	DW	0-4	0-11
Change	R	R	Y	DW	DW	DW	3	3
Clearance	R	R	R	DW	DW	DW	2	2
3) Route 27 S/B Lead	R	G/<G-	R	DW	DW	W	6	6
Lead Clearance	R	G/<Y-	R	DW	DW	W	3	3

*The offset of 0 seconds is measured from the beginning of yellow at Heathcote Road – Laurel Avenue to the beginning of yellow to Route 27 at this intersection.

The memory is to be disconnected and the vehicle extension set at 2.0 seconds.

The manual control is to be disconnected.

Timing Schedule: Timing Schedule II / 4:00 – 6:00 P.M., Monday – Friday

Timing Schedule I / All Other Times

1216106t

2016-03-C1-TEMP

Route NJ 27 & Laurel Ave-Heathcote Rd
South Brunswick Township, Middlesex County
Franklin Township, Somerset County

100 SECOND BACKGROUND CYCLE

PHASE		Signal Indications 1,2	3,4	5,6	7,8	TIME (SECONDS)
1.	**Route NJ 27 ROW**	G	G	R	R	81-60
	Change	Y	Y	R	R	4*
	Clearance	R	R	R	R	2
2.	**Heathcote Road-Laurel Avenue ROW**	R	R	G	G	8-29
	Change	R	R	Y	Y	3
	Clearance	R	R	R	R	2
	Emergency Flash	Y	Y	R	R	--

*An offset of 0 seconds is measured from the beginning of yellow to Route NJ 27 at this intersection.

The memory is to be ON and the vehicle interval is to be set at 3 seconds.

Manual control is to remain disconnected.

Actuation of pedestrian push button shall provide minimum side street green.

05/24/02

Traffic Signal Timing

Mapleton Road & Seminary Drive
Plainsboro Township
Middlesex County, NJ

74-95 SECOND MAXIMUM VARIABLE CYCLE LENGTH

PHASE	SIGNAL FACES 1,2	3,13	4,5	6,14	7-12,15	P1-P4	P5-P8	Time
Normal Operation								
A. Mapleton Rd / Seminary Dr Lead Lefts	<G/R	R	<G/R	R	R	DW	DW	5-7
Change	<Y/R	R	<Y/R	R	R	DW	DW	3
B. Mapleton Rd / Seminary Dr N/S ROW	G	G	G	G	R	DW	DW	44
Change	Y	Y	Y	Y	R	DW	DW	5
Clearance	R	R	R	R	R	DW	DW	2
C. Mapleton Rd E/W ROW	R	R	R	R	G	DW	DW	7-15
Change	R	R	R	R	Y	DW	DW	5
Clearance	R	R	R	R	R	DW	DW	3
With Pedestrian Actuation								
A. Mapleton Rd / Seminary Dr Lead Lefts	<G/R	R	<G/R	R	R	DW	DW	5-7
Change	<Y/R	R	<Y/R	R	R	DW	DW	3
B. Mapleton Rd / Seminary Dr N/S ROW	G	G	G	G	R	W	DW	31
Pedestrian Clearance	G	G	G	G	R	FDW	DW	13
Change	Y	Y	Y	Y	R	DW	DW	5
Clearance	R	R	R	R	R	DW	DW	2
C. Mapleton Rd E/W ROW	R	R	R	R	G	DW	W	10
Pedestrian Clearance	R	R	R	R	G	DW	FDW	16
Change	R	R	R	R	Y	DW	DW	5
Clearance	R	R	R	R	R	DW	DW	3
EMERGENCY FLASH	Y	Y	Y	Y	R	DARK	DARK	

1. The vehicle memories are to be disconnected and their extensions set at 2.0 seconds.
2. The manual control is to be disconnected.
3. Minimum recall switch is to be OFF.
4. The left turn slots (phase A) are to be separate phases but concurrently timed if actuation occurs in both slots. Each left turn slot is to have the capability of operating independently of each other, thereby reverting the time to the non-conflicting through movement.
5. The signal shall rest in Phase B, Mapleton Rd / Seminary Dr N/S ROW.
6. Phase B shall always follow Phase A.

L-9 7/71

New Jersey Department of Transportation

TRAFFIC ENGINEERING – ELECTRICAL PROJECT

Number 851

MAINTENANCE BUREAU

Job No.	6618102-4725 STC
Memo to	Mrs. D. Andres
Attention	Mr. E. Ellis-Dist. # 3

Route No.	Scudders Mill Rd.-& College Rd. East-Driveway
Location	PLAINSBORO TWP-Middlesex Co.
Date	May 10, 1988

Please void all previous directives and employ the attached revised timing schedule and operation (NOTE CHANGE IN P.P.B. OPERATION):

AUTHORIZATION: E. ANDERSON (HDB)

HDB:WEA:JOB

Date Completed	5-23-88
By	DAVID

Copies: Blue
Pink
Green
White

TITLE:CHIEF, BUREAU OF ELECTRICAL ENGINEERING

PLA-054

6618102001-3

Directive #851

Scudders Mill Road and
College Road East - Driveway
Plainsboro Township
Middlesex County

71-111 SECOND VARIABLE CYCLE

PHASES AND SIGNALS

		Phase 6 1,6,7	Phase 5 2,3	Phase 2 4,5,10	Phase 1 8,9	Phase 4 11-14	Phase 3 15,18,19	Phase 3 16,17	Time (Seconds)
1 + 5	Scudders Mill Road Left Turns	R	<--	R	<--	R	R	R	6-15
	Change	R	Y	R	Y	R	R	R	3
-	Clearance	R	R	R	R	R	R	R	2
2 + 6	Scudders Mill Road	G	R	G	R	R	R	R	30 (min.)
	Change	Y	R	Y	R	R	R	R	5
	Clearance	R	R	R	R	R	R	R	2
3	College Road East	R	R	R	R	R	G	<--	6-23*
	Change	R	R	R	R	R		Y	4
	Clearance	R	R	R	R	R	R	R	2
4	Driveway	R	R	R	R	G	R	R	6-20*
	Change	R	R	R	R	Y	R	R	3
	Clearance	R	R	R	R	R	R	R	2
	Emergency Flash	Y	R	Y	R	R	R	R	

PL4-004

The Scudders Mill Road left turn slots (Phase 1 + Phase 5) are to be separate phases but concurrently timed if actuations occur in both slots. Each slot shall have the capability of terminating or extending independently, thereby reverting the timing to the non-conflicting Phase 2 or Phase 6 movement.

The vehicular memories for phases 1, 3, 4 and 5 are to be disconnected and their extensions set at 2.0 seconds.

- The manual control is to be removed.

*Pedestrian pushbutton across the College Road East leg of the intersection shall call phase 3 for the maximum green of 23 seconds.

*Pedestrian pushbutton across the driveway leg of the intersection shall call phase 4 for the maximum green of 20 seconds.

NOTE: All costs for labor and material involved in both the routine and emergency maintenance of th signal are to be carefully recorded. All costs will be paid by Middlesex County.

PLA-004

Intersection: **PLA-004: Scudders Mill Road & College Road East**

	Signal Parameters			Existing System		Retrofit System		Savings
	Signal Heads	Source	Size (inches)	Type	Watts per Unit	Type	Watts per Unit	Watts per Unit
A	1,2,9-11,18,19	R	8	Incad.	135.0	LED	8.0	127.0
B		Y	8	Incad.	135.0	Incad.	135.0	0.0
C	,10,11,14,18,19	G	8	Incad.	135.0	LED	7.0	128.0
D	3-8,12,13,15,16	R	12	Incad.	135.0	LED	14.0	121.0
E		Y	12	Incad.	135.0	Incad.	135.0	0.0
F	4-7,12,13,15,16	G	12	Incad.	135.0	LED	12.0	123.0
G	2,3,8,9	G>	12	Incad.	50.0	LED	5.5	44.5
H								0.0
I								0.0
J								0.0
K								0.0
L								0.0
M								0.0

Operating Schedule Description Without Pedestrian Actuation

PSE&G Method

Interval (from timing schedule)	Interval Length (Seconds)			Number of Signals Operating by Source												Power Usage Post Retrofit	
				8" R	8" Y	8" G	12" R	12" Y	12" G	12" G>							
				1,2,9-11,14,18,19		1,10,11, 14,18,19	3-8,12,13,15,16		4-7, 12, 13,15,16	2,3,8,9						kW	k
	Min.	Max.	Avg.	A	B	C	D	E	F	G	H	I	J	K	L	M	
1. Scudders Mill Left	6	15	10.5	6	0	0	8	0	0	4							0.182	
Change	3	3	3	6	2	0	8	2	0	0							0.700	
Clear	2	2	2	8	0	0	10	0	0	0							0.204	
2. Scudders Mill ROW	30	30	30	6	0	2	6	0	4	0							0.194	
Change	5	5	5	6	2	0	6	4	0	0							0.942	
Clear	2	2	2	8	0	0	10	0	0	0							0.204	
3. College Road East	6	23	14.5	6	0	2	8	0	1	1							0.192	2.
Change	4	4	4	6	2	0	8	2	0	0							0.700	
Clear	2	2	2	8	0	0	10	0	0	0							0.204	
4. Driveway	6	20	13	6	0	2	8	0	2	0							0.198	
Change	3	3	3	6	2	0	8	2	0	0							0.700	
Clear	2	2	2	8	0	0	10	0	0	0							0.204	
			0														0.000	
	Total Avg.		91															

Weighed Average Savings this Int

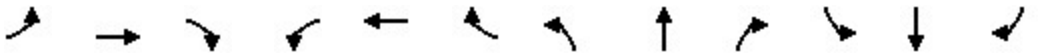
EXISTING SIGNAL USAGE			RETROFIT SIGNAL USAGE			RETROFIT SIGNAL SAVIN
Usage in this 24 hour period:	**57.05**	**kWh**	**Usage in this 24 hour period:**	**6.97**	**kWh**	**Savings in this 24 hour period:**
Monthly Usage:	**1711.60**	**kWh**	**Monthly Usage:**	**209.07**	**kWh**	**Monthly Savings:**

Note: In any particular phase the power usage is calculated by summing the products of the signal sources and the watts per unit.

APPENDIX D
CAPACITY ANALYSIS

AM PROJECTED

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	234	98	206	326	55	0	1737	0	0	2845	0
Future Volume (vph)	68	234	98	206	326	55	0	1737	0	0	2845	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.978							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1524	1770	1792	0	0	4975	0	0	5022	0
Flt Permitted	0.183			0.180								
Satd. Flow (perm)	341	1863	1524	335	1792	0	0	4975	0	0	5022	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80		5							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	6%	2%	4%	2%	0%	7%	0%	0%	6%	0%
Adj. Flow (vph)	76	260	109	229	362	61	0	1930	0	0	3161	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	260	109	229	423	0	0	1930	0	0	3161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

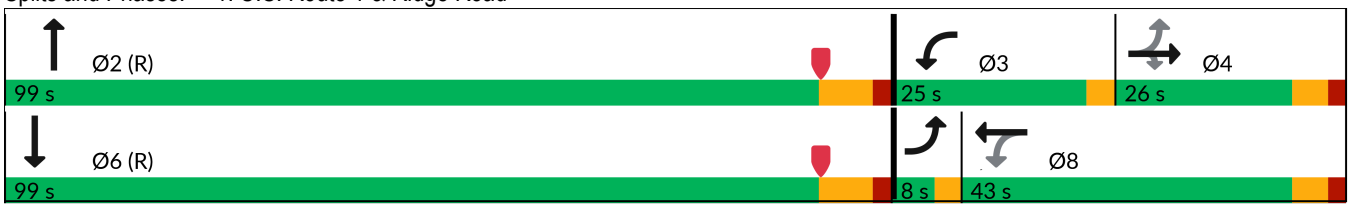


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	26.0	26.0	25.0	43.0			99.0			99.0	
Total Split (%)	5.3%	17.3%	17.3%	16.7%	28.7%			66.0%			66.0%	
Maximum Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Dont Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	31.3	23.3	23.3	48.0	37.0			94.0			94.0	
Actuated g/C Ratio	0.21	0.16	0.16	0.32	0.25			0.63			0.63	
v/c Ratio	0.64	0.90	0.36	0.80	0.95			0.62			1.00	
Control Delay (s/veh)	66.0	94.4	23.0	61.1	86.5			16.0			45.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	66.0	94.4	23.0	61.1	86.5			16.0			45.0	
LOS	E	F	C	E	F			B			D	
Approach Delay (s/veh)		72.0			77.6			16.0			45.0	
Approach LOS		E			E			B			D	
90th %ile Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	22.2	22.2	19.8	37.0			91.0			91.0	
50th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
30th %ile Green (s)	5.0	25.1	25.1	16.9	37.0			91.0			91.0	
30th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
10th %ile Green (s)	5.0	29.0	29.0	13.0	37.0			91.0			91.0	
10th %ile Term Code	Max	Max	Max	Gap	Hold			Coord			Coord	
Stops (vph)	57	196	30	158	338			884			2513	
Fuel Used(gal)	2	7	1	5	12			26			79	
CO Emissions (g/hr)	108	466	60	363	859			1801			5515	
NOx Emissions (g/hr)	21	91	12	71	167			350			1073	
VOC Emissions (g/hr)	25	108	14	84	199			417			1278	
Dilemma Vehicles (#)	0	7	0	0	12			58			92	
Queue Length 50th (ft)	54	256	25	176	407			400			~1099	
Queue Length 95th (ft)	#107	#460	88	#259	#621			355			#1247	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	118	288	303	317	445			3117			3147	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.64	0.90	0.36	0.72	0.95			0.62			1.00	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 112 (75%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 41.3		Intersection LOS: D	
Intersection Capacity Utilization 90.7%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	57	0	10	0	3	0	1966	101	0	3103	0
Future Volume (vph)	11	57	0	10	0	3	0	1966	101	0	3103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.993				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						124		19				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			361	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	11%	0%	0%	0%	8%	0%	0%	5%	0%
Adj. Flow (vph)	12	64	0	11	0	3	0	2209	113	0	3487	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	64	0	11	0	3	0	2322	0	0	3487	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	

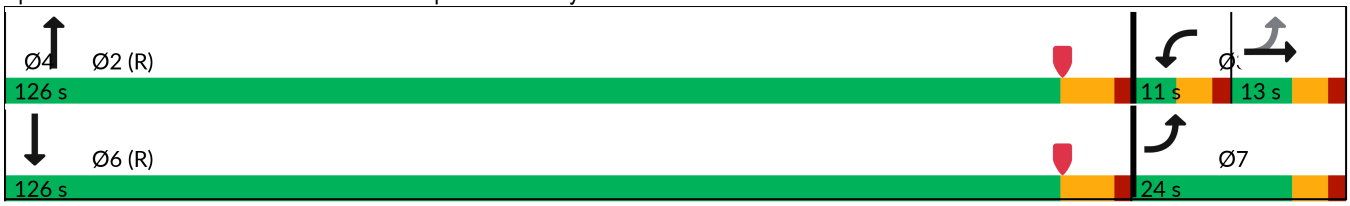
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				126.0			126.0	
Total Split (%)	16.0%	8.7%		7.3%				84.0%			84.0%	
Maximum Green (s)	18.0	7.0		5.0				118.0			118.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	12.3	7.9		5.1		150.0		126.7			126.7	
Actuated g/C Ratio	0.08	0.05		0.03		1.00		0.84			0.84	
v/c Ratio	0.04	0.65		0.20		0.00		0.56			0.81	
Control Delay (s/veh)	50.5	73.7		79.0		0.0		4.3			5.8	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	50.5	73.7		79.0		0.0		4.3			5.8	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		70.0			62.1			4.3			5.8	
Approach LOS		E			E			A			A	
90th %ile Green (s)	18.0	7.0		5.0				118.0			118.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				118.0			118.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	0.0	10.0		0.0				126.0			126.0	
50th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
30th %ile Green (s)	0.0	8.4		0.0				127.6			127.6	
30th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
10th %ile Green (s)	0.0	7.0		0.0				129.0			129.0	
10th %ile Term Code	Skip	Min		Skip				Coord			Coord	
Stops (vph)	11	49		11		0		555			772	
Fuel Used(gal)	0	1		0		0		26			29	
CO Emissions (g/hr)	16	97		21		1		1814			2029	
NOx Emissions (g/hr)	3	19		4		0		353			395	
VOC Emissions (g/hr)	4	22		5		0		420			470	
Dilemma Vehicles (#)	0	1		0		0		69			109	
Queue Length 50th (ft)	5	57		11		0		166			301	
Queue Length 95th (ft)	m6	m66		34		0		275			m99	
Internal Link Dist (ft)		319			684			451			281	
Turn Bay Length (ft)						300						
Base Capacity (vph)	420	99		55		1615		4152			4283	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03	0.65		0.20		0.00		0.56			0.81	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	107	369	0	0	372	61	0	0	191	0	0	0
Future Volume (vph)	107	369	0	0	372	61	0	0	191	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3433	3539	0	0	3505	1583	0	0	1611	0	0	0
Flt Permitted	0.402											
Satd. Flow (perm)	1453	3539	0	0	3505	1583	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			684			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	0%	0%	3%	2%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	116	401	0	0	404	66	0	0	208	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	401	0	0	404	66	0	0	208	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

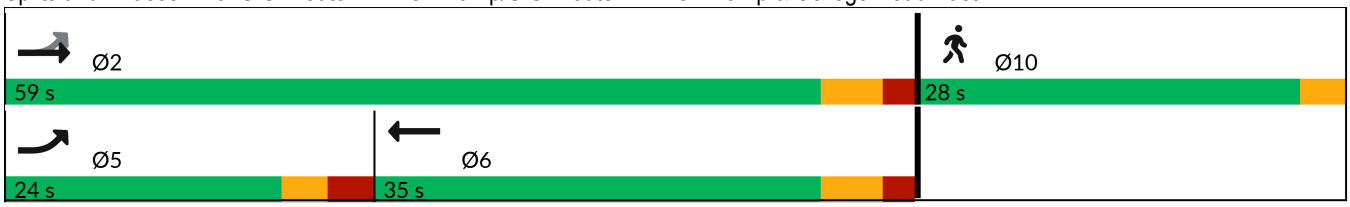
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	31.9	37.9			22.6	37.9			37.9			
Actuated g/C Ratio	0.84	1.00			0.60	1.00			1.00			
v/c Ratio	0.07	0.11			0.19	0.04			0.13			
Control Delay (s/veh)	0.6	0.1			5.4	0.0			0.2			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.6	0.1			5.4	0.0			0.2			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.2			4.7			0.2				
Approach LOS		A			A			A				
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	37.7			24.7							
30th %ile Term Code	Min	Dwell			Dwell							
10th %ile Green (s)	0.0	32.0			32.0							
10th %ile Term Code	Skip	Dwell			Dwell							
Stops (vph)	10	0			174	0			0			
Fuel Used(gal)	0	1			12	2			2			
CO Emissions (g/hr)	26	64			854	116			122			
NOx Emissions (g/hr)	5	12			166	23			24			
VOC Emissions (g/hr)	6	15			198	27			28			
Dilemma Vehicles (#)	0	0			37	0			0			
Queue Length 50th (ft)	0	0			21	0			0			
Queue Length 95th (ft)	0	0			37	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2166	3539			2860	1583			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

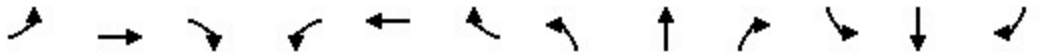
Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Dont Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.05	0.11			0.14	0.04			0.13			

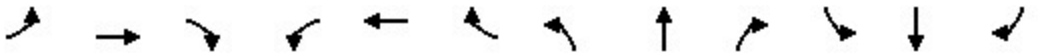
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 37.9			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.19			
Intersection Signal Delay (s/veh): 2.0		Intersection LOS: A	
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 43.7			
10th %ile Actuated Cycle: 38			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	619	12	0	592	0	15	0	90	1	131	0
Future Volume (vph)	0	619	12	0	592	0	15	0	90	1	131	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950					
Satd. Flow (prot)	0	3530	0	0	3539	0	1805	0	1568	0	3506	0
Flt Permitted							0.702					
Satd. Flow (perm)	0	3530	0	0	3539	0	1334	0	1568	0	3506	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							98			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		350			259			325			205	
Travel Time (s)		6.0			4.4			7.4			4.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	3%	0%	3%	0%
Adj. Flow (vph)	0	673	13	0	643	0	16	0	98	1	142	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	686	0	0	643	0	16	0	98	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

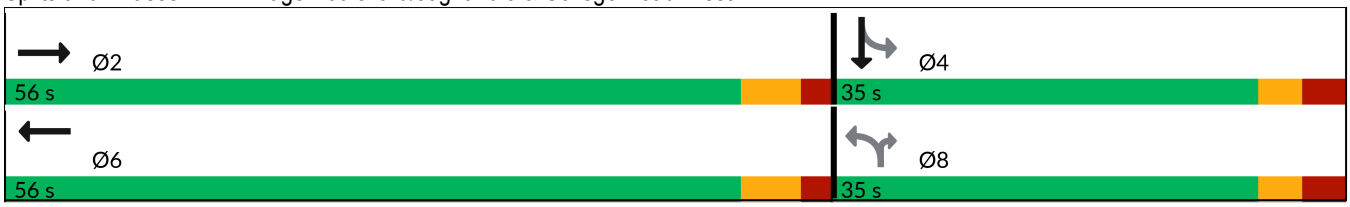


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		19.0			19.0		7.0		7.0		7.0	
Actuated g/C Ratio		0.55			0.55		0.20		0.20		0.20	
v/c Ratio		0.35			0.33		0.06		0.25		0.20	
Control Delay (s/veh)		6.6			6.5		11.5		5.3		12.1	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		6.6			6.5		11.5		5.3		12.1	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		6.6			6.5			6.2			12.1	
Approach LOS		A			A			A			B	
90th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
90th %ile Term Code		Min			Min		Min		Min	Min	Min	
70th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
70th %ile Term Code		Min			Min		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		345			319		16		24		103	
Fuel Used(gal)		6			5		0		1		1	
CO Emissions (g/hr)		401			347		13		40		77	
NOx Emissions (g/hr)		78			67		2		8		15	
VOC Emissions (g/hr)		93			80		3		9		18	
Dilemma Vehicles (#)		63			59		0		0		0	
Queue Length 50th (ft)		40			37		2		0		12	
Queue Length 95th (ft)		64			60		11		20		26	
Internal Link Dist (ft)		270			179			245			125	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3530			3539		1124		1337		2957	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.19			0.18		0.01		0.07		0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 34.4			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 44.2%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 34			
70th %ile Actuated Cycle: 34			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



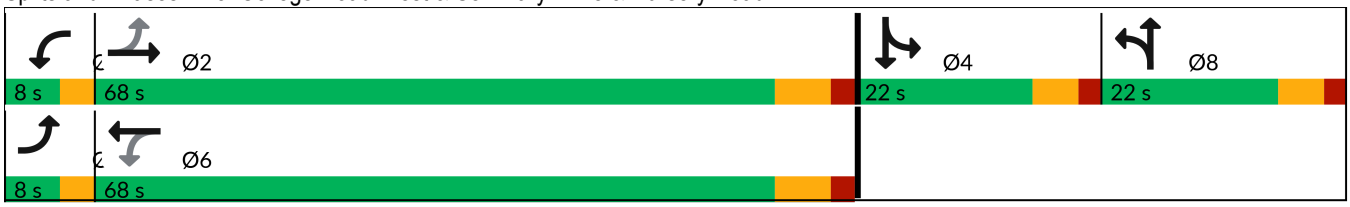
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	562	98	235	490	1	38	3	72	1	1	0
Future Volume (vph)	1	562	98	235	490	1	38	3	72	1	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	0		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.978				0.850		0.857				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3496	0	1787	1863	1615	1687	1513	0	1643	3458	0
Flt Permitted	0.415			0.299			0.950			0.950		
Satd. Flow (perm)	788	3496	0	562	1863	1615	1687	1513	0	1643	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				173		86				
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		1646			423			875			1364	
Travel Time (s)		28.1			7.2			14.9			26.6	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	7%	0%	8%	0%	0%	0%
Adj. Flow (vph)	1	669	117	280	583	1	45	4	86	1	1	0
Shared Lane Traffic (%)										35%		
Lane Group Flow (vph)	1	786	0	280	583	1	45	90	0	1	1	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	41.5	32.2		44.1	41.1	59.3	6.4	6.4		7.2	7.2	
Actuated g/C Ratio	0.70	0.54		0.74	0.69	1.00	0.11	0.11		0.12	0.12	
v/c Ratio	0.00	0.41		0.53	0.45	0.00	0.25	0.38		0.01	0.00	
Control Delay (s/veh)	5.0	10.1		9.9	9.6	0.0	31.1	13.4		29.0	29.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.0	10.1		9.9	9.6	0.0	31.1	13.4		29.0	29.0	
LOS	A	B		A	A	A	C	B		C	C	
Approach Delay (s/veh)		10.1			9.7			19.3			29.0	
Approach LOS		B			A			B			C	
90th %ile Green (s)	5.0	37.4		5.0	37.4		9.3	9.3		7.0	7.0	
90th %ile Term Code	Max	Hold		Max	Gap		Gap	Gap		Min	Min	
70th %ile Green (s)	0.0	30.0		5.0	38.0		6.6	6.6		0.0	0.0	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
50th %ile Green (s)	0.0	30.0		5.0	38.0		5.9	5.9		0.0	0.0	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
30th %ile Green (s)	0.0	30.0		5.0	38.0		5.3	5.3		0.0	0.0	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
10th %ile Green (s)	0.0	30.0		5.0	38.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Min		Max	Hold		Skip	Skip		Skip	Skip	
Stops (vph)	1	351		73	236	0	35	20		3	3	
Fuel Used(gal)	0	14		2	5	0	1	1		0	0	
CO Emissions (g/hr)	2	981		142	352	0	57	60		3	3	
NOx Emissions (g/hr)	0	191		28	68	0	11	12		1	1	
VOC Emissions (g/hr)	0	227		33	81	0	13	14		1	1	
Dilemma Vehicles (#)	0	42		0	27	0	0	4		0	0	
Queue Length 50th (ft)	0	74		20	75	0	14	1		0	0	
Queue Length 95th (ft)	2	165		86	292	0	48	37		5	2	
Internal Link Dist (ft)		1566			343			795			1284	
Turn Bay Length (ft)	150									400		
Base Capacity (vph)	639	3326		525	1772	1615	471	484		459	966	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.00	0.24		0.53	0.33	0.00	0.10	0.19		0.00	0.00	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 59.3			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay (s/veh): 10.6		Intersection LOS: B	
Intersection Capacity Utilization 61.0%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80.7			
70th %ile Actuated Cycle: 57.6			
50th %ile Actuated Cycle: 56.9			
30th %ile Actuated Cycle: 56.3			
10th %ile Actuated Cycle: 45			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	311	656	293	441	5	271	148	56	0	0	0
Future Volume (vph)	14	311	656	293	441	5	271	148	56	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.984				
Flt Protected		0.998		0.950				0.972				
Satd. Flow (prot)	0	1841	1641	1834	1837	0	0	1799	0	0	0	0
Flt Permitted		0.973		0.479				0.972				
Satd. Flow (perm)	0	1794	1641	925	1837	0	0	1799	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			737		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		509			588			1050			585	
Travel Time (s)		9.9			16.0			23.9			13.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	6%	1%	1%	6%	0%	0%	1%	6%	0%	0%	0%
Adj. Flow (vph)	16	349	737	329	496	6	304	166	63	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	365	737	329	502	0	0	533	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

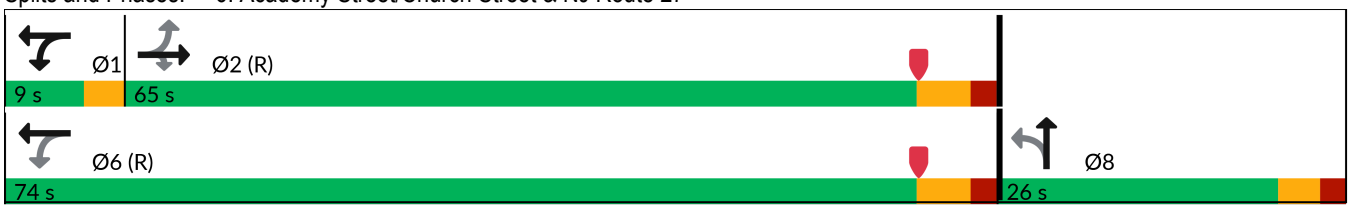
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Dont Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.34	0.58	0.46	0.38			1.41				
Control Delay (s/veh)		11.7	2.8	4.7	4.1			233.5				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		11.7	2.8	4.7	4.1			233.5				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		5.7			4.4			233.5				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		159	34	64	112			362				
Fuel Used(gal)		3	3	2	3			45				
CO Emissions (g/hr)		221	212	139	213			3155				
NOx Emissions (g/hr)		43	41	27	41			614				
VOC Emissions (g/hr)		51	49	32	49			731				
Dilemma Vehicles (#)		16	0	0	0			0				
Queue Length 50th (ft)		111	0	39	69			~459				
Queue Length 95th (ft)		165	42	m50	m83			#651				
Internal Link Dist (ft)		429			508			970			505	
Turn Bay Length (ft)												
Base Capacity (vph)		1058	1270	711	1304			377				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Dont Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.34	0.58	0.46	0.38			1.41				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.41			
Intersection Signal Delay (s/veh): 54.5		Intersection LOS: D	
Intersection Capacity Utilization 110.8%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	342	6	62	529	40	26	227	29	67	190	198
Future Volume (vph)	21	342	6	62	529	40	26	227	29	67	190	198
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.991			0.986			0.941	
Flt Protected		0.997			0.995			0.995			0.993	
Satd. Flow (prot)	0	2077	0	0	2052	0	0	1771	0	0	1727	0
Flt Permitted		0.950			0.923			0.885			0.834	
Satd. Flow (perm)	0	1979	0	0	1903	0	0	1575	0	0	1450	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		588			1371			1875			956	
Travel Time (s)		16.0			26.7			51.1			18.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	6%	0%	5%	6%	11%	13%	4%	8%	2%	5%	1%
Adj. Flow (vph)	22	364	6	66	563	43	28	241	31	71	202	211
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	392	0	0	672	0	0	300	0	0	484	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.33			0.59			0.66			1.15	
Control Delay (s/veh)		7.0			15.0			39.2			126.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		7.0			15.0			39.2			126.7	
LOS		A			B			D			F	
Approach Delay (s/veh)		7.0			15.0			39.2			126.7	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		104			376			243			373	
Fuel Used(gal)		3			11			18			18	
CO Emissions (g/hr)		194			770			1235			1236	
NOx Emissions (g/hr)		38			150			240			241	
VOC Emissions (g/hr)		45			178			286			287	
Dilemma Vehicles (#)		0			32			0			19	
Queue Length 50th (ft)		71			245			167			~365	
Queue Length 95th (ft)		m93			352			262			#561	
Internal Link Dist (ft)		508			1291			1795			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1187			1141			456			420	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.33			0.59			0.66			1.15	

Intersection Summary

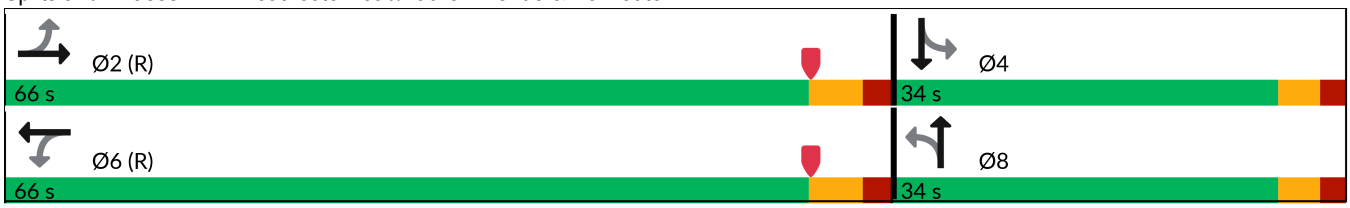
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay (s/veh): 46.5		Intersection LOS: D	
Intersection Capacity Utilization 99.0%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

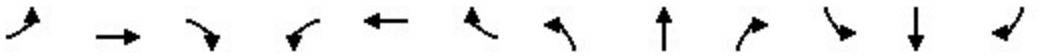
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	6	38	41	20	28	9	281	18	10	638	205
Future Volume (vph)	93	6	38	41	20	28	9	281	18	10	638	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.957			0.991			0.964	
Flt Protected		0.967			0.978		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1650	0	1805	1823	0	1805	1813	0
Flt Permitted		0.738			0.820		0.143			0.562		
Satd. Flow (perm)	0	1349	0	0	1383	0	272	1823	0	1068	1813	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			24			6			29	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		876			237			415			370	
Travel Time (s)		13.3			6.5			7.1			6.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	17%	0%	0%	0%	1%	39%	0%	1%	1%
Adj. Flow (vph)	102	7	42	45	22	31	10	309	20	11	701	225
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	151	0	0	98	0	10	329	0	11	926	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

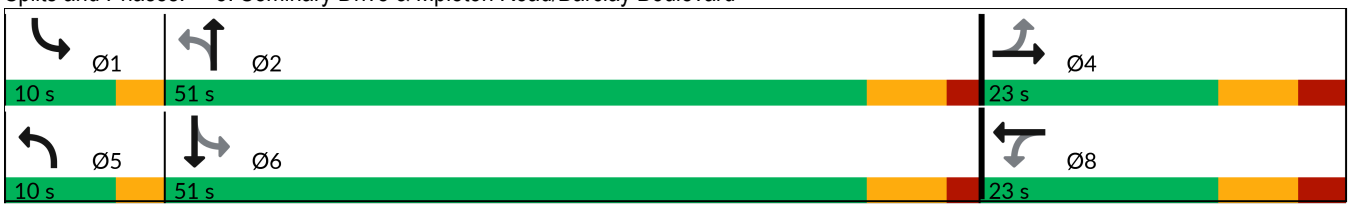


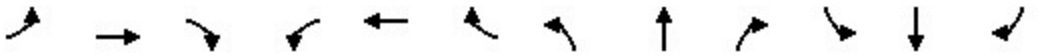
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		11.0			11.0		49.2	44.3		49.2	44.3	
Actuated g/C Ratio		0.15			0.15		0.69	0.62		0.69	0.62	
v/c Ratio		0.67			0.42		0.03	0.29		0.01	0.82	
Control Delay (s/veh)		40.7			27.8		4.3	8.2		4.2	20.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		40.7			27.8		4.3	8.2		4.2	20.0	
LOS		D			C		A	A		A	C	
Approach Delay (s/veh)		40.7			27.8			8.1			19.9	
Approach LOS		D			C			A			B	
90th %ile Green (s)	15.0	15.0		15.0	15.0		5.0	44.0		5.0	44.0	
90th %ile Term Code	Max	Max		Hold	Hold		Min	Max		Min	Max	
70th %ile Green (s)	13.7	13.7		13.7	13.7		0.0	44.0		0.0	44.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
50th %ile Green (s)	11.2	11.2		11.2	11.2		0.0	44.0		0.0	44.0	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
30th %ile Green (s)	8.9	8.9		8.9	8.9		0.0	44.0		0.0	44.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
10th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Min	Min		Hold	Hold		Skip	Max		Skip	Max	
Stops (vph)		108			60		4	130		4	558	
Fuel Used(gal)		3			1		0	6		0	41	
CO Emissions (g/hr)		228			64		12	416		30	2874	
NOx Emissions (g/hr)		44			12		2	81		6	559	
VOC Emissions (g/hr)		53			15		3	97		7	666	
Dilemma Vehicles (#)		8			0		0	20		0	56	
Queue Length 50th (ft)		54			29		1	55		1	255	
Queue Length 95th (ft)		123			78		6	140		6	#689	
Internal Link Dist (ft)		796			157			335			290	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		299			309		338	1126		808	1129	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.51			0.32		0.03	0.29		0.01	0.82	

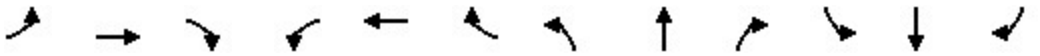
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 71.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 19.8		Intersection LOS: B	
Intersection Capacity Utilization 70.3%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82			
70th %ile Actuated Cycle: 72.7			
50th %ile Actuated Cycle: 70.2			
30th %ile Actuated Cycle: 67.9			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	531	6	1	1327	327	9	2	3	152	0	98
Future Volume (vph)	36	531	6	1	1327	327	9	2	3	152	0	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.971				0.850
Flt Protected	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (prot)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Flt Permitted	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (perm)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			245		3				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		612			1998			444			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	5%	0%	0%	2%	1%	0%	0%	0%	7%	0%	0%
Adj. Flow (vph)	38	559	6	1	1397	344	9	2	3	160	0	103
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	38	559	6	1	1397	344	0	14	0	80	80	103
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

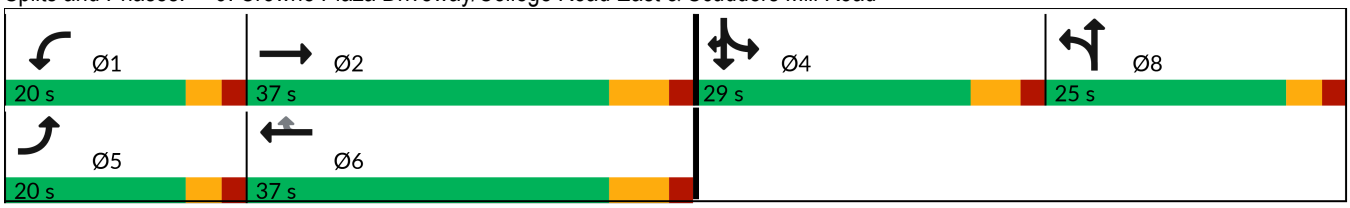


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.6	34.5	59.1	6.2	32.1	32.1		6.2		7.8	7.8	7.8
Actuated g/C Ratio	0.11	0.58	1.00	0.10	0.54	0.54		0.10		0.13	0.13	0.13
v/c Ratio	0.19	0.28	0.00	0.01	0.73	0.35		0.07		0.38	0.38	0.31
Control Delay (s/veh)	30.0	8.5	0.0	30.0	17.0	5.2		27.4		31.2	31.2	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	30.0	8.5	0.0	30.0	17.0	5.2		27.4		31.2	31.2	5.8
LOS	C	A	A	C	B	A		C		C	C	A
Approach Delay (s/veh)		9.8			14.6			27.4			21.3	
Approach LOS		A			B			C			C	
90th %ile Green (s)	8.1	32.1		6.0	30.0	30.0	6.2	6.2		11.5	11.5	11.5
90th %ile Term Code	Gap	Hold		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	6.4	41.4		0.0	30.0	30.0	0.0	0.0		8.6	8.6	8.6
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		7.4	7.4	7.4
50th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.0	6.0	6.0
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Min	Min	Min
10th %ile Green (s)	0.0	35.4		0.0	35.4	35.4	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Skip	Dwell		Skip	Dwell	Dwell	Skip	Skip		Min	Min	Min
Stops (vph)	33	244	0	3	842	67		14		66	66	10
Fuel Used(gal)	1	11	0	0	34	6		0		4	4	4
CO Emissions (g/hr)	79	745	5	5	2399	386		15		284	284	279
NOx Emissions (g/hr)	15	145	1	1	467	75		3		55	55	54
VOC Emissions (g/hr)	18	173	1	1	556	89		4		66	66	65
Dilemma Vehicles (#)	0	41	0	0	109	0		1		0	5	0
Queue Length 50th (ft)	10	35	0	0	121	11		3		23	23	0
Queue Length 95th (ft)	46	140	0	5	#524	93		22		80	80	25
Internal Link Dist (ft)		532			1918			364			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	472	2009	1615	472	1921	980		625		642	642	730
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.08	0.28	0.00	0.00	0.73	0.35		0.02		0.12	0.12	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 59.1			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	
Intersection Capacity Utilization 62.7%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 78.8			
70th %ile Actuated Cycle: 63			
50th %ile Actuated Cycle: 50.4			
30th %ile Actuated Cycle: 49			
10th %ile Actuated Cycle: 54.4			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	3.7

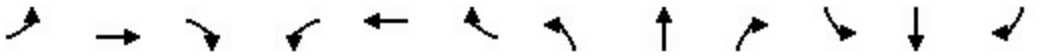
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	50	199	0	243	14	53	346
Future Vol, veh/h	50	199	0	243	14	53	346
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	0	2	0	2	0	2	1
Mvmt Flow	58	231	0	283	16	62	402

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	615	149	402	0	0	299	0
Stage 1	291	-	-	-	-	-	-
Stage 2	324	-	-	-	-	-	-
Critical Hdwy	6.8	6.94	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.32	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	428	870	807	-	-	1259	-
Stage 1	739	-	-	-	-	-	-
Stage 2	711	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	407	870	807	-	-	1259	-
Mov Cap-2 Maneuver	407	-	-	-	-	-	-
Stage 1	739	-	-	-	-	-	-
Stage 2	676	-	-	-	-	-	-

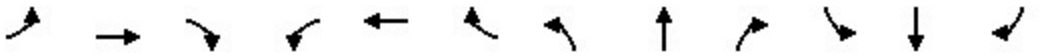
Approach	WB	NB	SB
HCM Control Delay, s/v	11.57	0	1.06
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	807	-	-	407	870	1259	-
HCM Lane V/C Ratio	-	-	-	0.143	0.266	0.049	-
HCM Control Delay (s/veh)	0	-	-	15.3	10.6	8	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	1.1	0.2	-

PM PROJECTED



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	333	57	140	346	118	0	2364	0	0	1620	0
Future Volume (vph)	72	333	57	140	346	118	0	2364	0	0	1620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.962							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1752	1900	1615	1787	1801	0	0	5168	0	0	5219	0
Flt Permitted	0.132			0.127								
Satd. Flow (perm)	243	1900	1615	239	1801	0	0	5168	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60		11							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	0%	0%	1%	2%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	77	358	61	151	372	127	0	2542	0	0	1742	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	358	61	151	499	0	0	2542	0	0	1742	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

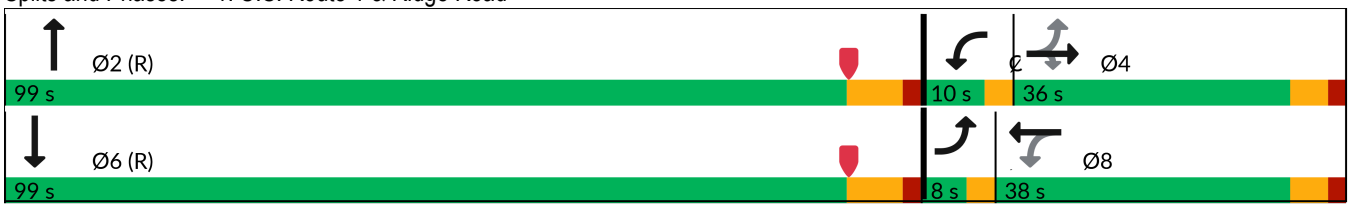


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	10.0	38.0			99.0			99.0	
Total Split (%)	5.5%	24.8%	24.8%	6.9%	26.2%			68.3%			68.3%	
Maximum Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	39.1	30.2	30.2	44.8	33.6			91.4			91.4	
Actuated g/C Ratio	0.27	0.21	0.21	0.31	0.23			0.63			0.63	
v/c Ratio	0.61	0.91	0.16	0.87	1.17			0.78			0.53	
Control Delay (s/veh)	59.8	83.0	11.2	83.4	146.3			20.9			15.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	59.8	83.0	11.2	83.4	146.3			20.9			15.4	
LOS	E	F	B	F	F			C			B	
Approach Delay (s/veh)		70.5			131.7			20.9			15.4	
Approach LOS		E			F			C			B	
90th %ile Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.6	30.0	30.0	7.6	32.0			90.4			90.4	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	8.1	30.0	30.0	10.4	32.3			87.6			87.6	
30th %ile Term Code	Gap	Hold	Hold	Max	Max			Coord			Coord	
10th %ile Green (s)	6.1	30.8	30.8	15.1	39.8			82.1			82.1	
10th %ile Term Code	Gap	Hold	Hold	Gap	Max			Coord			Coord	
Stops (vph)	54	302	10	88	359			1716			849	
Fuel Used(gal)	1	9	0	4	20			47			24	
CO Emissions (g/hr)	104	625	20	270	1384			3280			1704	
NOx Emissions (g/hr)	20	122	4	53	269			638			332	
VOC Emissions (g/hr)	24	145	5	63	321			760			395	
Dilemma Vehicles (#)	0	10	0	0	13			97			56	
Queue Length 50th (ft)	53	336	0	~111	~568			642			303	
Queue Length 95th (ft)	#116	#532	35	#251	#790			402			335	
Internal Link Dist (ft)		77			79			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	127	395	383	174	426			3350			3383	

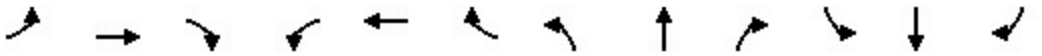
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.61	0.91	0.16	0.87	1.17			0.76			0.51	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 21 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay (s/veh): 36.9		Intersection LOS: D	
Intersection Capacity Utilization 86.6%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	9	0	87	0	38	0	2701	10	0	2034	0
Future Volume (vph)	12	9	0	87	0	38	0	2701	10	0	2034	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			532			361	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	13	9	0	91	0	40	0	2814	10	0	2119	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	9	0	91	0	40	0	2824	0	0	2119	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



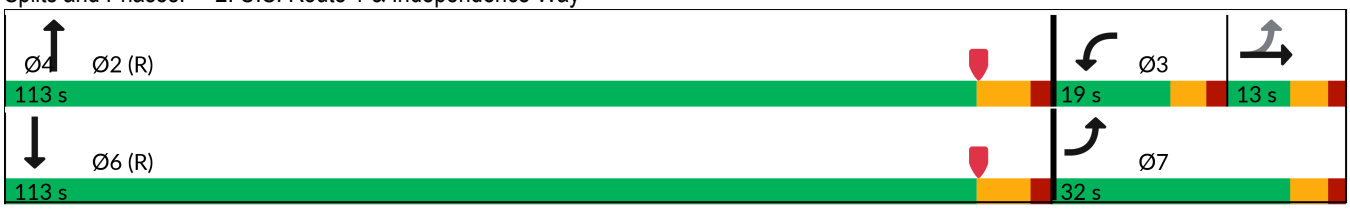
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	32.0	13.0		19.0				113.0			113.0	
Total Split (%)	22.1%	9.0%		13.1%				77.9%			77.9%	
Maximum Green (s)	26.0	7.0		13.0				105.0			105.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	11.6	7.0		11.7		145.0		119.7			119.7	
Actuated g/C Ratio	0.08	0.05		0.08		1.00		0.83			0.83	
v/c Ratio	0.05	0.10		0.63		0.02		0.66			0.49	
Control Delay (s/veh)	62.5	71.6		82.8		0.0		6.7			7.6	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	62.5	71.6		82.8		0.0		6.7			7.6	
LOS	E	E		F		A		A			A	
Approach Delay (s/veh)		66.2			57.5			6.7			7.6	
Approach LOS		E			E			A			A	
90th %ile Green (s)	29.5	7.0		16.5				101.5			101.5	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	13.6	0.0		13.6				117.4			117.4	
70th %ile Term Code	Hold	Skip		Gap				Coord			Coord	
50th %ile Green (s)	0.0	0.0		11.7				119.3			119.3	
50th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
30th %ile Green (s)	0.0	0.0		9.7				121.3			121.3	
30th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
10th %ile Green (s)	0.0	0.0		6.8				124.2			124.2	
10th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
Stops (vph)	12	10		84		0		984			891	
Fuel Used(gal)	0	0		3		0		40			27	
CO Emissions (g/hr)	19	16		180		15		2803			1883	
NOx Emissions (g/hr)	4	3		35		3		545			366	
VOC Emissions (g/hr)	4	4		42		3		650			436	
Dilemma Vehicles (#)	0	1		0		0		94			44	
Queue Length 50th (ft)	6	8		85		0		262			429	
Queue Length 95th (ft)	m9	m19		141		0		589			301	
Internal Link Dist (ft)		319			684			452			281	
Turn Bay Length (ft)						300						
Base Capacity (vph)	644	91		171		1615		4330			4334	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.02	0.10		0.53		0.02		0.65			0.49	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 8.7		Intersection LOS: A	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	113	246	0	0	546	105	0	0	71	0	0	0
Future Volume (vph)	113	246	0	0	546	105	0	0	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.335											
Satd. Flow (perm)	1235	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			787			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			521			621	
Travel Time (s)		6.2			9.5			11.8			14.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.89	0.89	0.93	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	122	265	0	0	587	113	0	0	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	265	0	0	587	113	0	0	76	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

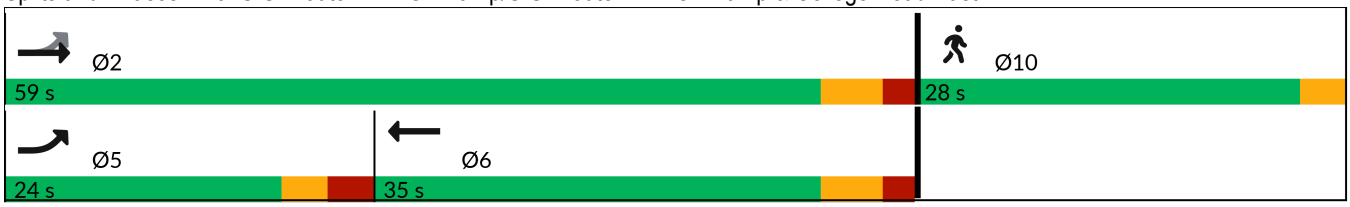
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	31.6	37.6			22.3	37.6			37.6			
Actuated g/C Ratio	0.84	1.00			0.59	1.00			1.00			
v/c Ratio	0.08	0.07			0.27	0.07			0.05			
Control Delay (s/veh)	0.6	0.0			5.8	0.1			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.6	0.0			5.8	0.1			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.2			4.9			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	35.9			22.9							
30th %ile Term Code	Min	Dwell			Dwell							
10th %ile Green (s)	0.0	32.0			32.0							
10th %ile Term Code	Skip	Dwell			Dwell							
Stops (vph)	10	0			266	0			0			
Fuel Used(gal)	0	1			18	3			1			
CO Emissions (g/hr)	27	42			1263	199			45			
NOx Emissions (g/hr)	5	8			246	39			9			
VOC Emissions (g/hr)	6	10			293	46			10			
Dilemma Vehicles (#)	0	0			53	0			0			
Queue Length 50th (ft)	0	0			33	0			0			
Queue Length 95th (ft)	0	0			54	0			0			
Internal Link Dist (ft)		282			478			441			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2126	3574			2966	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

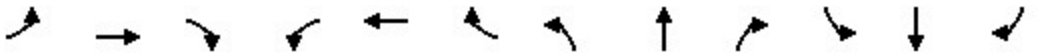
Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.06	0.07			0.20	0.07			0.05			

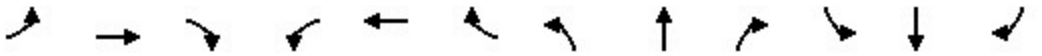
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 37.6			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 3.0		Intersection LOS: A	
Intersection Capacity Utilization 38.9%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 41.9			
10th %ile Actuated Cycle: 38			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	392	16	0	539	0	18	0	114	6	220	0
Future Volume (vph)	0	392	16	0	539	0	18	0	114	6	220	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.994							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3554	0	0	3574	0	1703	0	1583	0	3572	0
Flt Permitted							0.607				0.999	
Satd. Flow (perm)	0	3554	0	0	3574	0	1088	0	1583	0	3572	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							118			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		350			259			324			205	
Travel Time (s)		6.0			4.4			7.4			4.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	6%	0%	2%	0%	1%	0%
Adj. Flow (vph)	0	404	16	0	556	0	19	0	118	6	227	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	420	0	0	556	0	19	0	118	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

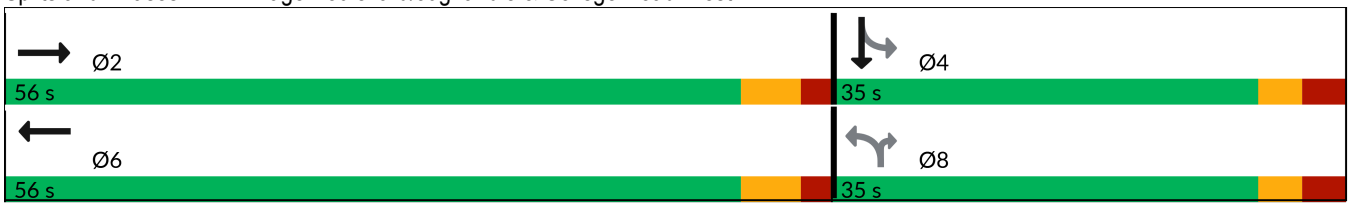


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		15.0			15.0		7.2		7.2		7.2	
Actuated g/C Ratio		0.44			0.44		0.21		0.21		0.21	
v/c Ratio		0.27			0.35		0.08		0.28		0.31	
Control Delay (s/veh)		6.6			7.2		11.8		5.1		12.7	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		6.6			7.2		11.8		5.1		12.7	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		6.6			7.2			6.0			12.7	
Approach LOS		A			A			A			B	
90th %ile Green (s)		15.0			15.0		7.9		7.9	7.9	7.9	
90th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
70th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
70th %ile Term Code		Min			Min		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		221			313		19		27		173	
Fuel Used(gal)		4			5		0		1		2	
CO Emissions (g/hr)		258			337		15		49		133	
NOx Emissions (g/hr)		50			65		3		10		26	
VOC Emissions (g/hr)		60			78		4		11		31	
Dilemma Vehicles (#)		45			60		0		0		0	
Queue Length 50th (ft)		22			31		3		0		18	
Queue Length 95th (ft)		41			55		12		23		36	
Internal Link Dist (ft)		270			179			244			125	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3554			3574		923		1361		3030	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.12			0.16		0.02		0.09		0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 34.2			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay (s/veh): 7.9		Intersection LOS: A	
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 34.9			
70th %ile Actuated Cycle: 34			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



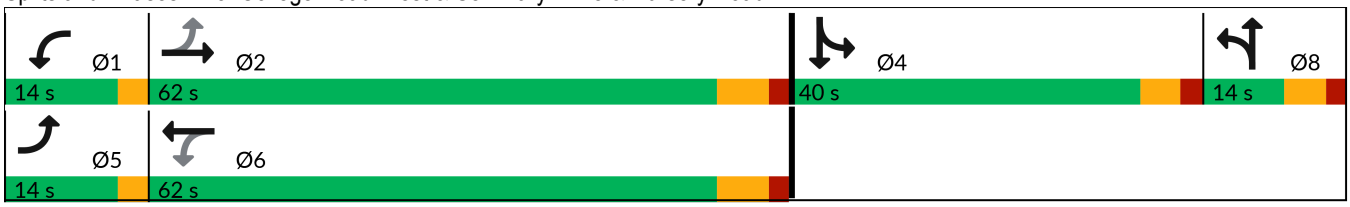
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	291	63	149	470	1	86	1	100	1	3	0
Future Volume (vph)	1	291	63	149	470	1	86	1	100	1	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	0		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.973				0.850		0.851				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3466	0	1736	1881	1615	1805	1585	0	1643	3458	0
Flt Permitted	0.487			0.489			0.950			0.950		
Satd. Flow (perm)	925	3466	0	893	1881	1615	1805	1585	0	1643	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				159		103				
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		1645			423			875			1362	
Travel Time (s)		28.0			7.2			14.9			26.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	3%	4%	1%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	1	300	65	154	485	1	89	1	103	1	3	0
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	1	365	0	154	485	1	89	104	0	1	3	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	14.0	62.0		14.0	62.0		14.0	14.0		40.0	40.0	
Total Split (%)	10.8%	47.7%		10.8%	47.7%		10.8%	10.8%		30.8%	30.8%	
Maximum Green (s)	11.0	55.0		11.0	55.0		8.0	8.0		34.0	34.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	39.4	30.3		43.8	38.5	62.7	7.6	7.6		7.1	7.1	
Actuated g/C Ratio	0.63	0.48		0.70	0.61	1.00	0.12	0.12		0.11	0.11	
v/c Ratio	0.00	0.22		0.22	0.42	0.00	0.40	0.37		0.01	0.01	
Control Delay (s/veh)	5.0	10.2		4.8	9.7	0.0	33.3	11.5		29.0	28.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.0	10.2		4.8	9.7	0.0	33.3	11.5		29.0	28.3	
LOS	A	B		A	A	A	C	B		C	C	
Approach Delay (s/veh)		10.2			8.5			21.5			28.5	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		9.2	34.2		8.0	8.0		7.0	7.0	
90th %ile Term Code	Min	Min		Gap	Hold		Max	Max		Min	Min	
70th %ile Green (s)	0.0	30.0		6.5	39.5		8.0	8.0		0.0	0.0	
70th %ile Term Code	Skip	Min		Gap	Hold		Max	Max		Skip	Skip	
50th %ile Green (s)	0.0	30.0		6.1	39.1		8.0	8.0		0.0	0.0	
50th %ile Term Code	Skip	Min		Gap	Hold		Max	Max		Skip	Skip	
30th %ile Green (s)	0.0	30.0		5.7	38.7		7.7	7.7		0.0	0.0	
30th %ile Term Code	Skip	Min		Gap	Hold		Gap	Gap		Skip	Skip	
10th %ile Green (s)	0.0	30.0		5.1	38.1		6.3	6.3		0.0	0.0	
10th %ile Term Code	Skip	Min		Gap	Hold		Gap	Gap		Skip	Skip	
Stops (vph)	1	177		45	236	0	75	23		3	6	
Fuel Used(gal)	0	7		1	5	0	2	1		0	0	
CO Emissions (g/hr)	2	519		78	345	0	128	74		3	6	
NOx Emissions (g/hr)	0	101		15	67	0	25	14		1	1	
VOC Emissions (g/hr)	0	120		18	80	0	30	17		1	1	
Dilemma Vehicles (#)	0	21		0	28	0	0	8		0	0	
Queue Length 50th (ft)	0	33		13	68	0	30	0		0	0	
Queue Length 95th (ft)	2	85		52	255	0	84	43		5	4	
Internal Link Dist (ft)		1565			343			795			1282	
Turn Bay Length (ft)	150									400		
Base Capacity (vph)	799	3074		773	1666	1615	232	293		900	1894	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.00	0.12		0.20	0.29	0.00	0.38	0.35		0.00	0.00	

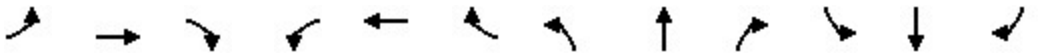
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 62.7			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 11.2		Intersection LOS: B	
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 76.2			
70th %ile Actuated Cycle: 60.5			
50th %ile Actuated Cycle: 60.1			
30th %ile Actuated Cycle: 59.4			
10th %ile Actuated Cycle: 57.4			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	597	491	216	464	5	264	217	50	0	0	0
Future Volume (vph)	46	597	491	216	464	5	264	217	50	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.987				
Flt Protected		0.996		0.950				0.976				
Satd. Flow (prot)	0	1922	1641	1816	1927	0	0	1823	0	0	0	0
Flt Permitted		0.937		0.220				0.976				
Satd. Flow (perm)	0	1808	1641	421	1927	0	0	1823	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			511		1							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	1%	2%	1%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	48	622	511	225	483	5	275	226	52	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	670	511	225	488	0	0	553	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



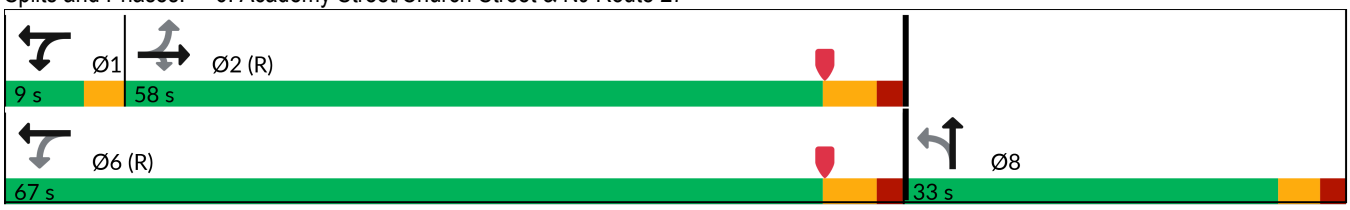
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.71	0.47	0.64	0.40			1.08				
Control Delay (s/veh)		23.6	2.7	12.8	6.3			100.3				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		23.6	2.7	12.8	6.3			100.3				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		14.6			8.3			100.3				
Approach LOS		B			A			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		480	28	79	154			447				
Fuel Used(gal)		9	2	2	4			36				
CO Emissions (g/hr)		633	159	136	247			2545				
NOx Emissions (g/hr)		123	31	27	48			495				
VOC Emissions (g/hr)		147	37	32	57			590				
Dilemma Vehicles (#)		32	0	0	0			0				
Queue Length 50th (ft)		311	0	37	95			~397				
Queue Length 95th (ft)		451	48	m50	m115			#603				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		940	1098	353	1233			510				

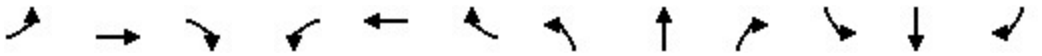
Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.71	0.47	0.64	0.40			1.08				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 32.1		Intersection LOS: C	
Intersection Capacity Utilization 109.0%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	626	15	53	488	91	41	287	48	89	173	151
Future Volume (vph)	19	626	15	53	488	91	41	287	48	89	173	151
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.981			0.983			0.951	
Flt Protected		0.999			0.996			0.995			0.989	
Satd. Flow (prot)	0	2180	0	0	2140	0	0	1833	0	0	1745	0
Flt Permitted		0.974			0.901			0.874			0.671	
Satd. Flow (perm)	0	2126	0	0	1936	0	0	1610	0	0	1184	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1875			956	
Travel Time (s)		16.1			26.7			51.1			18.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	1%	5%	0%	4%	2%
Adj. Flow (vph)	20	645	15	55	503	94	42	296	49	92	178	156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	680	0	0	652	0	0	387	0	0	426	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.53			0.56			0.83			1.24	
Control Delay (s/veh)		8.1			14.4			50.1			164.1	
Queue Delay		0.2			0.0			0.0			0.0	
Total Delay (s/veh)		8.3			14.4			50.1			164.1	
LOS		A			B			D			F	
Approach Delay (s/veh)		8.3			14.4			50.1			164.1	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		158			365			328			326	
Fuel Used(gal)		5			11			24			19	
CO Emissions (g/hr)		350			759			1702			1335	
NOx Emissions (g/hr)		68			148			331			260	
VOC Emissions (g/hr)		81			176			394			309	
Dilemma Vehicles (#)		0			32			0			16	
Queue Length 50th (ft)		95			233			230			~339	
Queue Length 95th (ft)		m172			332			#386			#527	
Internal Link Dist (ft)		509			1291			1795			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1275			1161			466			343	
Starvation Cap Reductn		115			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.59			0.56			0.83			1.24	

Intersection Summary

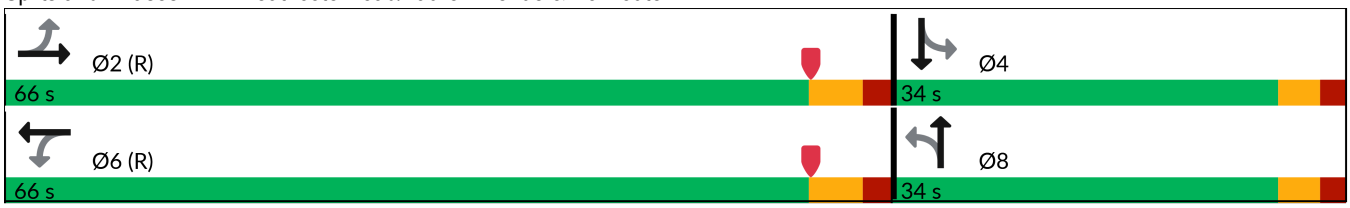
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay (s/veh): 48.6		Intersection LOS: D	
Intersection Capacity Utilization 104.2%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



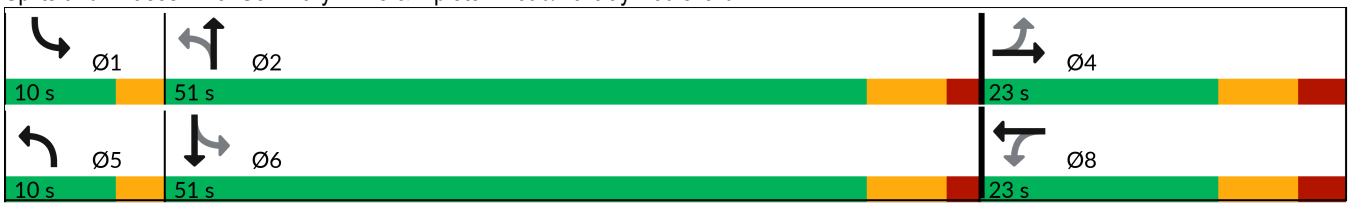
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	1	11	23	5	7	12	487	27	15	307	154
Future Volume (vph)	29	1	11	23	5	7	12	487	27	15	307	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.963			0.974			0.992			0.950	
Flt Protected		0.966			0.968		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1745	0	1805	1878	0	1805	1787	0
Flt Permitted		0.831			0.813		0.467			0.429		
Satd. Flow (perm)	0	1520	0	0	1465	0	887	1878	0	815	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			5			45	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		876			238			415			371	
Travel Time (s)		13.3			6.5			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	4%	0%	0%	0%	0%	7%	0%	1%	1%
Adj. Flow (vph)	31	1	12	24	5	7	13	518	29	16	327	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	36	0	13	547	0	16	491	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

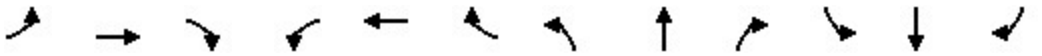
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.5			7.5		50.0	48.5		50.0	48.5	
Actuated g/C Ratio		0.12			0.12		0.81	0.78		0.81	0.78	
v/c Ratio		0.23			0.20		0.02	0.37		0.02	0.35	
Control Delay (s/veh)		25.7			27.2		2.7	6.2		2.7	5.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		25.7			27.2		2.7	6.2		2.7	5.6	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		25.7			27.2			6.2			5.5	
Approach LOS		C			C			A			A	
90th %ile Green (s)	9.2	9.2		9.2	9.2		5.0	44.0		5.0	44.0	
90th %ile Term Code	Gap	Gap		Hold	Hold		Min	Max		Min	Max	
70th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
70th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Min	Min		Hold	Hold		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		30			27		4	183		4	150	
Fuel Used(gal)		1			0		0	10		1	20	
CO Emissions (g/hr)		57			25		15	673		43	1374	
NOx Emissions (g/hr)		11			5		3	131		8	267	
VOC Emissions (g/hr)		13			6		3	156		10	318	
Dilemma Vehicles (#)		2			0		0	26		0	24	
Queue Length 50th (ft)		12			11		1	85		1	66	
Queue Length 95th (ft)		43			39		5	216		6	178	
Internal Link Dist (ft)		796			158			335			291	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		385			368		826	1470		775	1407	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.11			0.10		0.02	0.37		0.02	0.35	

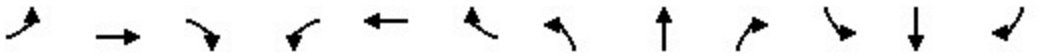
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 7.3		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 76.2			
70th %ile Actuated Cycle: 66			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	1215	5	13	690	145	5	2	9	347	3	59
Future Volume (vph)	73	1215	5	13	690	145	5	2	9	347	3	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.924				0.850
Flt Protected	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (prot)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Flt Permitted	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (perm)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			149		9				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		612			1998			444			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	75	1253	5	13	711	149	5	2	9	358	3	61
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	75	1253	5	13	711	149	0	16	0	179	182	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

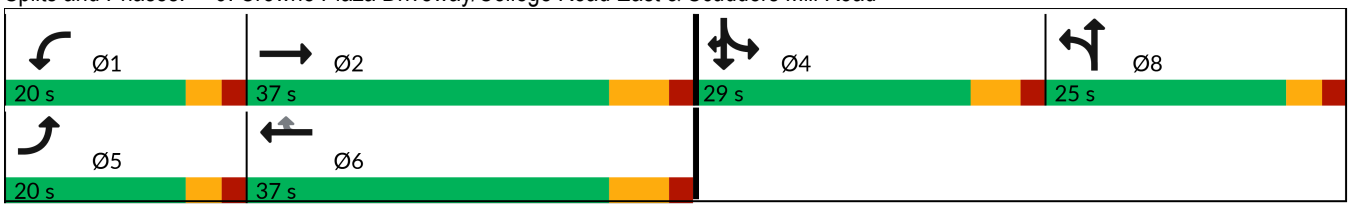


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	8.0	39.6	68.8	6.3	31.2	31.2		6.3		12.3	12.3	12.3
Actuated g/C Ratio	0.12	0.58	1.00	0.09	0.45	0.45		0.09		0.18	0.18	0.18
v/c Ratio	0.36	0.61	0.00	0.08	0.44	0.19		0.10		0.59	0.60	0.15
Control Delay (s/veh)	36.7	14.4	0.0	36.2	17.0	4.4		26.8		36.2	36.5	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	36.7	14.4	0.0	36.2	17.0	4.4		26.8		36.2	36.5	0.8
LOS	D	B	A	D	B	A		C		D	D	A
Approach Delay (s/veh)		15.6			15.1			26.8			31.2	
Approach LOS		B			B			C			C	
90th %ile Green (s)	11.5	35.0		6.5	30.0	30.0	6.4	6.4		20.1	20.1	20.1
90th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	9.2	44.2		0.0	30.0	30.0	0.0	0.0		15.2	15.2	15.2
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	7.3	42.3		0.0	30.0	30.0	0.0	0.0		11.5	11.5	11.5
50th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	6.2	41.2		0.0	30.0	30.0	0.0	0.0		9.7	9.7	9.7
30th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.8	6.8	6.8
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
Stops (vph)	64	701	0	15	453	18		12		147	149	0
Fuel Used(gal)	2	28	0	0	18	2		0		9	10	2
CO Emissions (g/hr)	164	1960	4	34	1264	157		16		659	671	159
NOx Emissions (g/hr)	32	381	1	7	246	30		3		128	130	31
VOC Emissions (g/hr)	38	454	1	8	293	36		4		153	155	37
Dilemma Vehicles (#)	0	74	0	0	49	0		1		0	9	0
Queue Length 50th (ft)	29	130	0	5	100	0		3		72	73	0
Queue Length 95th (ft)	83	#490	0	25	237	40		24		163	166	0
Internal Link Dist (ft)		532			1918			364			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	408	2055	1615	408	1619	805		528		589	591	640
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.18	0.61	0.00	0.03	0.44	0.19		0.03		0.30	0.31	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 68.8			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 18.0		Intersection LOS: B	
Intersection Capacity Utilization 69.9%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 91			
70th %ile Actuated Cycle: 72.4			
50th %ile Actuated Cycle: 66.8			
30th %ile Actuated Cycle: 63.9			
10th %ile Actuated Cycle: 49.8			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	2.9

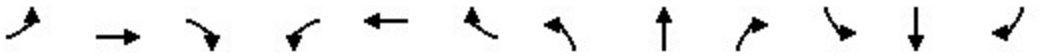
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	21	71	0	290	52	146	249
Future Vol, veh/h	21	71	0	290	52	146	249
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89	89
Heavy Vehicles, %	5	0	0	0	0	2	1
Mvmt Flow	24	80	0	326	58	164	280

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	823	192	280	0	0	384	0
Stage 1	355	-	-	-	-	-	-
Stage 2	468	-	-	-	-	-	-
Critical Hdwy	6.9	6.9	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	306	823	964	-	-	1171	-
Stage 1	672	-	-	-	-	-	-
Stage 2	588	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	263	823	964	-	-	1171	-
Mov Cap-2 Maneuver	263	-	-	-	-	-	-
Stage 1	672	-	-	-	-	-	-
Stage 2	506	-	-	-	-	-	-

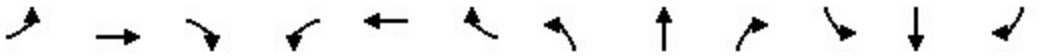
Approach	WB	NB	SB
HCM Control Delay, s/v	12.17	0	3.17
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	964	-	-	263	823	1171	-
HCM Lane V/C Ratio	-	-	-	0.09	0.097	0.14	-
HCM Control Delay (s/veh)	0	-	-	20	9.8	8.6	-
HCM Lane LOS	A	-	-	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0.5	-

SATURDAY PROJECTED



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	221	57	76	174	102	0	1740	0	0	1599	0
Future Volume (vph)	49	221	57	76	174	102	0	1740	0	0	1599	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1805	1881	1553	1787	1778	0	0	3597	0	0	3632	0
Flt Permitted	0.270			0.300								
Satd. Flow (perm)	513	1881	1553	564	1778	0	0	3597	0	0	3632	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	4%	1%	1%	1%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	50	226	58	78	178	104	0	1776	0	0	1632	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	226	58	78	282	0	0	1776	0	0	1632	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

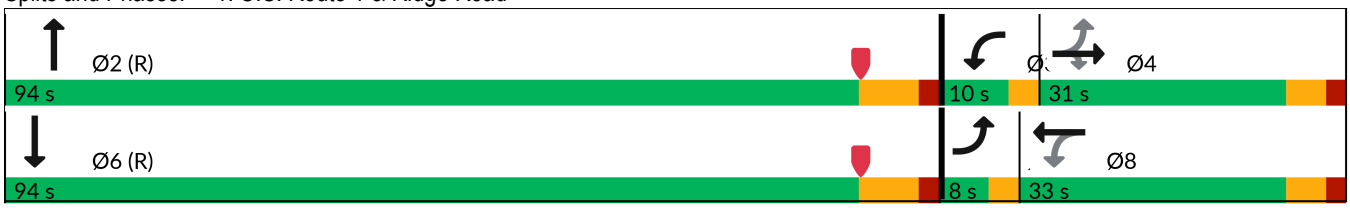


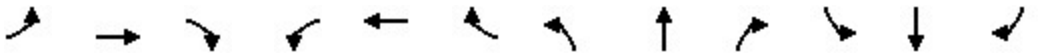
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	31.0	31.0	10.0	33.0			94.0			94.0	
Total Split (%)	5.9%	23.0%	23.0%	7.4%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	25.0	25.0	7.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	31.0	21.6	21.6	34.4	24.7			91.5			91.5	
Actuated g/C Ratio	0.23	0.16	0.16	0.25	0.18			0.68			0.68	
v/c Ratio	0.28	0.75	0.19	0.36	0.83			0.73			0.66	
Control Delay (s/veh)	40.0	69.4	10.4	41.7	69.7			15.3			15.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	40.0	69.4	10.4	41.7	69.7			15.3			15.1	
LOS	D	E	B	D	E			B			B	
Approach Delay (s/veh)		54.8			63.7			15.3			15.1	
Approach LOS		D			E			B			B	
90th %ile Green (s)	5.0	25.0	25.0	7.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	8.3	26.2	26.2	10.3	28.2			81.5			81.5	
70th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
50th %ile Green (s)	7.3	23.3	23.3	8.9	24.9			85.8			85.8	
50th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
30th %ile Green (s)	6.3	20.2	20.2	7.5	21.4			90.3			90.3	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	13.4	13.4	5.6	22.0			99.0			99.0	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	36	206	9	56	242			1080			909	
Fuel Used(gal)	1	5	0	2	8			29			25	
CO Emissions (g/hr)	56	376	19	111	553			2038			1768	
NOx Emissions (g/hr)	11	73	4	22	108			397			344	
VOC Emissions (g/hr)	13	87	4	26	128			472			410	
Dilemma Vehicles (#)	0	7	0	0	9			64			59	
Queue Length 50th (ft)	32	188	0	51	225			515			435	
Queue Length 95th (ft)	66	275	34	95	#346			603			510	
Internal Link Dist (ft)		77			79			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	178	351	343	217	373			2463			2487	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.28	0.64	0.17	0.36	0.76			0.72			0.66	

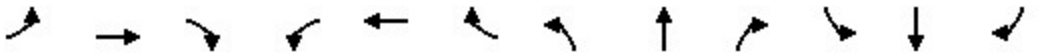
Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 22.7		Intersection LOS: C	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1	0	7	0	1	0	1794	6	0	1661	0
Future Volume (vph)	16	1	0	7	0	1	0	1794	6	0	1661	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			532			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	16	1	0	7	0	1	0	1849	6	0	1712	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	1	0	7	0	1	0	1855	0	0	1712	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



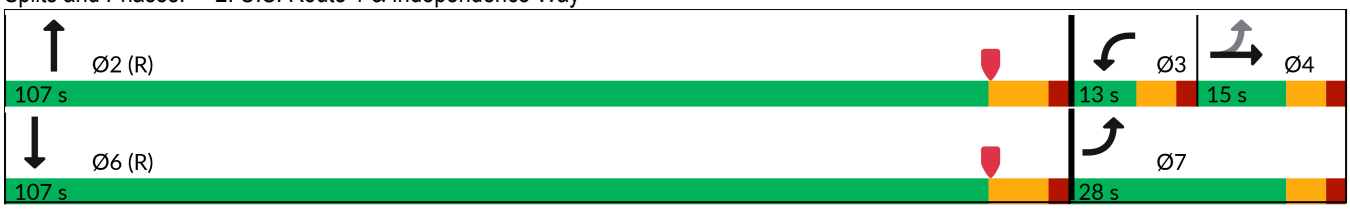
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	8.3	7.0		5.4		135.0		125.3			125.3	
Actuated g/C Ratio	0.06	0.05		0.04		1.00		0.93			0.93	
v/c Ratio	0.08	0.01		0.10		0.00		0.39			0.35	
Control Delay (s/veh)	45.1	53.0		65.1		0.0		2.0			1.6	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	45.1	53.0		65.1		0.0		2.0			1.6	
LOS	D	D		E		A		A			A	
Approach Delay (s/veh)		45.5			57.0			2.0			1.6	
Approach LOS		D			E			A			A	
90th %ile Green (s)	19.3	7.0		6.3				101.7			101.7	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
50th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	16	2		9		0		212			150	
Fuel Used(gal)	0	0		0		0		17			9	
CO Emissions (g/hr)	22	2		14		0		1165			646	
NOx Emissions (g/hr)	4	0		3		0		227			126	
VOC Emissions (g/hr)	5	0		3		0		270			150	
Dilemma Vehicles (#)	0	0		0		0		29			26	
Queue Length 50th (ft)	7	1		6		0		0			0	
Queue Length 95th (ft)	m10	m1		23		0		201			147	
Internal Link Dist (ft)		319			684			452			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	533	126		93		1615		4799			4845	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03	0.01		0.08		0.00		0.39			0.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay (s/veh): 2.1		Intersection LOS: A	
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	60	121	0	0	137	10	0	0	63	0	0	0
Future Volume (vph)	60	121	0	0	137	10	0	0	63	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3574	1455	0	0	1611	0	0	0
Flt Permitted	0.539											
Satd. Flow (perm)	1987	3574	0	0	3574	1455	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			923			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			522			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	11%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	64	129	0	0	146	11	0	0	67	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	129	0	0	146	11	0	0	67	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

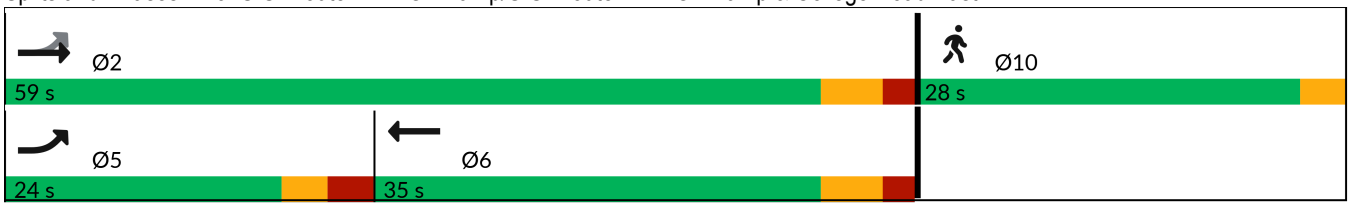
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	34.5	40.6			29.4	40.6			40.6			
Actuated g/C Ratio	0.85	1.00			0.72	1.00			1.00			
v/c Ratio	0.03	0.04			0.06	0.01			0.04			
Control Delay (s/veh)	0.5	0.0			4.3	0.0			0.0			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.5	0.0			4.3	0.0			0.0			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.2			4.0							
Approach LOS		A			A							
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	33.9			20.9							
70th %ile Term Code	Min	Dwell			Dwell							
50th %ile Green (s)	7.0	45.0			32.0							
50th %ile Term Code	Min	Dwell			Dwell							
30th %ile Green (s)	0.0	32.0			32.0							
30th %ile Term Code	Skip	Dwell			Dwell							
10th %ile Green (s)	0.0	32.0			32.0							
10th %ile Term Code	Skip	Dwell			Dwell							
Stops (vph)	6	0			53	0			0			
Fuel Used(gal)	0	0			4	0			1			
CO Emissions (g/hr)	15	21			305	19			40			
NOx Emissions (g/hr)	3	4			59	4			8			
VOC Emissions (g/hr)	3	5			71	4			9			
Dilemma Vehicles (#)	0	0			13	0			0			
Queue Length 50th (ft)	0	0			7	0			0			
Queue Length 95th (ft)	0	0			15	0			0			
Internal Link Dist (ft)		282			478			442			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2370	3574			2973	1455			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

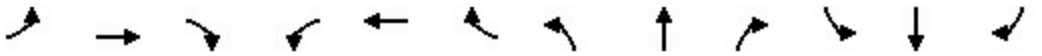
Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.03	0.04			0.05	0.01			0.04			

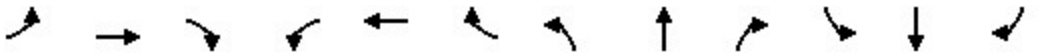
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 40.6			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.06			
Intersection Signal Delay (s/veh): 1.6		Intersection LOS: A	
Intersection Capacity Utilization 30.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 39.9			
50th %ile Actuated Cycle: 51			
30th %ile Actuated Cycle: 38			
10th %ile Actuated Cycle: 38			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	274	12	0	294	0	6	0	42	2	74	0
Future Volume (vph)	0	274	12	0	294	0	6	0	42	2	74	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.994							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3554	0	0	3574	0	1805	0	1615	0	3606	0
Flt Permitted							0.930				0.999	
Satd. Flow (perm)	0	3554	0	0	3574	0	1767	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							47			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			205	
Travel Time (s)		5.9			4.4			7.4			4.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	308	13	0	330	0	7	0	47	2	83	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	321	0	0	330	0	7	0	47	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

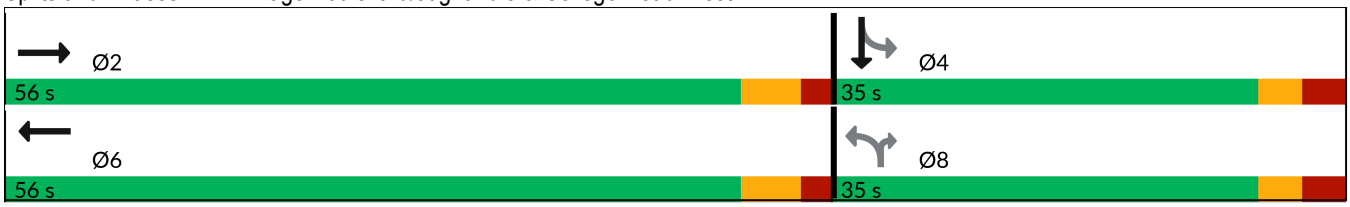


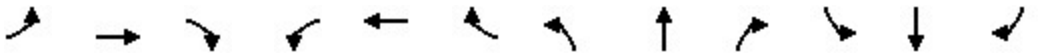
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		23.1			23.1		7.0		7.0		7.0	
Actuated g/C Ratio		0.67			0.67		0.20		0.20		0.20	
v/c Ratio		0.14			0.14		0.02		0.13		0.12	
Control Delay (s/veh)		4.8			4.9		11.0		5.6		11.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		4.8			4.9		11.0		5.6		11.5	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		4.8			4.9			6.3			11.5	
Approach LOS		A			A			A			B	
90th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
90th %ile Term Code		Min			Min		Min		Min	Min	Min	
70th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
70th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
30th %ile Green (s)		29.6			29.6		0.0		0.0	0.0	0.0	
30th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		120			126		9		15		59	
Fuel Used(gal)		2			2		0		0		1	
CO Emissions (g/hr)		149			143		6		20		44	
NOx Emissions (g/hr)		29			28		1		4		9	
VOC Emissions (g/hr)		35			33		1		5		10	
Dilemma Vehicles (#)		25			26		0		0		0	
Queue Length 50th (ft)		16			17		1		0		6	
Queue Length 95th (ft)		29			30		6		14		16	
Internal Link Dist (ft)		269			180			244			125	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3554			3574		1477		1357		3013	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.09			0.09		0.00		0.03		0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 34.7			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.14			
Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 34			
70th %ile Actuated Cycle: 34			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 35.6			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





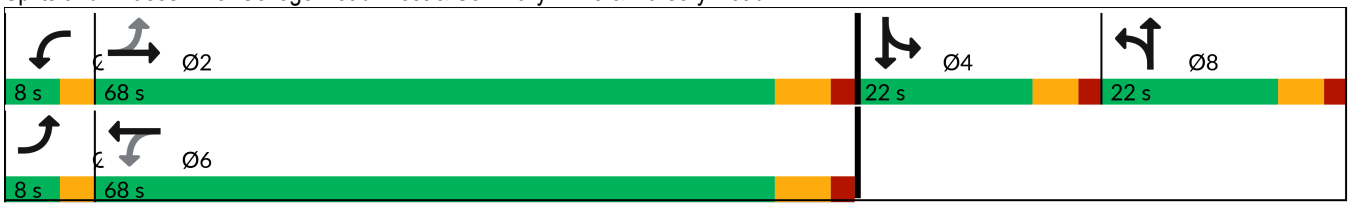
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	204	46	100	229	1	44	2	76	1	2	0
Future Volume (vph)	1	204	46	100	229	1	44	2	76	1	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	0		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.972				0.850		0.854				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3481	0	1752	1900	1615	1805	1576	0	1643	3458	0
Flt Permitted	0.605			0.539			0.950			0.950		
Satd. Flow (perm)	1150	3481	0	994	1900	1615	1805	1576	0	1643	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33				173		83				
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		1646			424			877			1363	
Travel Time (s)		28.1			7.2			14.9			26.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	3%	0%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	1	222	50	109	249	1	48	2	83	1	2	0
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	1	272	0	109	249	1	48	85	0	1	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	41.5	35.2		43.4	40.1	58.7	6.1	6.1		7.1	7.1	
Actuated g/C Ratio	0.71	0.60		0.74	0.68	1.00	0.10	0.10		0.12	0.12	
v/c Ratio	0.00	0.13		0.14	0.19	0.00	0.25	0.36		0.01	0.00	
Control Delay (s/veh)	5.0	7.9		4.4	7.6	0.0	29.6	12.5		27.0	26.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.0	7.9		4.4	7.6	0.0	29.6	12.5		27.0	26.5	
LOS	A	A		A	A	A	C	B		C	C	
Approach Delay (s/veh)		7.9			6.6			18.7			26.7	
Approach LOS		A			A			B			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.2	8.2		7.0	7.0	
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Min	Min	
70th %ile Green (s)	0.0	30.0		5.0	38.0		6.5	6.5		0.0	0.0	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
50th %ile Green (s)	0.0	30.0		5.0	38.0		5.9	5.9		0.0	0.0	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
30th %ile Green (s)	0.0	30.0		5.0	38.0		5.3	5.3		0.0	0.0	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
10th %ile Green (s)	0.0	43.5		0.0	43.5		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Dwell		Skip	Dwell		Skip	Skip		Skip	Skip	
Stops (vph)	1	105		30	95	0	40	21		3	4	
Fuel Used(gal)	0	5		1	2	0	1	1		0	0	
CO Emissions (g/hr)	2	344		52	147	0	64	61		3	4	
NOx Emissions (g/hr)	0	67		10	29	0	13	12		1	1	
VOC Emissions (g/hr)	0	80		12	34	0	15	14		1	1	
Dilemma Vehicles (#)	0	14		0	13	0	0	5		0	0	
Queue Length 50th (ft)	0	19		7	26	0	15	1		0	0	
Queue Length 95th (ft)	2	57		40	123	0	49	39		5	3	
Internal Link Dist (ft)		1566			344			797			1283	
Turn Bay Length (ft)	150									400		
Base Capacity (vph)	869	3374		800	1841	1615	498	495		454	955	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.00	0.08		0.14	0.14	0.00	0.10	0.17		0.00	0.00	

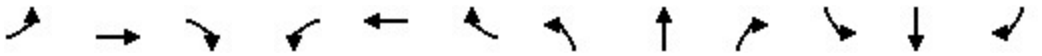
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 58.7			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 9.2		Intersection LOS: A	
Intersection Capacity Utilization 53.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 72.2			
70th %ile Actuated Cycle: 57.5			
50th %ile Actuated Cycle: 56.9			
30th %ile Actuated Cycle: 56.3			
10th %ile Actuated Cycle: 50.5			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	173	215	549	12	127	48	65	0	0	0
Future Volume (vph)	15	463	173	215	549	12	127	48	65	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.964				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1891	1658	1834	1907	0	0	1784	0	0	0	0
Flt Permitted		0.977		0.384				0.974				
Satd. Flow (perm)	0	1851	1658	741	1907	0	0	1784	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			182		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1051			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	3%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	182	226	578	13	134	51	68	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	182	226	591	0	0	253	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



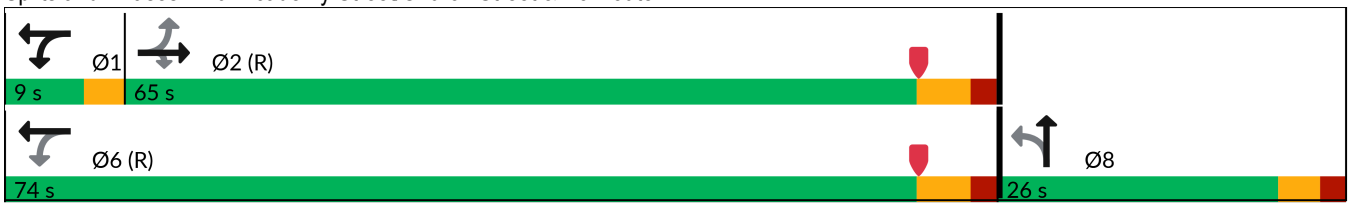
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		60.1	60.1	74.4	74.4			17.6				
Actuated g/C Ratio		0.60	0.60	0.74	0.74			0.18				
v/c Ratio		0.45	0.17	0.35	0.42			0.81				
Control Delay (s/veh)		12.8	1.8	3.8	3.7			59.0				
Queue Delay		0.0	0.0	0.0	0.2			0.0				
Total Delay (s/veh)		12.8	1.8	3.8	3.9			59.0				
LOS		B	A	A	A			E				
Approach Delay (s/veh)		9.9			3.9			59.0				
Approach LOS		A			A			E				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	8.6			18.4	18.4				
50th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
30th %ile Green (s)	59.0	59.0	59.0	11.3			15.7	15.7				
30th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
10th %ile Green (s)	64.6	64.6	64.6	9.7			11.7	11.7				
10th %ile Term Code	Coord	Coord	Coord	Gap			Gap	Gap				
Stops (vph)		253	11	37	122			225				
Fuel Used(gal)		5	1	1	4			15				
CO Emissions (g/hr)		343	55	97	259			1019				
NOx Emissions (g/hr)		67	11	19	50			198				
VOC Emissions (g/hr)		79	13	22	60			236				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		168	0	21	70			155				
Queue Length 95th (ft)		245	26	m36	m104			236				
Internal Link Dist (ft)		428			509			971			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1113	1069	642	1420			374				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	70.6
50th %ile Term Code	Coord
30th %ile Green (s)	73.3
30th %ile Term Code	Coord
10th %ile Green (s)	77.3
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	250			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.45	0.17	0.35	0.51			0.68				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 104.1%		ICU Level of Service G	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	466	23	63	567	61	42	110	72	85	140	144
Future Volume (vph)	38	466	23	63	567	61	42	110	72	85	140	144
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.988			0.957			0.947	
Flt Protected		0.996			0.995			0.991			0.989	
Satd. Flow (prot)	0	2145	0	0	2144	0	0	1793	0	0	1773	0
Flt Permitted		0.917			0.907			0.819			0.805	
Satd. Flow (perm)	0	1975	0	0	1954	0	0	1482	0	0	1443	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1876			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	491	24	66	597	64	44	116	76	89	147	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	555	0	0	727	0	0	236	0	0	388	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

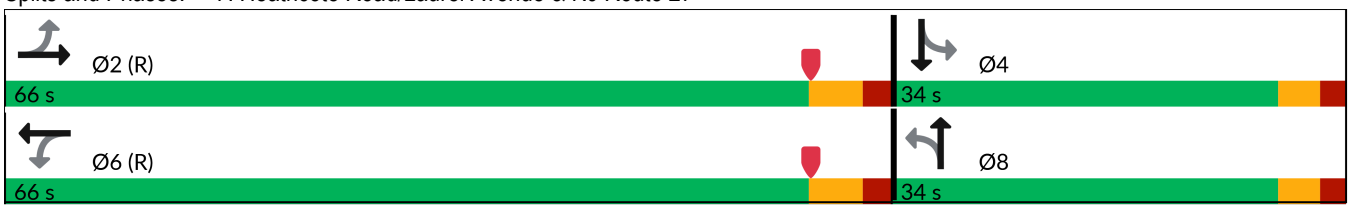
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.7			60.7			28.3			28.3	
Actuated g/C Ratio		0.61			0.61			0.28			0.28	
v/c Ratio		0.46			0.61			0.56			0.95	
Control Delay (s/veh)		7.8			15.3			36.5			70.6	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		7.9			15.3			36.5			70.6	
LOS		A			B			D			E	
Approach Delay (s/veh)		7.9			15.3			36.5			70.6	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	63.7	63.7		63.7	63.7		25.3	25.3		25.3	25.3	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		139			419			187			320	
Fuel Used(gal)		4			12			14			10	
CO Emissions (g/hr)		281			849			970			717	
NOx Emissions (g/hr)		55			165			189			139	
VOC Emissions (g/hr)		65			197			225			166	
Dilemma Vehicles (#)		0			35			0			16	
Queue Length 50th (ft)		102			274			127			240	
Queue Length 95th (ft)		130			390			206			#420	
Internal Link Dist (ft)		509			1291			1796			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1200			1186			429			418	
Starvation Cap Reductn		78			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.49			0.61			0.55			0.93	

Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 27.0		Intersection LOS: C	
Intersection Capacity Utilization 89.4%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



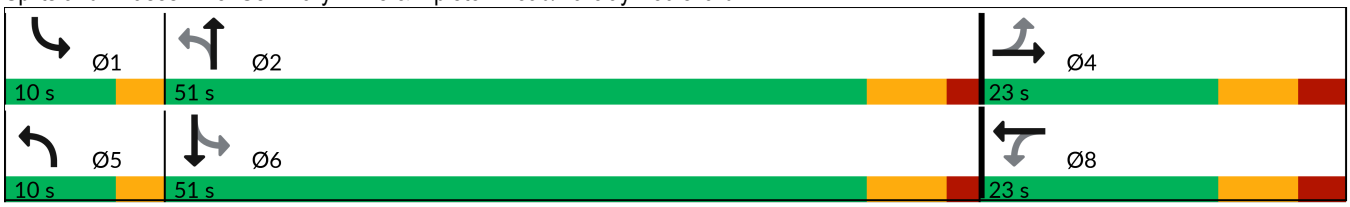
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	2	6	12	7	9	2	255	23	11	245	144
Future Volume (vph)	11	2	6	12	7	9	2	255	23	11	245	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.957			0.958			0.988			0.944	
Flt Protected		0.972			0.978		0.950			0.950		
Satd. Flow (prot)	0	1662	0	0	1780	0	1805	1877	0	1805	1794	0
Flt Permitted							0.524			0.582		
Satd. Flow (perm)	0	1710	0	0	1820	0	996	1877	0	1106	1794	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9			8			53	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		876			237			414			370	
Travel Time (s)		13.3			6.5			7.1			6.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	2	6	13	7	9	2	266	24	11	255	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	29	0	2	290	0	11	405	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

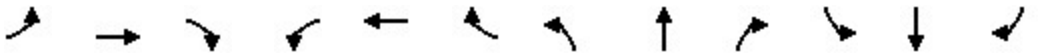
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		11.9			11.9		38.6	43.0		38.6	43.0	
Actuated g/C Ratio		0.24			0.24		0.76	0.85		0.76	0.85	
v/c Ratio		0.05			0.07		0.00	0.18		0.01	0.26	
Control Delay (s/veh)		23.8			22.8		2.0	3.9		2.1	3.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		23.8			22.8		2.0	3.9		2.1	3.9	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		23.8			22.8			3.9			3.9	
Approach LOS		C			C			A			A	
90th %ile Green (s)	7.5	7.5		7.5	7.5		5.0	44.0		5.0	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Min	Max	
70th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
50th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Skip		Skip	Skip	
Stops (vph)		15			21		1	64		3	88	
Fuel Used(gal)		0			0		0	5		0	16	
CO Emissions (g/hr)		26			19		3	331		32	1121	
NOx Emissions (g/hr)		5			4		1	64		6	218	
VOC Emissions (g/hr)		6			4		1	77		7	260	
Dilemma Vehicles (#)		1			0		0	11		0	15	
Queue Length 50th (ft)		4			5		0	0		0	0	
Queue Length 95th (ft)		25			32		1	95		4	126	
Internal Link Dist (ft)		796			157			334			290	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		693			739		1104	1599		1167	1535	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.03			0.04		0.00	0.18		0.01	0.26	

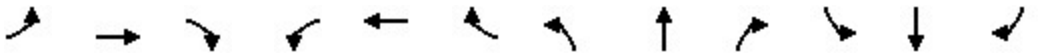
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 50.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay (s/veh): 5.1		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 74.5			
70th %ile Actuated Cycle: 66			
50th %ile Actuated Cycle: 51			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 10			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	665	14	10	619	80	23	5	12	95	2	14
Future Volume (vph)	3	665	14	10	619	80	23	5	12	95	2	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	25			25			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.960				0.850
Flt Protected	0.950			0.950				0.972		0.950	0.954	
Satd. Flow (prot)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1690	1615
Flt Permitted	0.950			0.950				0.972		0.950	0.954	
Satd. Flow (perm)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1690	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			128		12				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	7%	0%	1%	2%	4%	0%	0%	2%	0%	0%
Adj. Flow (vph)	3	686	14	10	638	82	24	5	12	98	2	14
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	3	686	14	10	638	82	0	41	0	50	50	14
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	custom	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

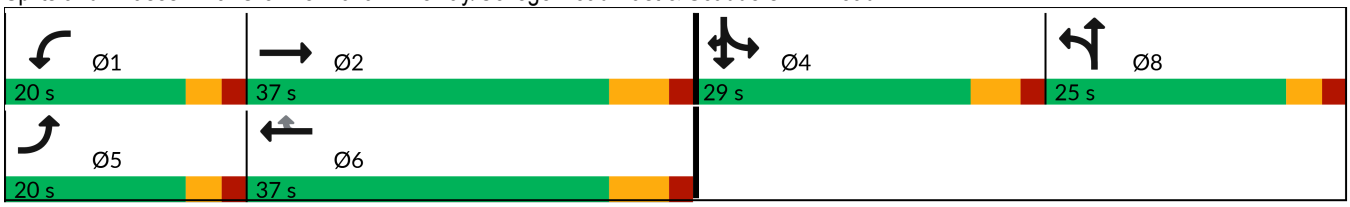


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6	8					
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.2	35.7	57.4	6.2	35.7	35.7		6.5		6.9	6.9	6.9
Actuated g/C Ratio	0.11	0.62	1.00	0.11	0.62	0.62		0.11		0.12	0.12	0.12
v/c Ratio	0.02	0.31	0.01	0.05	0.29	0.08		0.20		0.25	0.25	0.04
Control Delay (s/veh)	29.0	9.5	0.0	28.9	9.3	1.4		23.9		29.3	29.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	29.0	9.5	0.0	28.9	9.3	1.4		23.9		29.3	29.3	0.3
LOS	C	A	A	C	A	A		C		C	C	A
Approach Delay (s/veh)		9.4			8.7			23.9			25.7	
Approach LOS		A			A			C			C	
90th %ile Green (s)	6.0	30.0		6.0	30.0	30.0	7.8	7.8		9.0	9.0	9.0
90th %ile Term Code	Min	Max		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	6.1	6.1		7.0	7.0	7.0
70th %ile Term Code	Skip	Max		Skip	Max	Max	Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.2	6.2	6.2
50th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.0	6.0	6.0
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Min	Min	Min
10th %ile Green (s)	0.0	45.0		0.0	45.0	45.0	0.0	0.0		0.0	0.0	0.0
10th %ile Term Code	Skip	Dwell		Skip	Dwell	Dwell	Skip	Skip		Skip	Skip	Skip
Stops (vph)	5	324	0	13	296	4		30		43	43	0
Fuel Used(gal)	0	14	0	0	14	1		1		3	3	1
CO Emissions (g/hr)	9	962	11	27	948	77		38		179	179	38
NOx Emissions (g/hr)	2	187	2	5	184	15		7		35	35	7
VOC Emissions (g/hr)	2	223	3	6	220	18		9		41	41	9
Dilemma Vehicles (#)	0	50	0	0	47	0		2		0	3	0
Queue Length 50th (ft)	1	41	0	3	37	0		8		13	13	0
Queue Length 95th (ft)	9	171	0	19	157	11		41		55	55	0
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	484	2222	1509	484	2222	1032		628		692	696	746
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.01	0.31	0.01	0.02	0.29	0.08		0.07		0.07	0.07	0.02

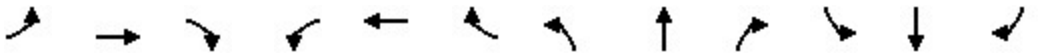
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 57.4			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 10.6		Intersection LOS: B	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 75.8			
70th %ile Actuated Cycle: 61.1			
50th %ile Actuated Cycle: 49.2			
30th %ile Actuated Cycle: 49			
10th %ile Actuated Cycle: 52			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



AM PROJECTED WITH GDP

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	234	98	225	326	55	0	1830	0	0	2945	0
Future Volume (vph)	68	234	98	225	326	55	0	1830	0	0	2945	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.978							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1524	1770	1792	0	0	4975	0	0	5022	0
Flt Permitted	0.200			0.174								
Satd. Flow (perm)	373	1863	1524	324	1792	0	0	4975	0	0	5022	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		6							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	6%	2%	4%	2%	0%	7%	0%	0%	6%	0%
Adj. Flow (vph)	76	260	109	250	362	61	0	2033	0	0	3272	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	260	109	250	423	0	0	2033	0	0	3272	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

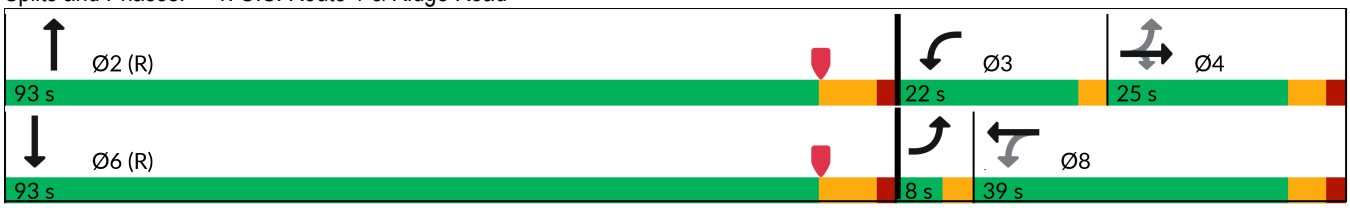


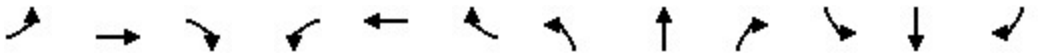
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	25.0	25.0	22.0	39.0			93.0			93.0	
Total Split (%)	5.7%	17.9%	17.9%	15.7%	27.9%			66.4%			66.4%	
Maximum Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.0	20.0	20.0	44.0	33.0			88.0			88.0	
Actuated g/C Ratio	0.20	0.14	0.14	0.31	0.24			0.63			0.63	
v/c Ratio	0.61	0.98	0.37	0.87	0.99			0.65			1.04	
Control Delay (s/veh)	60.1	109.3	20.3	67.6	94.1			15.6			52.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	60.1	109.3	20.3	67.6	94.1			15.6			52.7	
LOS	E	F	C	E	F			B			D	
Approach Delay (s/veh)		79.1			84.3			15.6			52.7	
Approach LOS		E			F			B			D	
90th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	19.4	19.4	18.6	33.0			85.0			85.0	
30th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
10th %ile Green (s)	5.0	23.6	23.6	14.4	33.0			85.0			85.0	
10th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
Stops (vph)	59	197	27	168	332			870			2588	
Fuel Used(gal)	1	7	1	6	13			26			86	
CO Emissions (g/hr)	104	517	54	413	893			1806			6019	
NOx Emissions (g/hr)	20	101	11	80	174			351			1171	
VOC Emissions (g/hr)	24	120	13	96	207			419			1395	
Dilemma Vehicles (#)	0	7	0	0	12			65			100	
Queue Length 50th (ft)	50	~252	19	182	383			293			~1172	
Queue Length 95th (ft)	#110	#434	77	#313	#608			341			#1242	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	124	266	291	298	426			3127			3156	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.61	0.98	0.37	0.84	0.99			0.65			1.04	

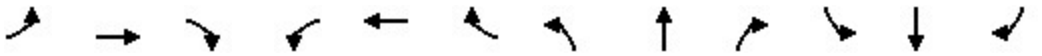
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 108 (77%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 46.1		Intersection LOS: D	
Intersection Capacity Utilization 92.7%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	57	0	10	0	3	0	2067	101	0	3222	0
Future Volume (vph)	11	57	0	10	0	3	0	2067	101	0	3222	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.993				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						132		18				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	11%	0%	0%	0%	8%	0%	0%	5%	0%
Adj. Flow (vph)	12	64	0	11	0	3	0	2322	113	0	3620	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	64	0	11	0	3	0	2435	0	0	3620	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



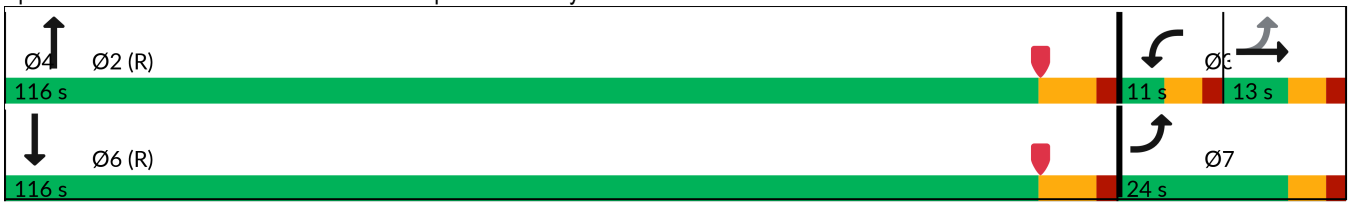
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				116.0			116.0	
Total Split (%)	17.1%	9.3%		7.9%				82.9%			82.9%	
Maximum Green (s)	18.0	7.0		5.0				108.0			108.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	11.7	7.7		5.1		140.0		120.5			120.5	
Actuated g/C Ratio	0.08	0.06		0.04		1.00		0.86			0.86	
v/c Ratio	0.04	0.62		0.19		0.00		0.58			0.83	
Control Delay (s/veh)	43.3	63.6		72.9		0.0		4.5			5.5	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	43.3	63.6		72.9		0.0		4.5			5.5	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		60.4			57.3			4.5			5.5	
Approach LOS		E			E			A			A	
90th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	0.0	9.5		0.0				116.5			116.5	
50th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
30th %ile Green (s)	0.0	8.0		0.0				118.0			118.0	
30th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				132.0			132.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	11	50		11		0		578			589	
Fuel Used(gal)	0	1		0		0		27			26	
CO Emissions (g/hr)	15	89		20		1		1898			1818	
NOx Emissions (g/hr)	3	17		4		0		369			354	
VOC Emissions (g/hr)	3	21		5		0		440			421	
Dilemma Vehicles (#)	0	1		0		0		64			69	
Queue Length 50th (ft)	5	53		10		0		176			152	
Queue Length 95th (ft)	m5	m59		32		0		304			m101	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	450	104		59		1615		4230			4363	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03	0.62		0.19		0.00		0.58			0.83	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	208	483	0	0	516	61	0	0	191	0	0	0
Future Volume (vph)	208	483	0	0	516	61	0	0	191	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3433	3539	0	0	3505	1583	0	0	1611	0	0	0
Flt Permitted	0.327											
Satd. Flow (perm)	1182	3539	0	0	3505	1583	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			612			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	0%	0%	3%	2%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	226	525	0	0	561	66	0	0	208	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	525	0	0	561	66	0	0	208	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

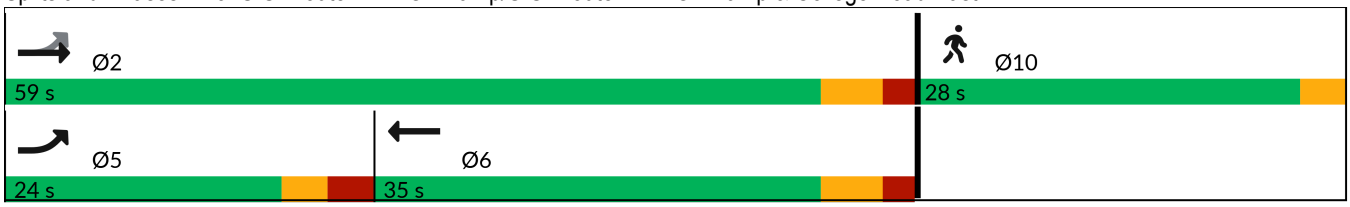
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.3	36.3			17.2	36.3			36.3			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.16	0.15			0.34	0.04			0.13			
Control Delay (s/veh)	0.8	0.1			6.7	0.0			0.2			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.8	0.1			6.7	0.0			0.2			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.3			6.0			0.2				
Approach LOS		A			A			A				
90th %ile Green (s)	7.3	30.3			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	31.0			18.0							
10th %ile Term Code	Min	Dwell			Dwell							
Stops (vph)	20	0			282	0			0			
Fuel Used(gal)	1	1			17	2			2			
CO Emissions (g/hr)	52	84			1221	116			122			
NOx Emissions (g/hr)	10	16			238	23			24			
VOC Emissions (g/hr)	12	19			283	27			28			
Dilemma Vehicles (#)	0	0			56	0			0			
Queue Length 50th (ft)	0	0			32	0			0			
Queue Length 95th (ft)	0	0			53	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2103	3539			2803	1583			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.11	0.15			0.20	0.04			0.13			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.3			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 2.5		Intersection LOS: A	
Intersection Capacity Utilization 44.1%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.3			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 37			

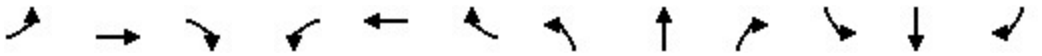
Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	954	12	0	926	0	15	0	90	1	131	0
Future Volume (vph)	0	954	12	0	926	0	15	0	90	1	131	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950					
Satd. Flow (prot)	0	3533	0	0	3539	0	1805	0	1568	0	3506	0
Flt Permitted							0.690					
Satd. Flow (perm)	0	3533	0	0	3539	0	1311	0	1568	0	3506	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2							89			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	3%	0%	3%	0%
Adj. Flow (vph)	0	1037	13	0	1007	0	16	0	98	1	142	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1050	0	0	1007	0	16	0	98	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

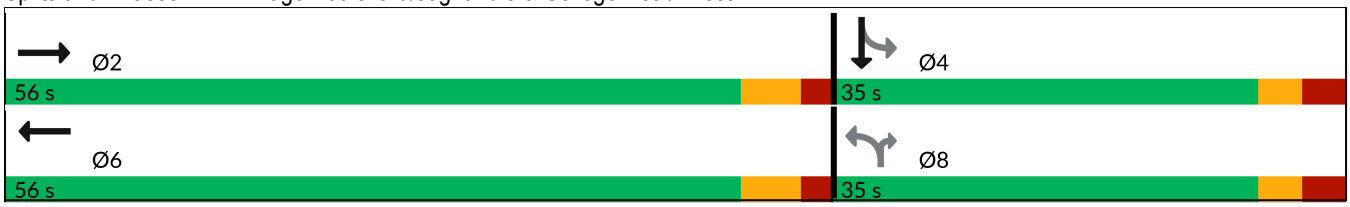


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		21.3			21.3		7.2		7.2		7.2	
Actuated g/C Ratio		0.58			0.58		0.20		0.20		0.20	
v/c Ratio		0.51			0.49		0.06		0.26		0.21	
Control Delay (s/veh)		7.5			7.3		13.7		7.0		13.9	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		7.5			7.3		13.7		7.0		13.9	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		7.5			7.3			7.9			13.9	
Approach LOS		A			A			A			B	
90th %ile Green (s)		21.4			21.4		7.9		7.9	7.9	7.9	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		18.4			18.4		7.0		7.0	7.0	7.0	
70th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
50th %ile Green (s)		15.6			15.6		7.0		7.0	7.0	7.0	
50th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		560			528		16		28		109	
Fuel Used(gal)		9			8		0		1		1	
CO Emissions (g/hr)		647			573		13		44		83	
NOx Emissions (g/hr)		126			112		3		9		16	
VOC Emissions (g/hr)		150			133		3		10		19	
Dilemma Vehicles (#)		86			83		0		0		0	
Queue Length 50th (ft)		71			66		2		1		12	
Queue Length 95th (ft)		117			110		14		28		36	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3533			3539		1042		1264		2786	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

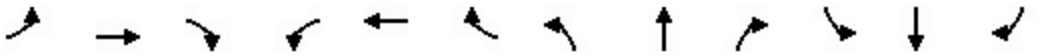
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.30			0.28		0.02		0.08		0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 36.7			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 7.8		Intersection LOS: A	
Intersection Capacity Utilization 53.4%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 41.3			
70th %ile Actuated Cycle: 37.4			
50th %ile Actuated Cycle: 34.6			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	612	98	235	515	428	38	20	72	286	13	17
Future Volume (vph)	61	612	98	235	515	428	38	20	72	286	13	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.979				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3499	0	1787	3539	1615	3273	1900	1495	3502	1900	1615
Flt Permitted	0.420			0.216			0.950			0.950		
Satd. Flow (perm)	798	3499	0	406	3539	1615	3273	1900	1495	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				510			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	7%	0%	8%	0%	0%	0%
Adj. Flow (vph)	73	729	117	280	613	510	45	24	86	340	15	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	846	0	280	613	510	45	24	86	340	15	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

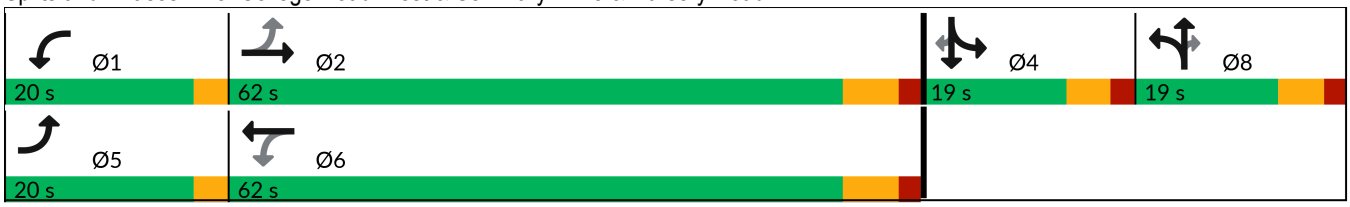


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	41.0	30.9		48.6	37.4	78.9	5.8	5.8	5.8	12.1	12.1	12.1
Actuated g/C Ratio	0.52	0.39		0.62	0.47	1.00	0.07	0.07	0.07	0.15	0.15	0.15
v/c Ratio	0.15	0.61		0.64	0.37	0.32	0.19	0.17	0.39	0.63	0.05	0.06
Control Delay (s/veh)	8.5	22.6		15.3	15.7	0.5	38.9	40.2	9.2	38.7	31.9	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.5	22.6		15.3	15.7	0.5	38.9	40.2	9.2	38.7	31.9	0.3
LOS	A	C		B	B	A	D	D	A	D	C	A
Approach Delay (s/veh)		21.5			10.1			22.6			36.3	
Approach LOS		C			B			C			D	
90th %ile Green (s)	7.6	32.4		14.7	39.5		7.2	7.2	7.2	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Gap	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	6.5	30.0		12.3	35.8		6.1	6.1	6.1	13.0	13.0	13.0
70th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Max	Max	Max
50th %ile Green (s)	5.9	30.0		10.8	34.9		5.6	5.6	5.6	13.0	13.0	13.0
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Max	Max	Max
30th %ile Green (s)	5.4	30.0		9.4	34.0		5.1	5.1	5.1	12.0	12.0	12.0
30th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		6.6	39.6		0.0	0.0	0.0	9.4	9.4	9.4
10th %ile Term Code	Skip	Min		Gap	Hold		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	29	535		102	313	0	35	20	7	257	13	0
Fuel Used(gal)	1	12		3	7	2	1	0	1	6	0	0
CO Emissions (g/hr)	49	852		180	459	110	61	33	44	398	18	6
NOx Emissions (g/hr)	10	166		35	89	21	12	7	9	77	3	1
VOC Emissions (g/hr)	11	197		42	106	26	14	8	10	92	4	1
Dilemma Vehicles (#)	0	34		0	24	0	0	1	0	0	1	0
Queue Length 50th (ft)	15	180		63	108	0	11	12	0	84	7	0
Queue Length 95th (ft)	30	242		97	145	0	27	34	20	129	23	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	710	2560		552	2584	1615	547	317	348	585	317	368
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.10	0.33		0.51	0.24	0.32	0.08	0.08	0.25	0.58	0.05	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 78.9			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 67.0%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 89.3			
70th %ile Actuated Cycle: 83.4			
50th %ile Actuated Cycle: 81.4			
30th %ile Actuated Cycle: 78.5			
10th %ile Actuated Cycle: 62			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	311	700	329	441	5	307	164	70	0	0	0
Future Volume (vph)	14	311	700	329	441	5	307	164	70	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.982				
Flt Protected		0.998		0.950				0.972				
Satd. Flow (prot)	0	1841	1641	1834	1837	0	0	1794	0	0	0	0
Flt Permitted		0.973		0.479				0.972				
Satd. Flow (perm)	0	1794	1641	925	1837	0	0	1794	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			787		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	6%	1%	1%	6%	0%	0%	1%	6%	0%	0%	0%
Adj. Flow (vph)	16	349	787	370	496	6	345	184	79	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	365	787	370	502	0	0	608	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.34	0.61	0.52	0.38			1.62				
Control Delay (s/veh)		11.7	3.0	5.1	4.1			318.9				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		11.7	3.0	5.1	4.1			318.9				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		5.7			4.5			318.9				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		159	37	76	114			394				
Fuel Used(gal)		3	3	2	3			61				
CO Emissions (g/hr)		221	229	160	213			4267				
NOx Emissions (g/hr)		43	44	31	42			830				
VOC Emissions (g/hr)		51	53	37	49			989				
Dilemma Vehicles (#)		16	0	0	0			0				
Queue Length 50th (ft)		111	0	46	69			~560				
Queue Length 95th (ft)		165	43	m57	m83			#759				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1058	1290	711	1304			376				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.34	0.61	0.52	0.38			1.62				

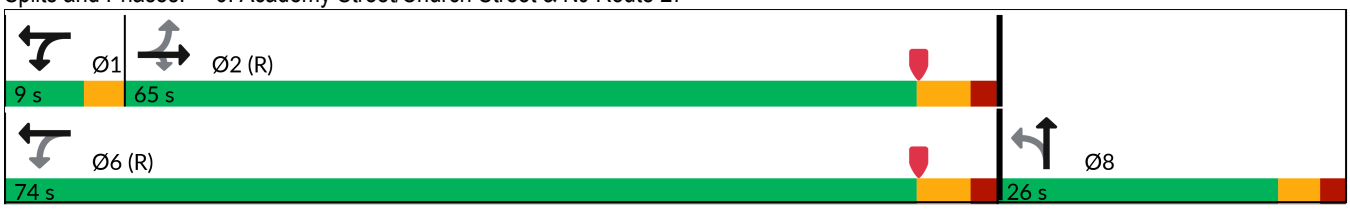
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.62			
Intersection Signal Delay (s/veh): 77.7		Intersection LOS: E	
Intersection Capacity Utilization 114.5%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	356	6	62	549	40	26	227	29	67	190	216
Future Volume (vph)	21	356	6	62	549	40	26	227	29	67	190	216
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.992			0.986			0.938	
Flt Protected		0.997			0.995			0.995			0.993	
Satd. Flow (prot)	0	2077	0	0	2054	0	0	1771	0	0	1722	0
Flt Permitted		0.950			0.923			0.876			0.839	
Satd. Flow (perm)	0	1979	0	0	1905	0	0	1559	0	0	1455	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	6%	0%	5%	6%	11%	13%	4%	8%	2%	5%	1%
Adj. Flow (vph)	22	379	6	66	584	43	28	241	31	71	202	230
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	407	0	0	693	0	0	300	0	0	503	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.34			0.61			0.66			1.19	
Control Delay (s/veh)		7.3			15.4			39.5			142.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		7.3			15.4			39.5			142.2	
LOS		A			B			D			F	
Approach Delay (s/veh)		7.3			15.4			39.5			142.2	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		118			395			246			383	
Fuel Used(gal)		3			11			18			20	
CO Emissions (g/hr)		206			801			1237			1387	
NOx Emissions (g/hr)		40			156			241			270	
VOC Emissions (g/hr)		48			186			287			321	
Dilemma Vehicles (#)		0			33			0			19	
Queue Length 50th (ft)		82			257			168			~390	
Queue Length 95th (ft)		m103			369			263			#588	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1187			1143			452			421	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.61			0.66			1.19	

Intersection Summary

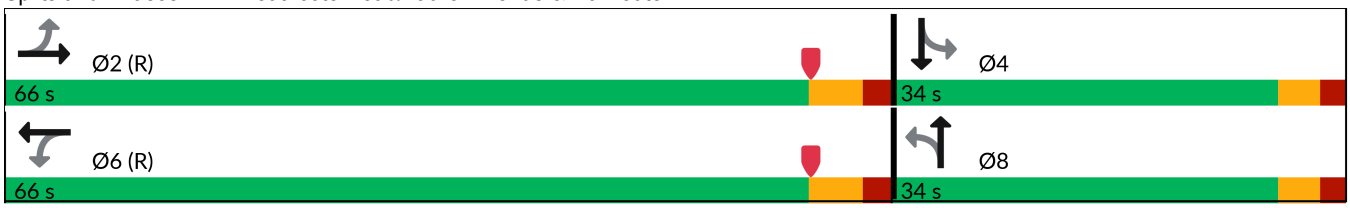
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay (s/veh): 51.0		Intersection LOS: D	
Intersection Capacity Utilization 100.9%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

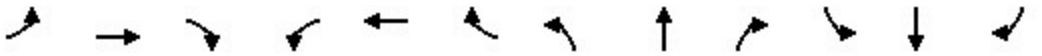
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	6	38	54	20	28	9	346	24	10	718	205
Future Volume (vph)	93	6	38	54	20	28	9	346	24	10	718	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.963			0.990			0.967	
Flt Protected		0.967			0.974		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1636	0	1805	1819	0	1805	1819	0
Flt Permitted		0.729			0.801		0.090			0.504		
Satd. Flow (perm)	0	1332	0	0	1345	0	171	1819	0	958	1819	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			20			6			26	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	17%	0%	0%	0%	1%	39%	0%	1%	1%
Adj. Flow (vph)	102	7	42	59	22	31	10	380	26	11	789	225
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	151	0	0	112	0	10	406	0	11	1014	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

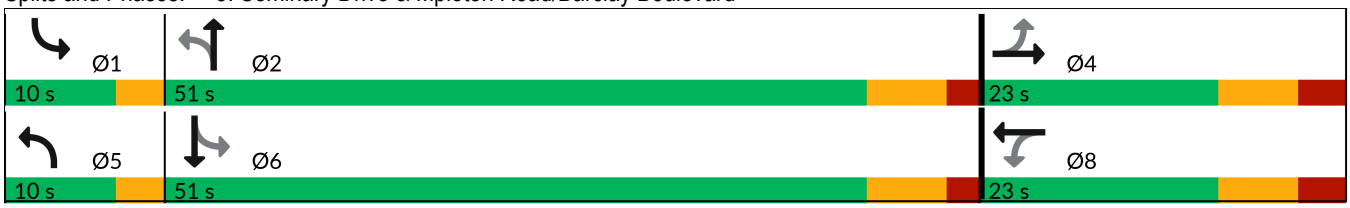


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		10.9			10.9		49.1	44.3		49.1	44.3	
Actuated g/C Ratio		0.15			0.15		0.69	0.62		0.69	0.62	
v/c Ratio		0.69			0.51		0.04	0.36		0.02	0.89	
Control Delay (s/veh)		42.1			32.0		4.4	8.8		4.1	25.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		42.1			32.0		4.4	8.8		4.1	25.6	
LOS		D			C		A	A		A	C	
Approach Delay (s/veh)		42.1			32.0			8.7			25.4	
Approach LOS		D			C			A			C	
90th %ile Green (s)	15.0	15.0		15.0	15.0		5.0	44.0		5.0	44.0	
90th %ile Term Code	Max	Max		Max	Max		Min	Max		Min	Max	
70th %ile Green (s)	13.3	13.3		13.3	13.3		0.0	44.0		0.0	44.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
50th %ile Green (s)	11.0	11.0		11.0	11.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
30th %ile Green (s)	8.7	8.7		8.7	8.7		0.0	44.0		0.0	44.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
10th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Min	Min		Hold	Hold		Skip	Max		Skip	Max	
Stops (vph)		110			75		4	171		4	638	
Fuel Used(gal)		3			1		0	6		0	46	
CO Emissions (g/hr)		232			81		9	391		30	3238	
NOx Emissions (g/hr)		45			16		2	76		6	630	
VOC Emissions (g/hr)		54			19		2	91		7	751	
Dilemma Vehicles (#)		8			0		0	25		0	60	
Queue Length 50th (ft)		53			36		1	71		1	308	
Queue Length 95th (ft)		123			91		6	179		6	#792	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		296			299		278	1126		745	1134	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

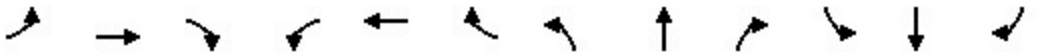
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.51			0.37		0.04	0.36		0.01	0.89	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 71.6			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82			
70th %ile Actuated Cycle: 72.3			
50th %ile Actuated Cycle: 70			
30th %ile Actuated Cycle: 67.7			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	531	6	1	1327	455	9	2	3	251	0	104
Future Volume (vph)	39	531	6	1	1327	455	9	2	3	251	0	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.971				0.850
Flt Protected	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (prot)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Flt Permitted	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (perm)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			342		3				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	5%	0%	0%	2%	1%	0%	0%	0%	7%	0%	0%
Adj. Flow (vph)	41	559	6	1	1397	479	9	2	3	264	0	109
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	41	559	6	1	1397	479	0	14	0	132	132	109
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

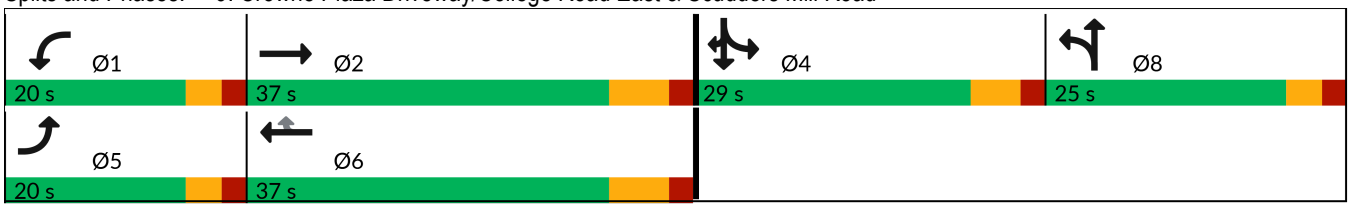


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.8	35.9	62.5	6.2	31.2	31.2		6.3		9.7	9.7	9.7
Actuated g/C Ratio	0.11	0.57	1.00	0.10	0.50	0.50		0.10		0.16	0.16	0.16
v/c Ratio	0.21	0.28	0.00	0.01	0.79	0.49		0.08		0.53	0.53	0.30
Control Delay (s/veh)	32.8	9.4	0.0	33.0	21.3	6.8		29.7		34.9	34.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	32.8	9.4	0.0	33.0	21.3	6.8		29.7		34.9	34.9	5.9
LOS	C	A	A	C	C	A		C		C	C	A
Approach Delay (s/veh)		10.9			17.6			29.7			26.4	
Approach LOS		B			B			C			C	
90th %ile Green (s)	8.6	32.6		6.0	30.0	30.0	6.3	6.3		15.6	15.6	15.6
90th %ile Term Code	Gap	Hold		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	6.7	41.7		0.0	30.0	30.0	0.0	0.0		11.2	11.2	11.2
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	6.0	41.0		0.0	30.0	30.0	0.0	0.0		9.6	9.6	9.6
50th %ile Term Code	Min	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		7.4	7.4	7.4
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Min	Min	Min
Stops (vph)	36	250	0	3	915	106		14		106	106	11
Fuel Used(gal)	1	11	0	0	37	8		0		7	7	4
CO Emissions (g/hr)	88	759	5	5	2559	561		16		471	471	296
NOx Emissions (g/hr)	17	148	1	1	498	109		3		92	92	58
VOC Emissions (g/hr)	20	176	1	1	593	130		4		109	109	69
Dilemma Vehicles (#)	0	37	0	0	102	0		1		0	7	0
Queue Length 50th (ft)	15	40	0	0	233	29		4		50	50	0
Queue Length 95th (ft)	50	152	0	6	#573	143		23		121	121	28
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	450	1977	1615	450	1765	968		596		612	612	702
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.09	0.28	0.00	0.00	0.79	0.49		0.02		0.22	0.22	0.16

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 62.5			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 17.4		Intersection LOS: B	
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 83.5			
70th %ile Actuated Cycle: 65.9			
50th %ile Actuated Cycle: 63.6			
30th %ile Actuated Cycle: 50.4			
10th %ile Actuated Cycle: 49			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	50	213	0	373	14	61	451
Future Vol, veh/h	50	213	0	373	14	61	451
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	0	2	0	2	0	2	1
Mvmt Flow	58	248	0	434	16	71	524

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	846	225	524	0	0	450	0
Stage 1	442	-	-	-	-	-	-
Stage 2	404	-	-	-	-	-	-
Critical Hdwy	6.8	6.94	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.32	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	305	778	676	-	-	1107	-
Stage 1	621	-	-	-	-	-	-
Stage 2	649	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	286	778	676	-	-	1107	-
Mov Cap-2 Maneuver	286	-	-	-	-	-	-
Stage 1	621	-	-	-	-	-	-
Stage 2	607	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.49	0	1.01
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	676	-	-	286	778	1107	-
HCM Lane V/C Ratio	-	-	-	0.203	0.318	0.064	-
HCM Ctrl Dly (s/v)	0	-	-	20.8	11.8	8.5	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	1.4	0.2	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	714	9	13	530	25	7	0	6	50	0	54
Future Vol, veh/h	32	714	9	13	530	25	7	0	6	50	0	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	35	776	10	14	576	27	8	0	7	54	0	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	603	0	0	786	0	0	1455	1482	781	1450	1460	576
Stage 1	-	-	-	-	-	-	851	851	-	604	604	-
Stage 2	-	-	-	-	-	-	604	632	-	846	855	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	984	-	-	842	-	-	109	126	398	110	130	521
Stage 1	-	-	-	-	-	-	358	379	-	488	491	-
Stage 2	-	-	-	-	-	-	488	477	-	360	377	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	984	-	-	842	-	-	88	115	398	99	119	521
Mov Cap-2 Maneuver	-	-	-	-	-	-	88	115	-	99	119	-
Stage 1	-	-	-	-	-	-	335	356	-	476	478	-
Stage 2	-	-	-	-	-	-	422	465	-	332	354	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.37	0.21	34.07	44.67
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	138	76	-	-	43	-	-	99	521
HCM Lane V/C Ratio	0.102	0.035	-	-	0.017	-	-	0.55	0.113
HCM Ctrl Dly (s/v)	34.1	8.8	0	-	9.3	0	-	79.1	12.8
HCM Lane LOS	D	A	A	-	A	A	-	F	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.1	-	-	2.5	0.4

PM PROJECTED WITH GDP

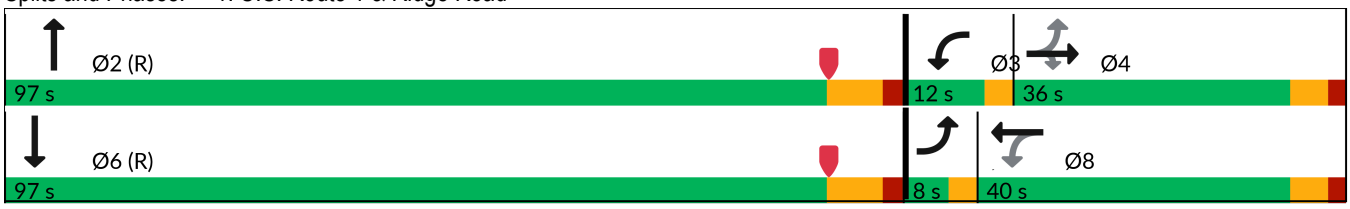
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	333	57	167	346	118	0	2462	0	0	1695	0
Future Volume (vph)	72	333	57	167	346	118	0	2462	0	0	1695	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.962							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1752	1900	1615	1787	1801	0	0	5168	0	0	5219	0
Flt Permitted	0.133			0.124								
Satd. Flow (perm)	245	1900	1615	233	1801	0	0	5168	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83		11							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	0%	0%	1%	2%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	77	358	61	180	372	127	0	2647	0	0	1823	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	358	61	180	499	0	0	2647	0	0	1823	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	12.0	40.0			97.0			97.0	
Total Split (%)	5.5%	24.8%	24.8%	8.3%	27.6%			66.9%			66.9%	
Maximum Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	38.4	30.0	30.0	46.2	34.8			90.8			90.8	
Actuated g/C Ratio	0.26	0.21	0.21	0.32	0.24			0.63			0.63	
v/c Ratio	0.64	0.91	0.15	0.98	1.13			0.82			0.56	
Control Delay (s/veh)	62.3	83.8	4.6	103.8	132.4			25.4			16.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	62.3	83.8	4.6	103.8	132.4			25.4			16.3	
LOS	E	F	A	F	F			C			B	
Approach Delay (s/veh)		70.8			124.8			25.4			16.3	
Approach LOS		E			F			C			B	
90th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	6.0	30.0	30.0	10.0	34.0			88.0			88.0	
30th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
10th %ile Green (s)	6.1	30.0	30.0	14.2	38.1			83.8			83.8	
10th %ile Term Code	Gap	Hold	Hold	Max	Max			Coord			Coord	
Stops (vph)	55	302	4	104	374			1998			925	
Fuel Used(gal)	2	9	0	5	19			55			26	
CO Emissions (g/hr)	107	630	11	370	1308			3849			1851	
NOx Emissions (g/hr)	21	122	2	72	255			749			360	
VOC Emissions (g/hr)	25	146	2	86	303			892			429	
Dilemma Vehicles (#)	0	10	0	0	13			93			58	
Queue Length 50th (ft)	53	336	0	~144	~543			852			335	
Queue Length 95th (ft)	#113	#532	17	#294	#766			331			373	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	121	393	399	183	440			3279			3311	

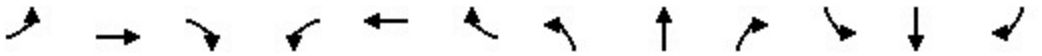
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.64	0.91	0.15	0.98	1.13			0.81			0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 16 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay (s/veh): 38.4		Intersection LOS: D	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	9	0	87	0	38	0	2830	10	0	2135	0
Future Volume (vph)	12	9	0	87	0	38	0	2830	10	0	2135	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	13	9	0	91	0	40	0	2948	10	0	2224	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	9	0	91	0	40	0	2958	0	0	2224	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



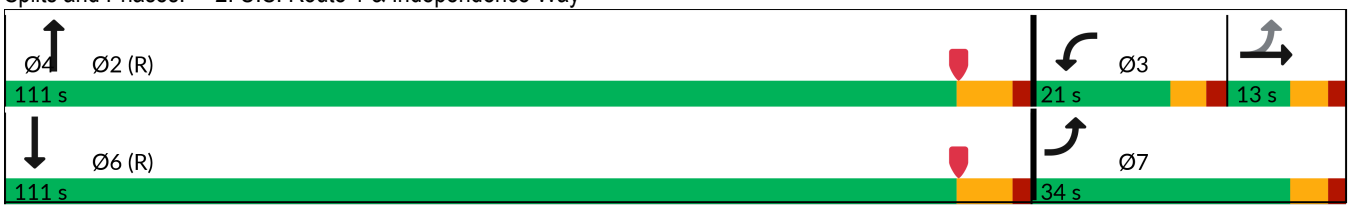
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	34.0	13.0		21.0				111.0			111.0	
Total Split (%)	23.4%	9.0%		14.5%				76.6%			76.6%	
Maximum Green (s)	28.0	7.0		15.0				103.0			103.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	11.3	7.0		11.4		145.0		120.0			120.0	
Actuated g/C Ratio	0.08	0.05		0.08		1.00		0.83			0.83	
v/c Ratio	0.05	0.10		0.65		0.02		0.69			0.51	
Control Delay (s/veh)	60.1	64.6		85.0		0.0		7.0			8.8	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	60.1	64.6		85.0		0.0		7.0			8.8	
LOS	E	E		F		A		A			A	
Approach Delay (s/veh)		61.9			59.0			7.0			8.8	
Approach LOS		E			E			A			A	
90th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	13.6	0.0		13.6				117.4			117.4	
70th %ile Term Code	Hold	Skip		Gap				Coord			Coord	
50th %ile Green (s)	0.0	0.0		11.7				119.3			119.3	
50th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
30th %ile Green (s)	0.0	0.0		9.7				121.3			121.3	
30th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
10th %ile Green (s)	0.0	0.0		6.8				124.2			124.2	
10th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
Stops (vph)	13	9		84		0		1078			1035	
Fuel Used(gal)	0	0		3		0		43			31	
CO Emissions (g/hr)	20	15		183		15		3007			2144	
NOx Emissions (g/hr)	4	3		36		3		585			417	
VOC Emissions (g/hr)	5	3		42		3		697			497	
Dilemma Vehicles (#)	0	1		0		0		98			89	
Queue Length 50th (ft)	6	7		85		0		291			505	
Queue Length 95th (ft)	m9	m17		143		0		624			m269	
Internal Link Dist (ft)		319			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	676	91		186		1615		4316			4320	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.02	0.10		0.49		0.02		0.69			0.51	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 9.3		Intersection LOS: A	
Intersection Capacity Utilization 72.5%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	307	402	0	0	666	105	0	0	71	0	0	0
Future Volume (vph)	307	402	0	0	666	105	0	0	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.280											
Satd. Flow (perm)	1032	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			664			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.89	0.89	0.93	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	330	432	0	0	716	113	0	0	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	330	432	0	0	716	113	0	0	76	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

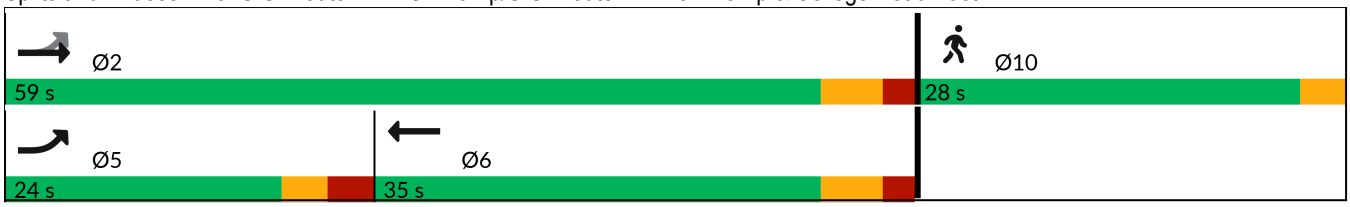
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.7	36.7			17.0	36.7			36.7			
Actuated g/C Ratio	0.84	1.00			0.46	1.00			1.00			
v/c Ratio	0.24	0.12			0.43	0.07			0.05			
Control Delay (s/veh)	1.0	0.1			7.7	0.1			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	1.0	0.1			7.7	0.1			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.5			6.7			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	9.6	32.6			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.8	30.8			17.0							
70th %ile Term Code	Gap	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	32	0			396	0			0			
Fuel Used(gal)	1	1			23	3			1			
CO Emissions (g/hr)	79	69			1608	199			45			
NOx Emissions (g/hr)	15	14			313	39			9			
VOC Emissions (g/hr)	18	16			373	46			10			
Dilemma Vehicles (#)	0	0			69	0			0			
Queue Length 50th (ft)	0	0			42	0			0			
Queue Length 95th (ft)	0	0			81	0			0			
Internal Link Dist (ft)		282			478			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2076	3574			2856	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.16	0.12			0.25	0.07			0.05			

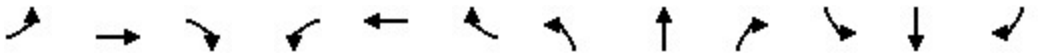
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.7			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 3.5		Intersection LOS: A	
Intersection Capacity Utilization 50.6%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 38.6			
70th %ile Actuated Cycle: 36.8			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

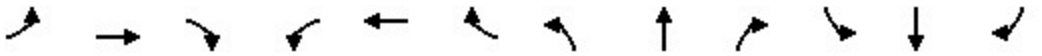


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1050	16	0	898	0	18	0	114	6	220	0
Future Volume (vph)	0	1050	16	0	898	0	18	0	114	6	220	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3568	0	0	3574	0	1703	0	1583	0	3572	0
Flt Permitted							0.607				0.999	
Satd. Flow (perm)	0	3568	0	0	3574	0	1088	0	1583	0	3572	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2							79			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	6%	0%	2%	0%	1%	0%
Adj. Flow (vph)	0	1082	16	0	926	0	19	0	118	6	227	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1098	0	0	926	0	19	0	118	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

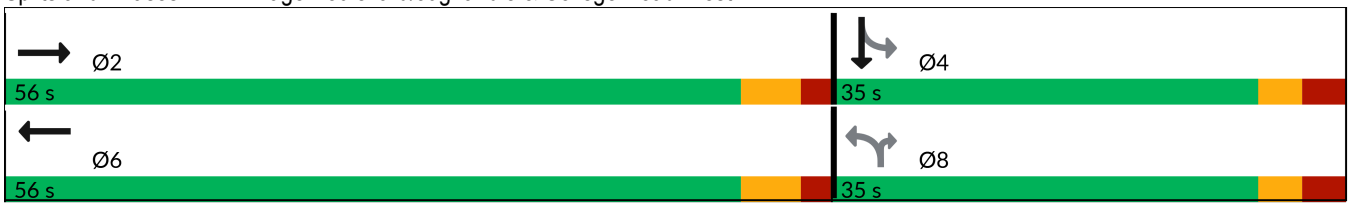


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		18.1			18.1		7.9		7.9		7.9	
Actuated g/C Ratio		0.47			0.47		0.21		0.21		0.21	
v/c Ratio		0.65			0.55		0.08		0.30		0.32	
Control Delay (s/veh)		9.7			8.5		14.8		9.2		15.0	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		9.7			8.5		14.8		9.2		15.0	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		9.7			8.5			10.0			15.0	
Approach LOS		A			A			B			B	
90th %ile Green (s)		24.6			24.6		10.0		10.0	10.0	10.0	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		20.0			20.0		8.3		8.3	8.3	8.3	
70th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
50th %ile Green (s)		16.9			16.9		7.3		7.3	7.3	7.3	
50th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Min		Min	Min	Min	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		698			546		18		45		178	
Fuel Used(gal)		11			9		0		1		2	
CO Emissions (g/hr)		802			594		16		63		142	
NOx Emissions (g/hr)		156			116		3		12		28	
VOC Emissions (g/hr)		186			138		4		15		33	
Dilemma Vehicles (#)		105			88		0		0		0	
Queue Length 50th (ft)		77			60		3		6		21	
Queue Length 95th (ft)		137			110		17		40		53	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3568			3574		837		1236		2749	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

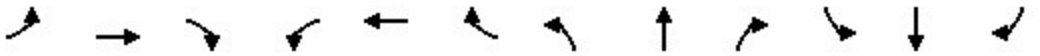
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31			0.26		0.02		0.10		0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 38.2			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 9.8		Intersection LOS: A	
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 46.6			
70th %ile Actuated Cycle: 40.3			
50th %ile Actuated Cycle: 36.2			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	299	59	144	495	516	86	23	100	650	37	83
Future Volume (vph)	57	299	59	144	495	516	86	23	100	650	37	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.975				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3474	0	1736	3574	1615	3502	1900	1583	3502	1900	1615
Flt Permitted	0.443			0.514			0.950			0.950		
Satd. Flow (perm)	842	3474	0	939	3574	1615	3502	1900	1583	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				532			109			109
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	3%	4%	1%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	59	308	61	148	510	532	89	24	103	670	38	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	369	0	148	510	532	89	24	103	670	38	86
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

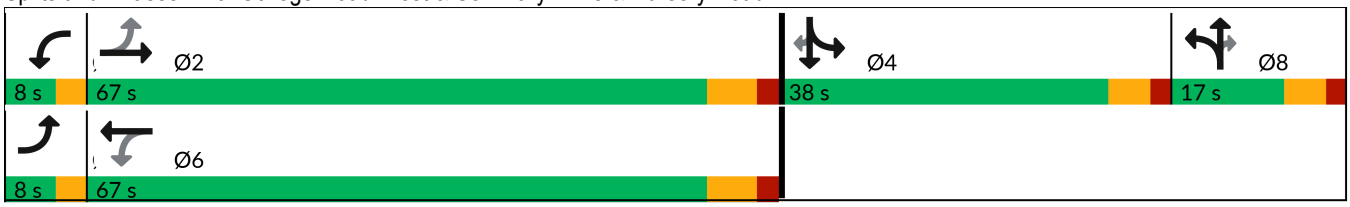


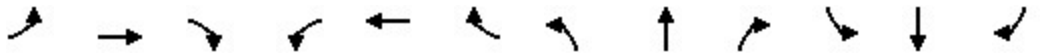
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.2	30.1		39.9	31.9	85.6	6.7	6.7	6.7	21.6	21.6	21.6
Actuated g/C Ratio	0.46	0.35		0.47	0.37	1.00	0.08	0.08	0.08	0.25	0.25	0.25
v/c Ratio	0.13	0.30		0.31	0.38	0.33	0.32	0.16	0.46	0.76	0.08	0.18
Control Delay (s/veh)	14.1	20.5		15.9	22.4	0.5	41.8	41.0	14.7	35.7	24.4	4.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.1	20.5		15.9	22.4	0.5	41.8	41.0	14.7	35.7	24.4	4.0
LOS	B	C		B	C	A	D	D	B	D	C	A
Approach Delay (s/veh)		19.6			11.8			28.8			31.7	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.6	8.6	8.6	28.6	28.6	28.6
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.6	7.6	7.6	24.8	24.8	24.8
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.8	6.8	6.8	21.3	21.3	21.3
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		6.0	6.0	6.0	19.1	19.1	19.1
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.0	5.0	5.0	15.1	15.1	15.1
10th %ile Term Code	Skip	Min		Max	Hold		Min	Min	Min	Gap	Gap	Gap
Stops (vph)	31	232		83	350	0	76	22	18	570	28	8
Fuel Used(gal)	1	6		2	7	2	2	1	1	12	1	1
CO Emissions (g/hr)	53	393		126	522	133	139	38	75	871	41	40
NOx Emissions (g/hr)	10	76		24	102	26	27	7	15	169	8	8
VOC Emissions (g/hr)	12	91		29	121	31	32	9	17	202	10	9
Dilemma Vehicles (#)	0	15		0	22	0	0	1	0	0	1	0
Queue Length 50th (ft)	16	68		41	106	0	23	12	0	171	16	0
Queue Length 95th (ft)	42	120		91	172	0	50	38	44	236	40	23
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	442	2454		484	2517	1615	452	245	299	1315	713	674
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.13	0.15		0.31	0.20	0.33	0.20	0.10	0.34	0.51	0.05	0.13

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 85.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 20.5		Intersection LOS: C	
Intersection Capacity Utilization 72.4%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 94.2			
70th %ile Actuated Cycle: 89.4			
50th %ile Actuated Cycle: 85.1			
30th %ile Actuated Cycle: 82.1			
10th %ile Actuated Cycle: 77.1			

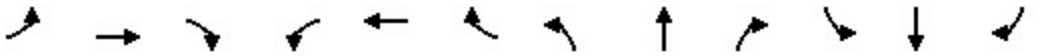
Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	597	534	253	464	5	316	231	81	0	0	0
Future Volume (vph)	46	597	534	253	464	5	316	231	81	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.983				
Flt Protected		0.996		0.950				0.975				
Satd. Flow (prot)	0	1922	1641	1816	1927	0	0	1814	0	0	0	0
Flt Permitted		0.937		0.220				0.975				
Satd. Flow (perm)	0	1808	1641	421	1927	0	0	1814	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			556		1							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	1%	2%	1%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	48	622	556	264	483	5	329	241	84	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	670	556	264	488	0	0	654	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



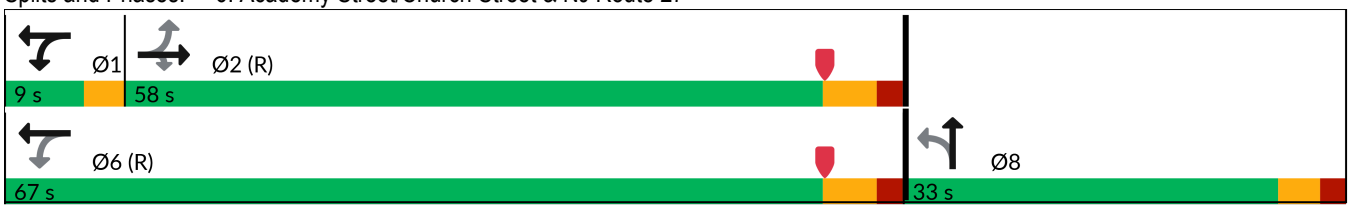
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.71	0.50	0.75	0.40			1.29				
Control Delay (s/veh)		23.6	2.8	18.5	6.2			176.9				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		23.6	2.8	18.5	6.2			176.9				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		14.2			10.5			176.9				
Approach LOS		B			B			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		480	31	98	152			497				
Fuel Used(gal)		9	2	3	4			53				
CO Emissions (g/hr)		633	174	182	246			3700				
NOx Emissions (g/hr)		123	34	35	48			720				
VOC Emissions (g/hr)		147	40	42	57			857				
Dilemma Vehicles (#)		32	0	0	0			0				
Queue Length 50th (ft)		311	0	44	94			~534				
Queue Length 95th (ft)		451	50	m71	m114			#748				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		940	1120	353	1233			507				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.71	0.50	0.75	0.40			1.29				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.29			
Intersection Signal Delay (s/veh): 53.6		Intersection LOS: D	
Intersection Capacity Utilization 114.5%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	657	15	53	516	91	41	287	48	89	173	160
Future Volume (vph)	19	657	15	53	516	91	41	287	48	89	173	160
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.981			0.983			0.949	
Flt Protected		0.999			0.996			0.995			0.990	
Satd. Flow (prot)	0	2180	0	0	2140	0	0	1833	0	0	1743	0
Flt Permitted		0.974			0.900			0.870			0.675	
Satd. Flow (perm)	0	2126	0	0	1933	0	0	1602	0	0	1189	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1372			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	1%	5%	0%	4%	2%
Adj. Flow (vph)	20	677	15	55	532	94	42	296	49	92	178	165
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	712	0	0	681	0	0	387	0	0	435	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.56			0.59			0.83			1.26	
Control Delay (s/veh)		8.3			15.0			50.5			172.7	
Queue Delay		0.2			0.0			0.0			0.0	
Total Delay (s/veh)		8.5			15.0			50.5			172.7	
LOS		A			B			D			F	
Approach Delay (s/veh)		8.5			15.0			50.5			172.7	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		186			391			328			330	
Fuel Used(gal)		5			12			24			20	
CO Emissions (g/hr)		374			804			1704			1414	
NOx Emissions (g/hr)		73			156			332			275	
VOC Emissions (g/hr)		87			186			395			328	
Dilemma Vehicles (#)		0			33			0			16	
Queue Length 50th (ft)		112			249			231			~350	
Queue Length 95th (ft)		m193			355			#388			#540	
Internal Link Dist (ft)		509			1292			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1275			1159			464			344	
Starvation Cap Reductn		115			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.61			0.59			0.83			1.26	

Intersection Summary

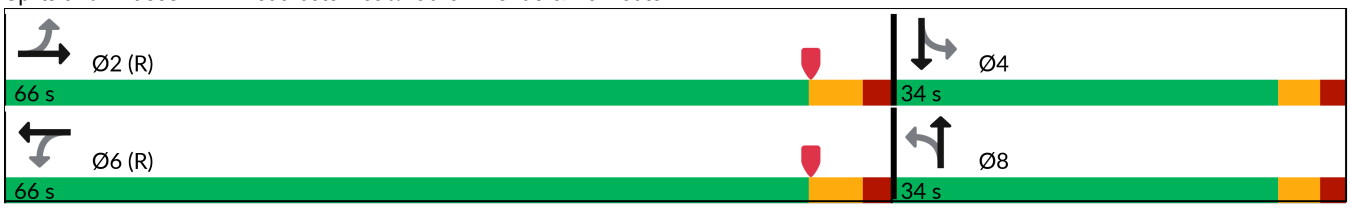
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay (s/veh): 50.1		Intersection LOS: D	
Intersection Capacity Utilization 106.6%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

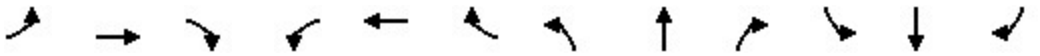
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	1	11	42	5	7	12	583	49	15	386	154
Future Volume (vph)	29	1	11	42	5	7	12	583	49	15	386	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.963			0.983			0.988			0.957	
Flt Protected		0.966			0.962		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1742	0	1805	1867	0	1805	1800	0
Flt Permitted		0.755			0.778		0.409			0.347		
Satd. Flow (perm)	0	1381	0	0	1409	0	777	1867	0	659	1800	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			8			36	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			416			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	4%	0%	0%	0%	0%	7%	0%	1%	1%
Adj. Flow (vph)	31	1	12	45	5	7	13	620	52	16	411	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	57	0	13	672	0	16	575	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

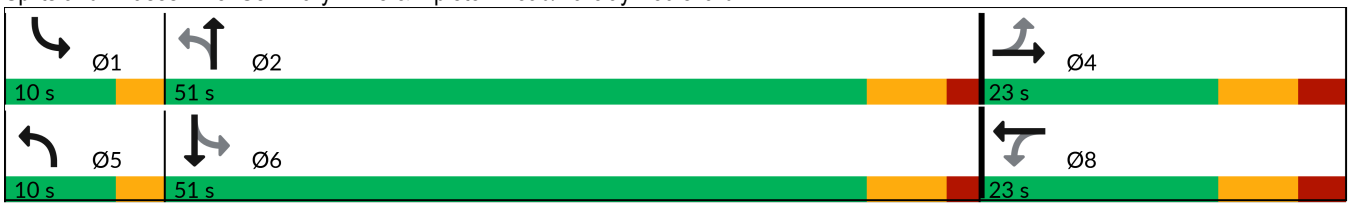


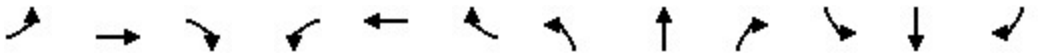
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		8.0			8.0		50.1	48.6		50.2	48.7	
Actuated g/C Ratio		0.13			0.13		0.80	0.78		0.80	0.78	
v/c Ratio		0.24			0.30		0.02	0.46		0.03	0.41	
Control Delay (s/veh)		25.7			30.1		3.0	7.6		3.0	6.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		25.7			30.1		3.0	7.6		3.0	6.7	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		25.7			30.1			7.5			6.6	
Approach LOS		C			C			A			A	
90th %ile Green (s)	10.9	10.9		10.9	10.9		5.0	44.0		5.1	44.1	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Gap	Hold	
70th %ile Green (s)	8.2	8.2		8.2	8.2		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		30			45		4	260		6	197	
Fuel Used(gal)		1			1		0	9		1	23	
CO Emissions (g/hr)		57			43		11	638		45	1628	
NOx Emissions (g/hr)		11			8		2	124		9	317	
VOC Emissions (g/hr)		13			10		2	148		10	377	
Dilemma Vehicles (#)		2			0		0	32		0	25	
Queue Length 50th (ft)		12			19		1	115		1	86	
Queue Length 95th (ft)		43			56		5	311		6	240	
Internal Link Dist (ft)		797			156			336			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		349			352		744	1452		662	1407	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.13			0.16		0.02	0.46		0.02	0.41	

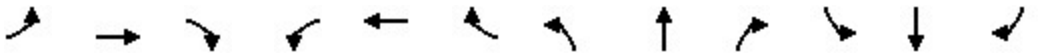
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 8.6		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 78			
70th %ile Actuated Cycle: 67.2			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	1215	5	13	690	236	5	2	9	474	3	62
Future Volume (vph)	77	1215	5	13	690	236	5	2	9	474	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.924				0.850
Flt Protected	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (prot)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Flt Permitted	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (perm)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			243		9				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		611			1998			443			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	79	1253	5	13	711	243	5	2	9	489	3	64
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	79	1253	5	13	711	243	0	16	0	244	248	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

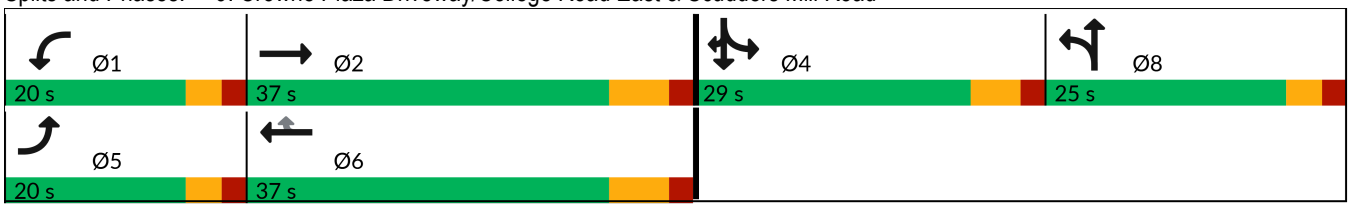


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	8.2	39.8	72.3	6.3	31.2	31.2		6.3		15.5	15.5	15.5
Actuated g/C Ratio	0.11	0.55	1.00	0.09	0.43	0.43		0.09		0.21	0.21	0.21
v/c Ratio	0.38	0.64	0.00	0.08	0.46	0.29		0.10		0.67	0.68	0.14
Control Delay (s/veh)	39.2	16.4	0.0	38.3	19.0	4.2		28.1		37.4	37.8	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	39.2	16.4	0.0	38.3	19.0	4.2		28.1		37.4	37.8	0.7
LOS	D	B	A	D	B	A		C		D	D	A
Approach Delay (s/veh)		17.7			15.6			28.1			33.3	
Approach LOS		B			B			C			C	
90th %ile Green (s)	11.8	35.3		6.5	30.0	30.0	6.4	6.4		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Max	Max	Max
70th %ile Green (s)	9.7	44.7		0.0	30.0	30.0	0.0	0.0		20.8	20.8	20.8
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	7.7	42.7		0.0	30.0	30.0	0.0	0.0		14.8	14.8	14.8
50th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	6.4	41.4		0.0	30.0	30.0	0.0	0.0		12.4	12.4	12.4
30th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		8.5	8.5	8.5
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
Stops (vph)	67	738	0	15	473	25		12		202	205	0
Fuel Used(gal)	3	29	0	0	19	4		0		13	13	2
CO Emissions (g/hr)	176	2033	4	35	1306	250		16		903	919	167
NOx Emissions (g/hr)	34	396	1	7	254	49		3		176	179	33
VOC Emissions (g/hr)	41	471	1	8	303	58		4		209	213	39
Dilemma Vehicles (#)	0	70	0	0	47	0		1		0	13	0
Queue Length 50th (ft)	33	154	0	5	112	0		3		103	105	0
Queue Length 95th (ft)	88	#516	0	26	249	52		24		220	223	0
Internal Link Dist (ft)		531			1918			363			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	389	1967	1615	389	1542	828		503		561	563	616
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.20	0.64	0.00	0.03	0.46	0.29		0.03		0.43	0.44	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 72.3			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 20.0		Intersection LOS: C	
Intersection Capacity Utilization 73.5%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 94.2			
70th %ile Actuated Cycle: 78.5			
50th %ile Actuated Cycle: 70.5			
30th %ile Actuated Cycle: 66.8			
10th %ile Actuated Cycle: 51.5			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	21	97	0	385	52	173	378
Future Vol, veh/h	21	97	0	385	52	173	378
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89	89
Heavy Vehicles, %	5	0	0	0	0	2	1
Mvmt Flow	24	109	0	433	58	194	425

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1063	246	425	0	0	491	0
Stage 1	462	-	-	-	-	-	-
Stage 2	601	-	-	-	-	-	-
Critical Hdwy	6.9	6.9	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	213	761	781	-	-	1069	-
Stage 1	592	-	-	-	-	-	-
Stage 2	502	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	175	761	781	-	-	1069	-
Mov Cap-2 Maneuver	175	-	-	-	-	-	-
Stage 1	592	-	-	-	-	-	-
Stage 2	411	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.78	0	2.86
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	781	-	-	175	761	1069	-
HCM Lane V/C Ratio	-	-	-	0.135	0.143	0.182	-
HCM Ctrl Dly (s/v)	0	-	-	28.8	10.5	9.1	-
HCM Lane LOS	A	-	-	D	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.5	0.7	-

Intersection	
Int Delay, s/veh	2

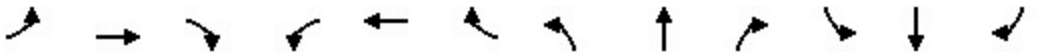
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	382	8	5	618	38	13	0	15	16	0	49
Future Vol, veh/h	54	382	8	5	618	38	13	0	15	16	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	59	415	9	5	672	41	14	0	16	17	0	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	713	0	0	424	0	0	1220	1261	420	1215	1224	672
Stage 1	-	-	-	-	-	-	537	537	-	683	683	-
Stage 2	-	-	-	-	-	-	683	724	-	533	541	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	896	-	-	1146	-	-	158	172	638	160	181	459
Stage 1	-	-	-	-	-	-	532	526	-	443	453	-
Stage 2	-	-	-	-	-	-	443	433	-	534	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	896	-	-	1146	-	-	127	156	638	141	164	459
Mov Cap-2 Maneuver	-	-	-	-	-	-	127	156	-	141	164	-
Stage 1	-	-	-	-	-	-	486	481	-	439	449	-
Stage 2	-	-	-	-	-	-	388	430	-	476	479	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.13	0.06	23.72	18.84
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	223	218	-	-	14	-	-	141	459
HCM Lane V/C Ratio	0.137	0.065	-	-	0.005	-	-	0.123	0.116
HCM Ctrl Dly (s/v)	23.7	9.3	0	-	8.2	0	-	34.1	13.9
HCM Lane LOS	C	A	A	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.5	0.2	-	-	0	-	-	0.4	0.4

SATURDAY PROJECTED WITH GDP



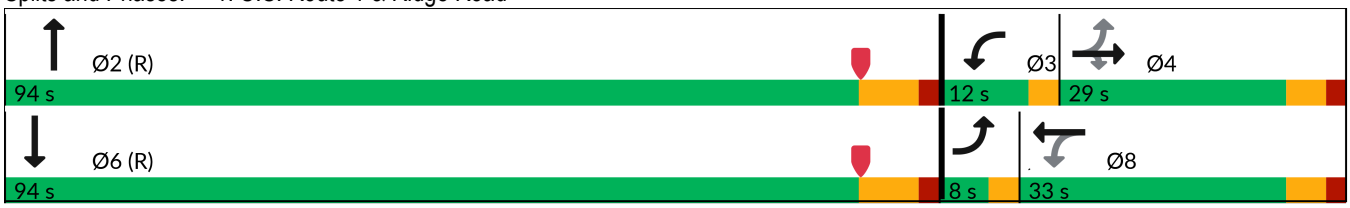
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	221	57	121	174	102	0	1842	0	0	1718	0
Future Volume (vph)	49	221	57	121	174	102	0	1842	0	0	1718	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1805	1881	1553	1787	1778	0	0	3597	0	0	3632	0
Flt Permitted	0.314			0.259								
Satd. Flow (perm)	597	1881	1553	487	1778	0	0	3597	0	0	3632	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	4%	1%	1%	1%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	50	226	58	123	178	104	0	1880	0	0	1753	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	226	58	123	282	0	0	1880	0	0	1753	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	29.0	29.0	12.0	33.0			94.0			94.0	
Total Split (%)	5.9%	21.5%	21.5%	8.9%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.9	19.6	19.6	35.9	25.2			91.1			91.1	
Actuated g/C Ratio	0.21	0.15	0.15	0.27	0.19			0.67			0.67	
v/c Ratio	0.27	0.83	0.19	0.54	0.81			0.77			0.72	
Control Delay (s/veh)	39.8	79.6	4.5	47.5	67.6			17.7			16.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	39.8	79.6	4.5	47.5	67.6			17.7			16.7	
LOS	D	E	A	D	E			B			B	
Approach Delay (s/veh)		60.6			61.5			17.7			16.7	
Approach LOS		E			E			B			B	
90th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	8.1	23.4	23.4	13.6	28.9			81.0			81.0	
70th %ile Term Code	Gap	Gap	Gap	Gap	Hold			Coord			Coord	
50th %ile Green (s)	7.2	20.5	20.5	11.6	24.9			85.9			85.9	
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap			Coord			Coord	
30th %ile Green (s)	6.2	17.8	17.8	9.8	21.4			90.4			90.4	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	13.5	13.5	7.3	23.8			97.2			97.2	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	38	210	3	92	242			1229			1053	
Fuel Used(gal)	1	6	0	3	8			33			29	
CO Emissions (g/hr)	58	411	10	189	545			2333			2036	
NOx Emissions (g/hr)	11	80	2	37	106			454			396	
VOC Emissions (g/hr)	13	95	2	44	126			541			472	
Dilemma Vehicles (#)	0	7	0	0	9			68			64	
Queue Length 50th (ft)	32	193	0	84	225			577			496	
Queue Length 95th (ft)	66	281	16	142	#346			675			581	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	184	321	339	231	375			2454			2478	

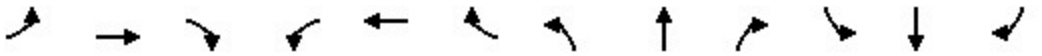
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.27	0.70	0.17	0.53	0.75			0.77			0.71	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 24.6		Intersection LOS: C	
Intersection Capacity Utilization 81.7%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	0	0	7	0	1	0	1934	6	0	1825	0
Future Volume (vph)	16	0	0	7	0	1	0	1934	6	0	1825	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	16	0	0	7	0	1	0	1994	6	0	1881	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	0	0	7	0	1	0	2000	0	0	1881	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt			Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



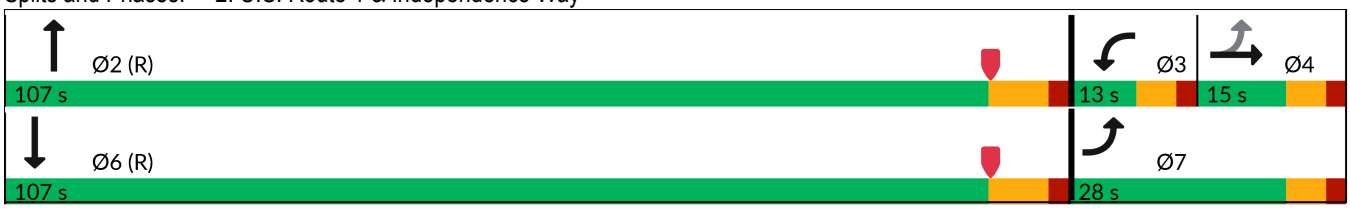
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	5.7			5.4		135.0		127.9			127.9	
Actuated g/C Ratio	0.04			0.04		1.00		0.95			0.95	
v/c Ratio	0.12			0.10		0.00		0.41			0.38	
Control Delay (s/veh)	57.1			65.1		0.0		1.1			1.3	
Queue Delay	0.0			0.0		0.0		0.0			0.0	
Total Delay (s/veh)	57.1			65.1		0.0		1.1			1.3	
LOS	E			E		A		A			A	
Approach Delay (s/veh)		57.1			57.0			1.1			1.3	
Approach LOS		E			E			A			A	
90th %ile Green (s)	6.3	0.0		6.3				114.7			114.7	
90th %ile Term Code	Hold	Skip		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
50th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	17			9		0		163			179	
Fuel Used(gal)	0			0		0		16			10	
CO Emissions (g/hr)	25			14		0		1147			722	
NOx Emissions (g/hr)	5			3		0		223			140	
VOC Emissions (g/hr)	6			3		0		266			167	
Dilemma Vehicles (#)	0			0		0		32			50	
Queue Length 50th (ft)	7			6		0		0			0	
Queue Length 95th (ft)	m10			23		0		105			123	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	533			93		1615		4898			4946	
Starvation Cap Reductn	0			0		0		0			0	
Spillback Cap Reductn	0			0		0		0			0	
Storage Cap Reductn	0			0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03			0.08		0.00		0.41			0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 1.6		Intersection LOS: A	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	263	289	0	0	330	10	0	0	63	0	0	0
Future Volume (vph)	263	289	0	0	330	10	0	0	63	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3574	1455	0	0	1611	0	0	0
Flt Permitted	0.400											
Satd. Flow (perm)	1474	3574	0	0	3574	1455	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			752			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	11%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	280	307	0	0	351	11	0	0	67	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	280	307	0	0	351	11	0	0	67	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

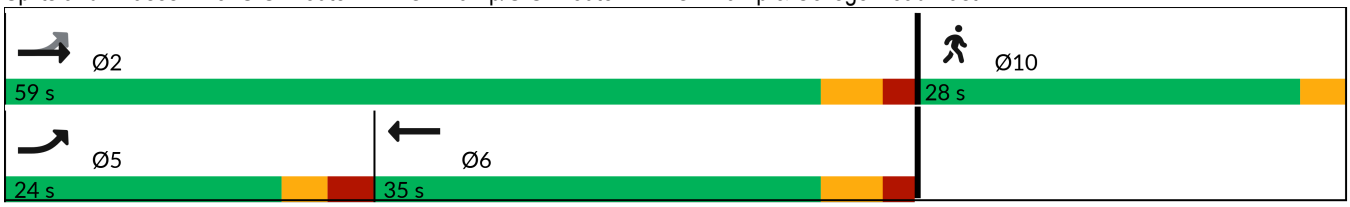
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.1	36.1			17.0	36.1			36.1			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.17	0.09			0.21	0.01			0.04			
Control Delay (s/veh)	0.8	0.0			6.0	0.0			0.0			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.8	0.0			6.0	0.0			0.0			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			5.8							
Approach LOS		A			A							
90th %ile Green (s)	7.3	30.3			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	26	0			167	0			0			
Fuel Used(gal)	1	1			11	0			1			
CO Emissions (g/hr)	66	50			769	19			40			
NOx Emissions (g/hr)	13	10			150	4			8			
VOC Emissions (g/hr)	15	12			178	4			9			
Dilemma Vehicles (#)	0	0			35	0			0			
Queue Length 50th (ft)	0	0			18	0			0			
Queue Length 95th (ft)	0	0			33	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2241	3574			2874	1455			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.12	0.09			0.12	0.01			0.04			

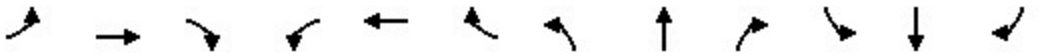
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.1			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.3			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

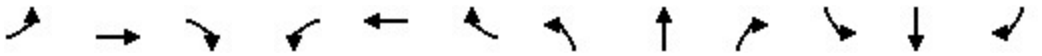


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	978	12	0	849	0	6	0	42	2	74	0
Future Volume (vph)	0	978	12	0	849	0	6	0	42	2	74	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3568	0	0	3574	0	1805	0	1615	0	3606	0
Flt Permitted							0.727				0.999	
Satd. Flow (perm)	0	3568	0	0	3574	0	1381	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2							47			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1099	13	0	954	0	7	0	47	2	83	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1112	0	0	954	0	7	0	47	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

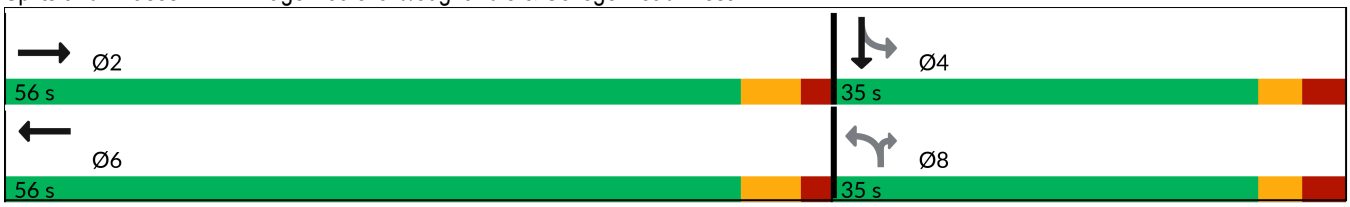


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		23.5			23.5		7.0		7.0		7.0	
Actuated g/C Ratio		0.61			0.61		0.18		0.18		0.18	
v/c Ratio		0.51			0.44		0.03		0.14		0.13	
Control Delay (s/veh)		7.1			6.5		13.8		7.0		14.2	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		7.1			6.5		13.8		7.0		14.2	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		7.1			6.5			7.9			14.2	
Approach LOS		A			A			A			B	
90th %ile Green (s)		22.3			22.3		7.0		7.0	7.0	7.0	
90th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
70th %ile Green (s)		18.6			18.6		7.0		7.0	7.0	7.0	
70th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
50th %ile Green (s)		16.2			16.2		7.0		7.0	7.0	7.0	
50th %ile Term Code		Gap			Hold		Hold		Hold	Min	Min	
30th %ile Green (s)		23.6			23.6		7.0		7.0	7.0	7.0	
30th %ile Term Code		Dwell			Dwell		Hold		Hold	Min	Min	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		551			445		9		16		62	
Fuel Used(gal)		9			7		0		0		1	
CO Emissions (g/hr)		642			489		6		22		48	
NOx Emissions (g/hr)		125			95		1		4		9	
VOC Emissions (g/hr)		149			113		1		5		11	
Dilemma Vehicles (#)		89			77		0		0		0	
Queue Length 50th (ft)		76			62		1		0		6	
Queue Length 95th (ft)		115			94		9		18		22	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3568			3574		1045		1233		2728	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31			0.27		0.01		0.04		0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 38.5			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 7.1		Intersection LOS: A	
Intersection Capacity Utilization 54.1%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 41.3			
70th %ile Actuated Cycle: 37.6			
50th %ile Actuated Cycle: 35.2			
30th %ile Actuated Cycle: 42.6			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



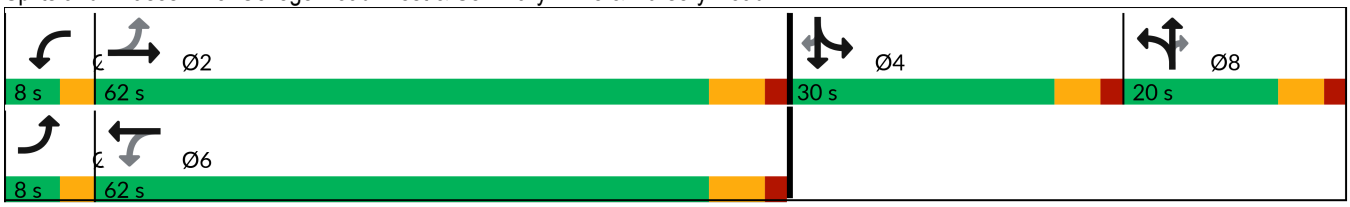
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	225	43	94	273	767	44	39	76	682	43	79
Future Volume (vph)	87	225	43	94	273	767	44	39	76	682	43	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.976				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3494	0	1752	3610	1615	3502	1900	1568	3502	1900	1615
Flt Permitted	0.570			0.573			0.950			0.950		
Satd. Flow (perm)	1083	3494	0	1057	3610	1615	3502	1900	1568	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				834			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	3%	0%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	95	245	47	102	297	834	48	42	83	741	47	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	292	0	102	297	834	48	42	83	741	47	86
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	38.2	30.4		38.2	30.4	83.7	6.5	6.5	6.5	24.3	24.3	24.3
Actuated g/C Ratio	0.46	0.36		0.46	0.36	1.00	0.08	0.08	0.08	0.29	0.29	0.29
v/c Ratio	0.18	0.23		0.19	0.23	0.52	0.18	0.29	0.36	0.73	0.09	0.16
Control Delay (s/veh)	13.8	19.0		14.1	20.6	1.2	39.3	43.3	8.0	33.2	24.7	3.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.8	19.0		14.1	20.6	1.2	39.3	43.3	8.0	33.2	24.7	3.1
LOS	B	B		B	C	A	D	D	A	C	C	A
Approach Delay (s/veh)		17.7			6.9			25.3			29.8	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.5	8.5	8.5	24.0	24.0	24.0
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.2	7.2	7.2	24.0	24.0	24.0
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.3	6.3	6.3	24.0	24.0	24.0
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.5	5.5	5.5	24.0	24.0	24.0
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
10th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0	0.0	24.0	24.0	24.0
10th %ile Term Code	Skip	Min		Skip	Min		Skip	Skip	Skip	Max	Max	Max
Stops (vph)	46	165		52	182	1	42	38	6	589	32	6
Fuel Used(gal)	1	4		1	4	3	1	1	1	13	1	1
CO Emissions (g/hr)	80	283		78	274	206	72	66	44	884	48	36
NOx Emissions (g/hr)	16	55		15	53	40	14	13	9	172	9	7
VOC Emissions (g/hr)	19	66		18	63	48	17	15	10	205	11	8
Dilemma Vehicles (#)	0	12		0	12	0	0	2	0	0	2	0
Queue Length 50th (ft)	27	54		30	60	0	12	22	0	192	19	0
Queue Length 95th (ft)	57	88		60	95	0	29	54	23	267	47	20
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	538	2331		524	2400	1615	592	321	363	1016	551	552
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.18	0.13		0.19	0.12	0.52	0.08	0.13	0.23	0.73	0.09	0.16

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 83.7			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 17.2		Intersection LOS: B	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 89.5			
70th %ile Actuated Cycle: 88.2			
50th %ile Actuated Cycle: 87.3			
30th %ile Actuated Cycle: 86.5			
10th %ile Actuated Cycle: 67			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	244	274	549	12	189	61	104	0	0	0
Future Volume (vph)	15	463	244	274	549	12	189	61	104	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.960				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1891	1658	1834	1907	0	0	1777	0	0	0	0
Flt Permitted		0.977		0.379				0.974				
Satd. Flow (perm)	0	1851	1658	732	1907	0	0	1777	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			257		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	3%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	257	288	578	13	199	64	109	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	257	288	591	0	0	372	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

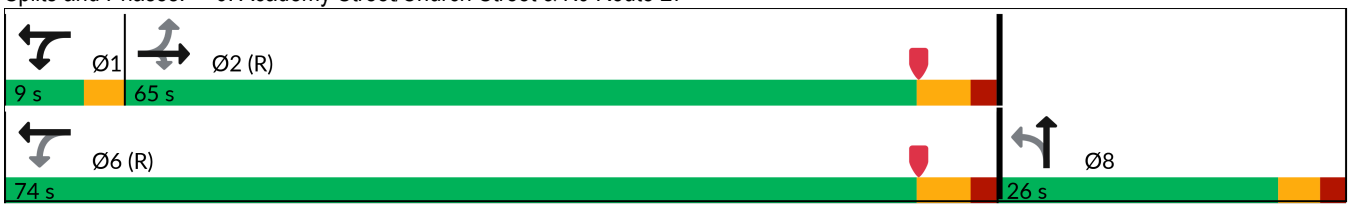
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.46	0.24	0.49	0.44			1.00				
Control Delay (s/veh)		13.3	1.7	5.3	4.5			87.0				
Queue Delay		0.0	0.0	0.0	0.3			0.0				
Total Delay (s/veh)		13.3	1.7	5.3	4.7			87.0				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		9.4			4.9			87.0				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		258	14	58	144			304				
Fuel Used(gal)		5	1	2	4			23				
CO Emissions (g/hr)		348	76	132	271			1637				
NOx Emissions (g/hr)		68	15	26	53			319				
VOC Emissions (g/hr)		81	18	31	63			379				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		168	0	34	84			239				
Queue Length 95th (ft)		245	31	m46	m103			#426				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1092	1083	585	1354			373				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	259			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.46	0.24	0.49	0.54			1.00				

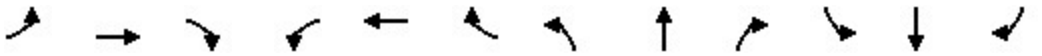
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 21.8		Intersection LOS: C	
Intersection Capacity Utilization 110.6%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	505	23	63	611	61	42	110	72	85	140	160
Future Volume (vph)	38	505	23	63	611	61	42	110	72	85	140	160
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.989			0.957			0.944	
Flt Protected		0.997			0.996			0.991			0.989	
Satd. Flow (prot)	0	2150	0	0	2148	0	0	1793	0	0	1767	0
Flt Permitted		0.917			0.906			0.812			0.815	
Satd. Flow (perm)	0	1977	0	0	1954	0	0	1469	0	0	1456	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	532	24	66	643	64	44	116	76	89	147	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	596	0	0	773	0	0	236	0	0	404	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

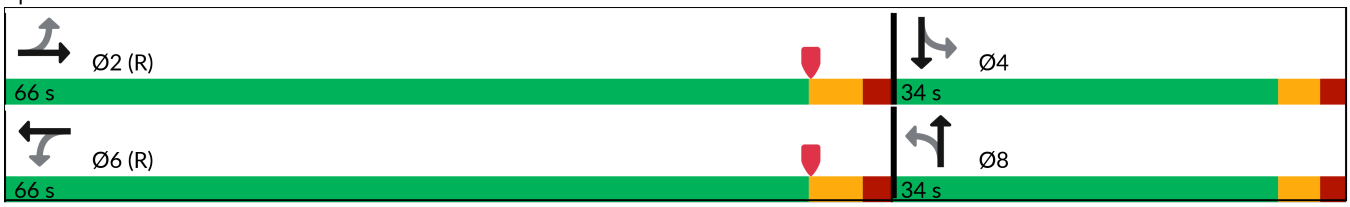
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.3			60.3			28.7			28.7	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.50			0.66			0.56			0.97	
Control Delay (s/veh)		8.5			16.5			36.2			73.1	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		8.6			16.5			36.2			73.1	
LOS		A			B			D			E	
Approach Delay (s/veh)		8.6			16.5			36.2			73.1	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	61.4	61.4		61.4	61.4		27.6	27.6		27.6	27.6	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		178			467			188			331	
Fuel Used(gal)		5			13			14			11	
CO Emissions (g/hr)		315			926			969			759	
NOx Emissions (g/hr)		61			180			189			148	
VOC Emissions (g/hr)		73			215			225			176	
Dilemma Vehicles (#)		0			37			0			17	
Queue Length 50th (ft)		130			302			127			252	
Queue Length 95th (ft)		m158			430			207			#441	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1191			1177			426			422	
Starvation Cap Reductn		79			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.54			0.66			0.55			0.96	

Intersection Summary

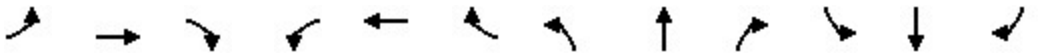
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 27.9		Intersection LOS: C	
Intersection Capacity Utilization 93.2%		ICU Level of Service F	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	2	6	45	7	9	2	367	52	11	374	144
Future Volume (vph)	11	2	6	45	7	9	2	367	52	11	374	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.957			0.981			0.981			0.958	
Flt Protected		0.972			0.964		0.950			0.950		
Satd. Flow (prot)	0	1662	0	0	1797	0	1805	1864	0	1805	1820	0
Flt Permitted		0.786			0.769		0.432			0.504		
Satd. Flow (perm)	0	1344	0	0	1433	0	821	1864	0	958	1820	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9			13			35	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	2	6	47	7	9	2	382	54	11	390	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	63	0	2	436	0	11	540	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

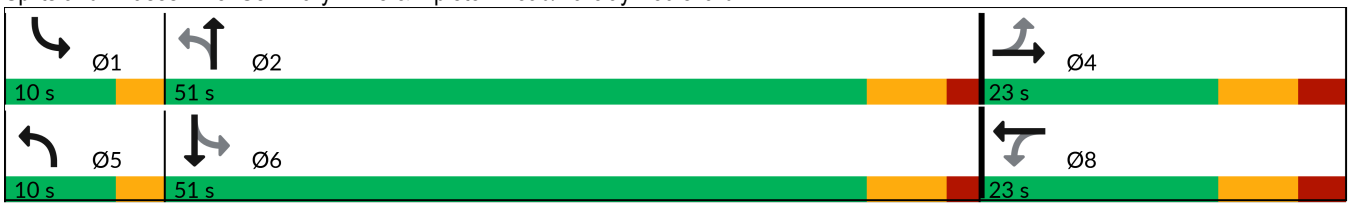


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		8.0			8.0		50.1	48.7		50.1	48.7	
Actuated g/C Ratio		0.13			0.13		0.80	0.78		0.80	0.78	
v/c Ratio		0.11			0.33		0.00	0.30		0.01	0.38	
Control Delay (s/veh)		25.0			30.0		3.0	5.9		3.0	6.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		25.0			30.0		3.0	5.9		3.0	6.4	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		25.0			30.0			5.9			6.3	
Approach LOS		C			C			A			A	
90th %ile Green (s)	10.9	10.9		10.9	10.9		5.0	44.0		5.0	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Min	Max	
70th %ile Green (s)	8.2	8.2		8.2	8.2		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		15			48		1	140		4	182	
Fuel Used(gal)		0			1		0	6		0	22	
CO Emissions (g/hr)		27			47		2	390		33	1555	
NOx Emissions (g/hr)		5			9		0	76		6	302	
VOC Emissions (g/hr)		6			11		0	90		8	360	
Dilemma Vehicles (#)		1			0		0	22		0	27	
Queue Length 50th (ft)		5			21		0	61		1	78	
Queue Length 95th (ft)		24			60		2	168		5	218	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		335			359		774	1451		869	1422	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

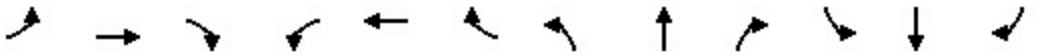
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.06			0.18		0.00	0.30		0.01	0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 7.9		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.9			
70th %ile Actuated Cycle: 67.2			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	665	14	10	619	224	23	5	12	219	2	18
Future Volume (vph)	8	665	14	10	619	224	23	5	12	219	2	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.960				0.850
Flt Protected	0.950			0.950				0.972		0.950	0.953	
Satd. Flow (prot)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1687	1615
Flt Permitted	0.950			0.950				0.972		0.950	0.953	
Satd. Flow (perm)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1687	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			231		12				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	7%	0%	1%	2%	4%	0%	0%	2%	0%	0%
Adj. Flow (vph)	8	686	14	10	638	231	24	5	12	226	2	19
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	8	686	14	10	638	231	0	41	0	113	115	19
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	custom	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

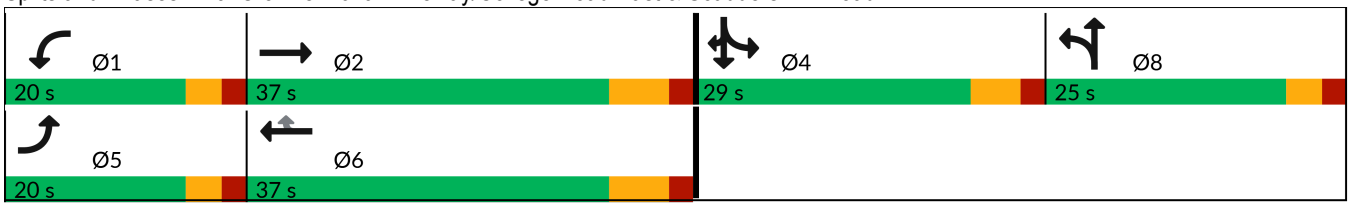


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6	8					
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.2	31.1	61.3	6.2	31.1	31.1		6.6		8.8	8.8	8.8
Actuated g/C Ratio	0.10	0.51	1.00	0.10	0.51	0.51		0.11		0.14	0.14	0.14
v/c Ratio	0.04	0.38	0.01	0.05	0.35	0.25		0.21		0.47	0.48	0.05
Control Delay (s/veh)	31.6	12.6	0.0	31.7	12.4	3.2		26.1		33.3	33.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	31.6	12.6	0.0	31.7	12.4	3.2		26.1		33.3	33.5	0.3
LOS	C	B	A	C	B	A		C		C	C	A
Approach Delay (s/veh)		12.5			10.2			26.1			30.9	
Approach LOS		B			B			C			C	
90th %ile Green (s)	6.0	30.0		6.0	30.0	30.0	8.1	8.1		13.6	13.6	13.6
90th %ile Term Code	Min	Max		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	6.3	6.3		9.9	9.9	9.9
70th %ile Term Code	Skip	Max		Skip	Max	Max	Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	6.0	6.0		8.6	8.6	8.6
50th %ile Term Code	Skip	Max		Skip	Max	Max	Min	Min		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.8	6.8	6.8
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Min	Min	Min
Stops (vph)	10	387	0	13	354	23		29		93	95	0
Fuel Used(gal)	0	15	0	0	15	3		1		6	6	1
CO Emissions (g/hr)	21	1061	11	27	1037	233		39		412	420	49
NOx Emissions (g/hr)	4	206	2	5	202	45		8		80	82	9
VOC Emissions (g/hr)	5	246	3	6	240	54		9		96	97	11
Dilemma Vehicles (#)	0	54	0	0	50	0		2		0	6	0
Queue Length 50th (ft)	3	82	0	4	75	0		10		42	43	0
Queue Length 95th (ft)	17	190	0	20	174	43		43		105	107	0
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	457	1810	1509	457	1810	915		592		653	655	711
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.02	0.38	0.01	0.02	0.35	0.25		0.07		0.17	0.18	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 61.3			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 14.1		Intersection LOS: B	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 80.7			
70th %ile Actuated Cycle: 64.2			
50th %ile Actuated Cycle: 62.6			
30th %ile Actuated Cycle: 49.8			
10th %ile Actuated Cycle: 49			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	12	92	0	237	3	72	232
Future Vol, veh/h	12	92	0	237	3	72	232
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	2	0	3	2
Mvmt Flow	14	105	0	269	3	82	264

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	566	136	264	0	0	273	0
Stage 1	271	-	-	-	-	-	-
Stage 2	295	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.16	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.23	-
Pot Cap-1 Maneuver	459	894	986	-	-	1280	-
Stage 1	756	-	-	-	-	-	-
Stage 2	735	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	430	894	986	-	-	1280	-
Mov Cap-2 Maneuver	430	-	-	-	-	-	-
Stage 1	756	-	-	-	-	-	-
Stage 2	688	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.03	0	1.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	986	-	-	430	894	1280	-
HCM Lane V/C Ratio	-	-	-	0.032	0.117	0.064	-
HCM Ctrl Dly (s/v)	0	-	-	13.7	9.6	8	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0.2	-

Intersection	
Int Delay, s/veh	3.1

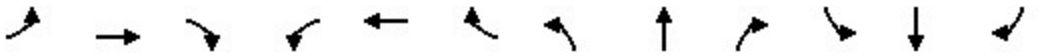
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	315	16	14	322	59	17	0	8	31	0	76
Future Vol, veh/h	89	315	16	14	322	59	17	0	8	31	0	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	97	342	17	15	350	64	18	0	9	34	0	83

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	414	0	0	360	0	0	925	989	351	916	934	350
Stage 1	-	-	-	-	-	-	545	545	-	380	380	-
Stage 2	-	-	-	-	-	-	380	445	-	536	553	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1156	-	-	1210	-	-	252	249	697	255	268	698
Stage 1	-	-	-	-	-	-	527	522	-	646	617	-
Stage 2	-	-	-	-	-	-	646	578	-	532	517	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1210	-	-	195	219	697	222	236	698
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	219	-	222	236	-
Stage 1	-	-	-	-	-	-	471	467	-	635	607	-
Stage 2	-	-	-	-	-	-	560	569	-	470	463	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.78	0.28	20.88	14.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	254	378	-	-	75	-	-	222	698
HCM Lane V/C Ratio	0.107	0.084	-	-	0.013	-	-	0.152	0.118
HCM Ctrl Dly (s/v)	20.9	8.4	0	-	8	0	-	24.1	10.8
HCM Lane LOS	C	A	A	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0	-	-	0.5	0.4

AM BUILD



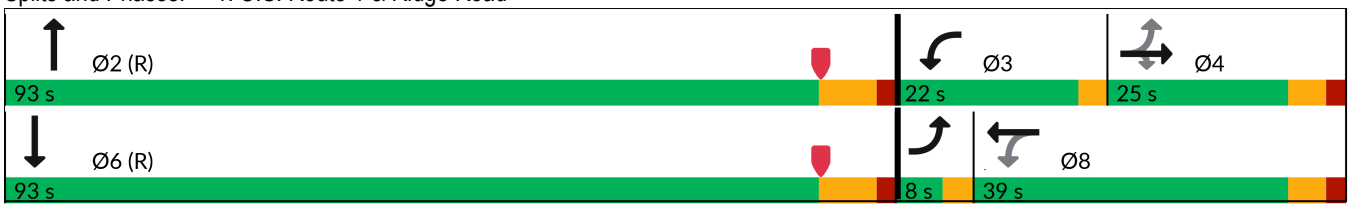
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	234	98	218	326	55	0	1809	0	0	2905	0
Future Volume (vph)	68	234	98	218	326	55	0	1809	0	0	2905	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.978							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1524	1770	1792	0	0	4975	0	0	5022	0
Flt Permitted	0.197			0.172								
Satd. Flow (perm)	367	1863	1524	320	1792	0	0	4975	0	0	5022	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		6							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	6%	2%	4%	2%	0%	7%	0%	0%	6%	0%
Adj. Flow (vph)	76	260	109	242	362	61	0	2010	0	0	3228	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	260	109	242	423	0	0	2010	0	0	3228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

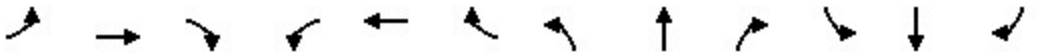
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	25.0	25.0	22.0	39.0			93.0			93.0	
Total Split (%)	5.7%	17.9%	17.9%	15.7%	27.9%			66.4%			66.4%	
Maximum Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.3	20.3	20.3	44.0	33.0			88.0			88.0	
Actuated g/C Ratio	0.20	0.15	0.15	0.31	0.24			0.63			0.63	
v/c Ratio	0.61	0.96	0.37	0.86	0.99			0.64			1.02	
Control Delay (s/veh)	60.2	105.2	20.2	65.7	94.1			15.4			48.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	60.2	105.2	20.2	65.7	94.1			15.4			48.2	
LOS	E	F	C	E	F			B			D	
Approach Delay (s/veh)		76.7			83.8			15.4			48.2	
Approach LOS		E			F			B			D	
90th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	20.3	20.3	17.7	33.0			85.0			85.0	
30th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
10th %ile Green (s)	5.0	24.3	24.3	13.7	33.0			85.0			85.0	
10th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
Stops (vph)	59	197	27	164	332			851			2550	
Fuel Used(gal)	1	7	1	6	13			25			82	
CO Emissions (g/hr)	104	503	54	395	894			1768			5748	
NOx Emissions (g/hr)	20	98	10	77	174			344			1118	
VOC Emissions (g/hr)	24	117	13	92	207			410			1332	
Dilemma Vehicles (#)	0	7	0	0	12			65			99	
Queue Length 50th (ft)	50	~252	19	175	384			264			~1141	
Queue Length 95th (ft)	#110	#434	77	#298	#616			338			#1213	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	124	270	294	297	426			3127			3156	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.61	0.96	0.37	0.81	0.99			0.64			1.02	

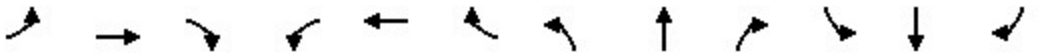
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 108 (77%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay (s/veh): 43.6		Intersection LOS: D	
Intersection Capacity Utilization 91.9%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	57	0	10	0	3	0	2045	101	0	3176	0
Future Volume (vph)	11	57	0	10	0	3	0	2045	101	0	3176	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.993				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						132		18				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	11%	0%	0%	0%	8%	0%	0%	5%	0%
Adj. Flow (vph)	12	64	0	11	0	3	0	2298	113	0	3569	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	64	0	11	0	3	0	2411	0	0	3569	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



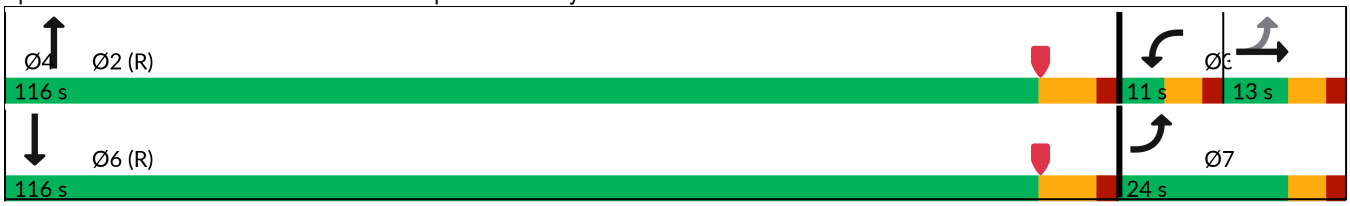
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				116.0			116.0	
Total Split (%)	17.1%	9.3%		7.9%				82.9%			82.9%	
Maximum Green (s)	18.0	7.0		5.0				108.0			108.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	11.7	7.7		5.1		140.0		120.5			120.5	
Actuated g/C Ratio	0.08	0.06		0.04		1.00		0.86			0.86	
v/c Ratio	0.04	0.62		0.19		0.00		0.57			0.82	
Control Delay (s/veh)	43.5	64.7		72.9		0.0		4.4			5.2	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	43.5	64.7		72.9		0.0		4.4			5.2	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		61.4			57.3			4.4			5.2	
Approach LOS		E			E			A			A	
90th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	0.0	9.5		0.0				116.5			116.5	
50th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
30th %ile Green (s)	0.0	8.0		0.0				118.0			118.0	
30th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				132.0			132.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	11	50		11		0		567			581	
Fuel Used(gal)	0	1		0		0		27			25	
CO Emissions (g/hr)	15	90		20		1		1871			1778	
NOx Emissions (g/hr)	3	18		4		0		364			346	
VOC Emissions (g/hr)	3	21		5		0		434			412	
Dilemma Vehicles (#)	0	1		0		0		63			70	
Queue Length 50th (ft)	4	53		10		0		173			198	
Queue Length 95th (ft)	m5	m60		32		0		298			m99	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	450	104		59		1615		4230			4363	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03	0.62		0.19		0.00		0.57			0.82	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 74.8%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	186	455	0	0	457	61	0	0	191	0	0	0
Future Volume (vph)	186	455	0	0	457	61	0	0	191	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3433	3539	0	0	3505	1583	0	0	1611	0	0	0
Flt Permitted	0.353											
Satd. Flow (perm)	1276	3539	0	0	3505	1583	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			628			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	0%	0%	3%	2%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	202	495	0	0	497	66	0	0	208	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	202	495	0	0	497	66	0	0	208	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

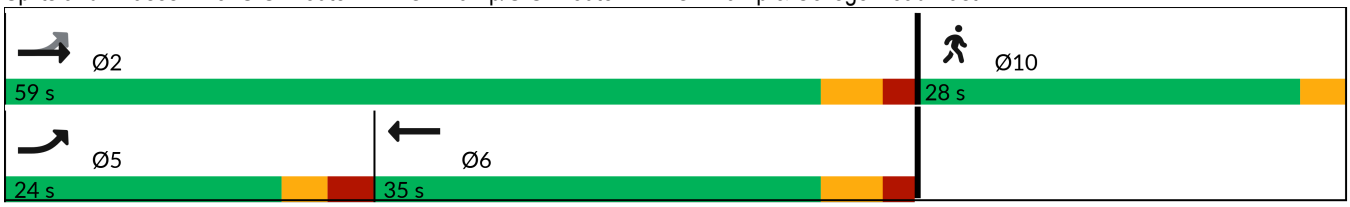
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	31.2	37.2			18.1	37.2			37.2			
Actuated g/C Ratio	0.84	1.00			0.49	1.00			1.00			
v/c Ratio	0.14	0.14			0.29	0.04			0.13			
Control Delay (s/veh)	0.7	0.1			6.3	0.0			0.2			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.7	0.1			6.3	0.0			0.2			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.3			5.6			0.2				
Approach LOS		A			A			A				
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	35.9			22.9							
10th %ile Term Code	Min	Dwell			Dwell							
Stops (vph)	18	0			243	0			0			
Fuel Used(gal)	1	1			15	2			2			
CO Emissions (g/hr)	46	79			1075	116			122			
NOx Emissions (g/hr)	9	15			209	23			24			
VOC Emissions (g/hr)	11	18			249	27			28			
Dilemma Vehicles (#)	0	0			49	0			0			
Queue Length 50th (ft)	0	0			27	0			0			
Queue Length 95th (ft)	0	0			46	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2117	3539			2743	1583			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.10	0.14			0.18	0.04			0.13			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 37.2			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 39.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 41.9			

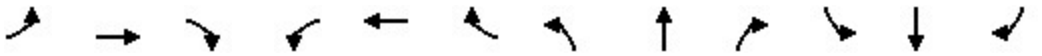
Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	872	12	0	790	0	15	0	90	1	131	0
Future Volume (vph)	0	872	12	0	790	0	15	0	90	1	131	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950					
Satd. Flow (prot)	0	3533	0	0	3539	0	1805	0	1568	0	3506	0
Flt Permitted							0.690					
Satd. Flow (perm)	0	3533	0	0	3539	0	1311	0	1568	0	3506	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2							98			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	3%	0%	3%	0%
Adj. Flow (vph)	0	948	13	0	859	0	16	0	98	1	142	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	961	0	0	859	0	16	0	98	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

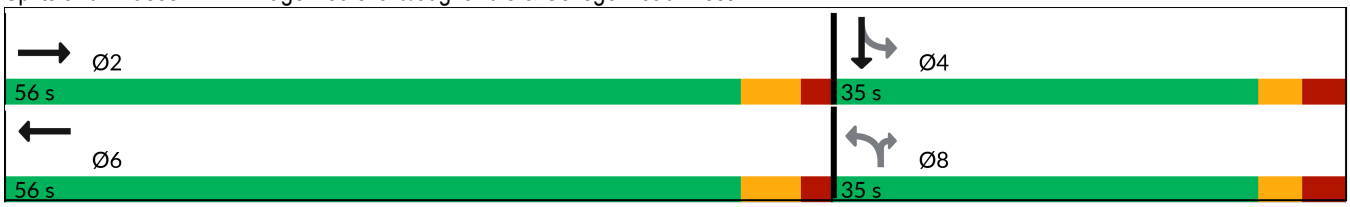


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		20.3			20.3		7.1		7.1		7.1	
Actuated g/C Ratio		0.57			0.57		0.20		0.20		0.20	
v/c Ratio		0.48			0.43		0.06		0.25		0.20	
Control Delay (s/veh)		7.3			6.9		12.9		5.9		13.2	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		7.3			6.9		12.9		5.9		13.2	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		7.3			6.9			6.9			13.2	
Approach LOS		A			A			A			B	
90th %ile Green (s)		19.8			19.8		7.7		7.7	7.7	7.7	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		16.1			16.1		7.0		7.0	7.0	7.0	
70th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		511			440		16		24		107	
Fuel Used(gal)		8			7		0		1		1	
CO Emissions (g/hr)		590			478		13		41		81	
NOx Emissions (g/hr)		115			93		3		8		16	
VOC Emissions (g/hr)		137			111		3		9		19	
Dilemma Vehicles (#)		82			74		0		0		0	
Queue Length 50th (ft)		62			53		2		0		12	
Queue Length 95th (ft)		103			89		13		25		34	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3533			3539		1067		1295		2855	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.27			0.24		0.01		0.08		0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 35.7			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 7.6		Intersection LOS: A	
Intersection Capacity Utilization 51.2%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 39.5			
70th %ile Actuated Cycle: 35.1			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



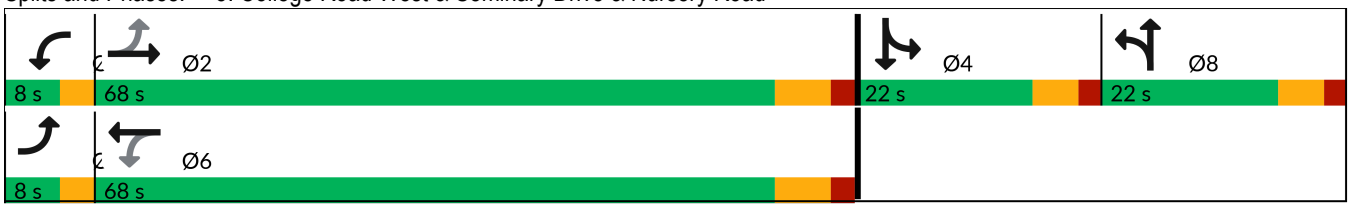
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	583	98	235	511	248	38	14	72	232	10	13
Future Volume (vph)	34	583	98	235	511	248	38	14	72	232	10	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.978				0.850		0.875			0.986	
Flt Protected	0.950			0.950			0.950			0.950	0.960	
Satd. Flow (prot)	1805	3496	0	1787	1863	1615	1687	1558	0	1643	3273	0
Flt Permitted	0.294			0.263			0.950			0.950	0.960	
Satd. Flow (perm)	559	3496	0	495	1863	1615	1687	1558	0	1643	3273	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				173		86			7	
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	7%	0%	8%	0%	0%	0%
Adj. Flow (vph)	40	694	117	280	608	295	45	17	86	276	12	15
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	40	811	0	280	608	295	45	103	0	138	165	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

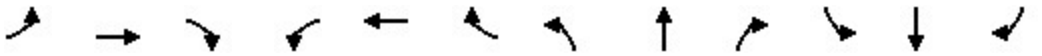
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	44.0	34.7		45.5	38.6	77.8	7.0	7.0		11.1	11.1	
Actuated g/C Ratio	0.57	0.45		0.58	0.50	1.00	0.09	0.09		0.14	0.14	
v/c Ratio	0.10	0.52		0.75	0.66	0.18	0.30	0.47		0.59	0.35	
Control Delay (s/veh)	8.8	17.4		26.6	21.9	0.3	42.5	20.5		44.7	33.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.8	17.4		26.6	21.9	0.3	42.5	20.5		44.7	33.1	
LOS	A	B		C	C	A	D	C		D	C	
Approach Delay (s/veh)		17.0			17.6			27.2			38.4	
Approach LOS		B			B			C			D	
90th %ile Green (s)	5.0	46.4		5.0	46.4		10.5	10.5		16.0	16.0	
90th %ile Term Code	Max	Hold		Max	Gap		Gap	Gap		Max	Max	
70th %ile Green (s)	5.0	36.5		5.0	36.5		7.8	7.8		13.7	13.7	
70th %ile Term Code	Max	Hold		Max	Gap		Gap	Gap		Gap	Gap	
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.6	6.6		11.0	11.0	
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Gap	Gap	
30th %ile Green (s)	0.0	30.0		5.0	38.0		5.6	5.6		8.9	8.9	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Gap	Gap	
10th %ile Green (s)	0.0	30.0		5.0	38.0		0.0	0.0		7.0	7.0	
10th %ile Term Code	Skip	Min		Max	Hold		Skip	Skip		Min	Min	
Stops (vph)	14	445		108	372	0	35	26		102	110	
Fuel Used(gal)	0	10		3	8	1	1	1		2	2	
CO Emissions (g/hr)	26	720		222	543	63	63	79		170	175	
NOx Emissions (g/hr)	5	140		43	106	12	12	15		33	34	
VOC Emissions (g/hr)	6	167		51	126	15	15	18		39	40	
Dilemma Vehicles (#)	0	33		0	25	0	0	4		0	7	
Queue Length 50th (ft)	8	144		61	239	0	20	7		65	36	
Queue Length 95th (ft)	22	210		#136	374	0	57	52		145	76	
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150			400		
Base Capacity (vph)	399	2800		375	1490	1615	358	398		349	700	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.10	0.29		0.75	0.41	0.18	0.13	0.26		0.40	0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 77.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 20.5		Intersection LOS: C	
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99.9			
70th %ile Actuated Cycle: 85			
50th %ile Actuated Cycle: 74.6			
30th %ile Actuated Cycle: 71.5			
10th %ile Actuated Cycle: 58			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

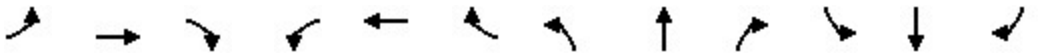
Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	311	683	315	441	5	299	159	66	0	0	0
Future Volume (vph)	14	311	683	315	441	5	299	159	66	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.983				
Flt Protected		0.998		0.950				0.972				
Satd. Flow (prot)	0	1841	1641	1834	1837	0	0	1796	0	0	0	0
Flt Permitted		0.973		0.479				0.972				
Satd. Flow (perm)	0	1794	1641	925	1837	0	0	1796	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			767		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	6%	1%	1%	6%	0%	0%	1%	6%	0%	0%	0%
Adj. Flow (vph)	16	349	767	354	496	6	336	179	74	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	365	767	354	502	0	0	589	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



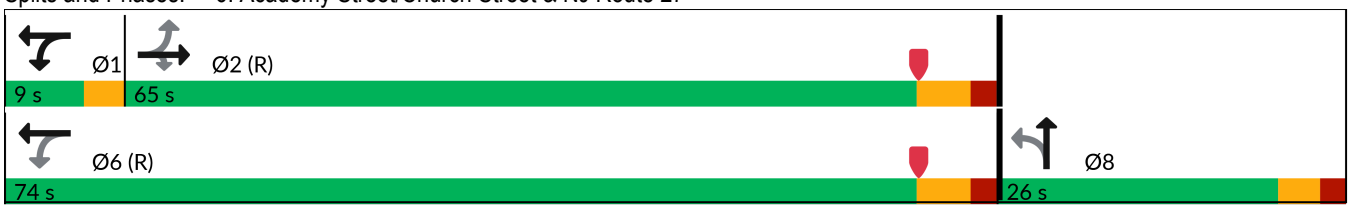
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.34	0.60	0.50	0.38			1.56				
Control Delay (s/veh)		11.7	2.9	4.9	4.1			295.7				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		11.7	2.9	4.9	4.1			295.7				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		5.7			4.5			295.7				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		159	36	70	114			387				
Fuel Used(gal)		3	3	2	3			57				
CO Emissions (g/hr)		221	222	151	214			3962				
NOx Emissions (g/hr)		43	43	29	42			771				
VOC Emissions (g/hr)		51	51	35	49			918				
Dilemma Vehicles (#)		16	0	0	0			0				
Queue Length 50th (ft)		111	0	43	68			~534				
Queue Length 95th (ft)		165	43	m55	m83			#733				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1058	1282	711	1304			377				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.34	0.60	0.50	0.38			1.56				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.56			
Intersection Signal Delay (s/veh): 71.6		Intersection LOS: E	
Intersection Capacity Utilization 113.5%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	352	6	62	542	40	26	227	29	67	190	208
Future Volume (vph)	21	352	6	62	542	40	26	227	29	67	190	208
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.992			0.986			0.940	
Flt Protected		0.997			0.995			0.995			0.993	
Satd. Flow (prot)	0	2077	0	0	2054	0	0	1771	0	0	1726	0
Flt Permitted		0.950			0.923			0.880			0.836	
Satd. Flow (perm)	0	1979	0	0	1905	0	0	1566	0	0	1453	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	6%	0%	5%	6%	11%	13%	4%	8%	2%	5%	1%
Adj. Flow (vph)	22	374	6	66	577	43	28	241	31	71	202	221
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	402	0	0	686	0	0	300	0	0	494	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.34			0.60			0.66			1.17	
Control Delay (s/veh)		7.2			15.3			39.4			134.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		7.2			15.3			39.4			134.3	
LOS		A			B			D			F	
Approach Delay (s/veh)		7.2			15.3			39.4			134.3	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		114			388			245			379	
Fuel Used(gal)		3			11			18			19	
CO Emissions (g/hr)		202			790			1236			1310	
NOx Emissions (g/hr)		39			154			241			255	
VOC Emissions (g/hr)		47			183			287			304	
Dilemma Vehicles (#)		0			32			0			19	
Queue Length 50th (ft)		78			253			168			~378	
Queue Length 95th (ft)		m100			363			263			#575	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1187			1143			454			421	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.60			0.66			1.17	

Intersection Summary

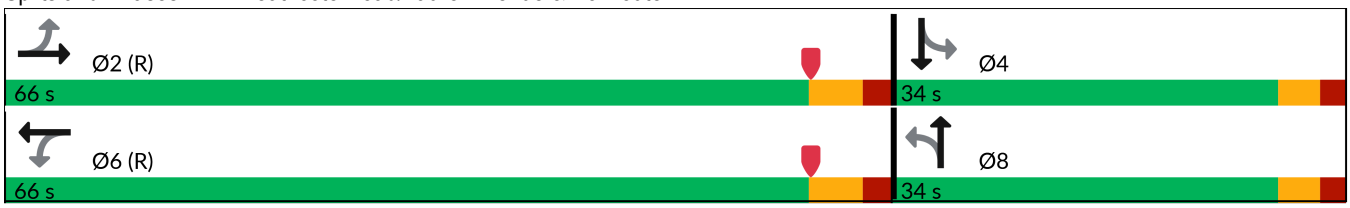
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay (s/veh): 48.6		Intersection LOS: D	
Intersection Capacity Utilization 100.0%		ICU Level of Service F	
Analysis Period (min) 15			

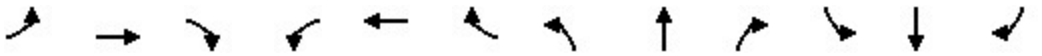
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

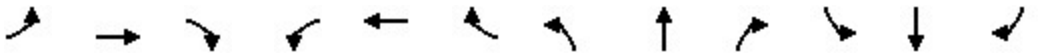
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	6	38	50	20	28	9	331	23	10	688	205
Future Volume (vph)	93	6	38	50	20	28	9	331	23	10	688	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.961			0.990			0.966	
Flt Protected		0.967			0.975		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1638	0	1805	1818	0	1805	1817	0
Flt Permitted		0.732			0.806		0.108			0.517		
Satd. Flow (perm)	0	1338	0	0	1354	0	205	1818	0	982	1817	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			21			6			27	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	17%	0%	0%	0%	1%	39%	0%	1%	1%
Adj. Flow (vph)	102	7	42	55	22	31	10	364	25	11	756	225
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	151	0	0	108	0	10	389	0	11	981	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

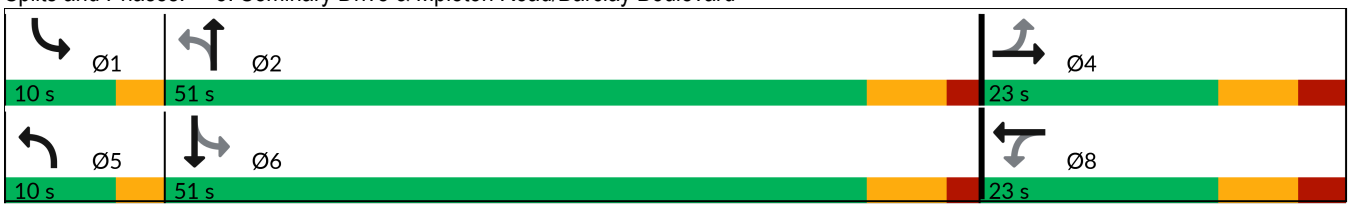


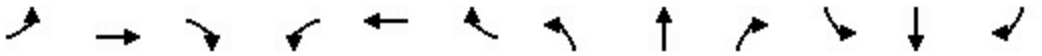
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		10.9			10.9		49.2	44.3		49.2	44.3	
Actuated g/C Ratio		0.15			0.15		0.69	0.62		0.69	0.62	
v/c Ratio		0.68			0.48		0.04	0.35		0.02	0.87	
Control Delay (s/veh)		41.5			30.7		4.4	8.7		4.1	23.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		41.5			30.7		4.4	8.7		4.1	23.2	
LOS		D			C		A	A		A	C	
Approach Delay (s/veh)		41.5			30.7			8.6			22.9	
Approach LOS		D			C			A			C	
90th %ile Green (s)	15.0	15.0		15.0	15.0		5.0	44.0		5.0	44.0	
90th %ile Term Code	Max	Max		Max	Max		Min	Max		Min	Max	
70th %ile Green (s)	13.5	13.5		13.5	13.5		0.0	44.0		0.0	44.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
50th %ile Green (s)	11.1	11.1		11.1	11.1		0.0	44.0		0.0	44.0	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
30th %ile Green (s)	8.8	8.8		8.8	8.8		0.0	44.0		0.0	44.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
10th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Min	Min		Hold	Hold		Skip	Max		Skip	Max	
Stops (vph)		109			69		4	163		4	611	
Fuel Used(gal)		3			1		0	5		0	44	
CO Emissions (g/hr)		230			75		9	374		30	3098	
NOx Emissions (g/hr)		45			15		2	73		6	603	
VOC Emissions (g/hr)		53			17		2	87		7	718	
Dilemma Vehicles (#)		8			0		0	24		0	59	
Queue Length 50th (ft)		53			34		1	68		1	287	
Queue Length 95th (ft)		123			87		6	171		6	#753	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		297			301		298	1124		758	1132	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.51			0.36		0.03	0.35		0.01	0.87	

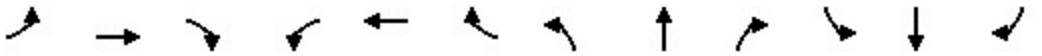
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 71.7			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 21.7		Intersection LOS: C	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82			
70th %ile Actuated Cycle: 72.5			
50th %ile Actuated Cycle: 70.1			
30th %ile Actuated Cycle: 67.8			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	531	6	1	1327	400	9	2	3	228	0	102
Future Volume (vph)	38	531	6	1	1327	400	9	2	3	228	0	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.971				0.850
Flt Protected	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (prot)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Flt Permitted	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (perm)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			300		3				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	5%	0%	0%	2%	1%	0%	0%	0%	7%	0%	0%
Adj. Flow (vph)	40	559	6	1	1397	421	9	2	3	240	0	107
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	40	559	6	1	1397	421	0	14	0	120	120	107
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

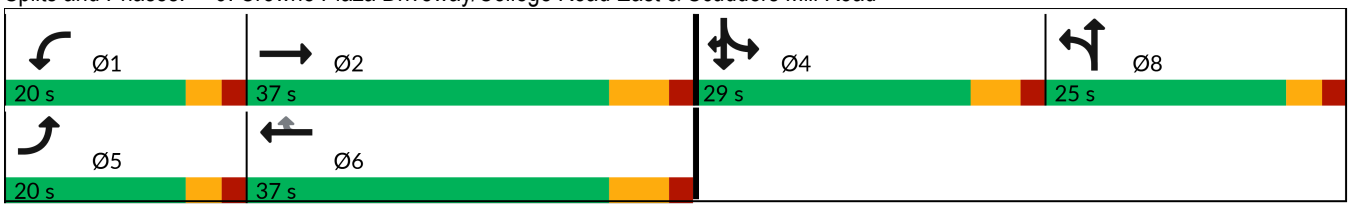


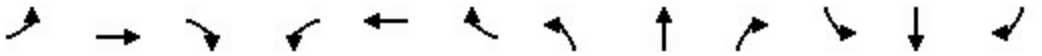
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.7	33.7	59.7	6.2	31.2	31.2		6.3		9.3	9.3	9.3
Actuated g/C Ratio	0.11	0.56	1.00	0.10	0.52	0.52		0.11		0.16	0.16	0.16
v/c Ratio	0.20	0.29	0.00	0.01	0.76	0.43		0.07		0.48	0.48	0.29
Control Delay (s/veh)	31.2	9.4	0.0	32.0	18.7	6.0		28.6		32.3	32.3	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	31.2	9.4	0.0	32.0	18.7	6.0		28.6		32.3	32.3	5.6
LOS	C	A	A	C	B	A		C		C	C	A
Approach Delay (s/veh)		10.7			15.8			28.6			24.1	
Approach LOS		B			B			C			C	
90th %ile Green (s)	8.4	32.4		6.0	30.0	30.0	6.2	6.2		14.6	14.6	14.6
90th %ile Term Code	Gap	Hold		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	6.6	41.6		0.0	30.0	30.0	0.0	0.0		10.6	10.6	10.6
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		9.1	9.1	9.1
50th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		7.1	7.1	7.1
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Min	Min	Min
Stops (vph)	36	256	0	3	863	86		14		96	96	10
Fuel Used(gal)	1	11	0	0	35	7		0		6	6	4
CO Emissions (g/hr)	85	765	5	5	2455	480		16		425	425	290
NOx Emissions (g/hr)	17	149	1	1	478	93		3		83	83	56
VOC Emissions (g/hr)	20	177	1	1	569	111		4		99	99	67
Dilemma Vehicles (#)	0	41	0	0	107	0		1		0	7	0
Queue Length 50th (ft)	11	39	0	0	136	15		3		34	34	0
Queue Length 95th (ft)	49	149	0	5	#559	121		23		111	111	27
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	471	1938	1615	471	1848	978		624		641	641	729
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.08	0.29	0.00	0.00	0.76	0.43		0.02		0.19	0.19	0.15

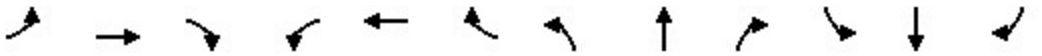
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 59.7			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 15.8		Intersection LOS: B	
Intersection Capacity Utilization 63.0%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82.2			
70th %ile Actuated Cycle: 65.2			
50th %ile Actuated Cycle: 52.1			
30th %ile Actuated Cycle: 50.1			
10th %ile Actuated Cycle: 49			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road





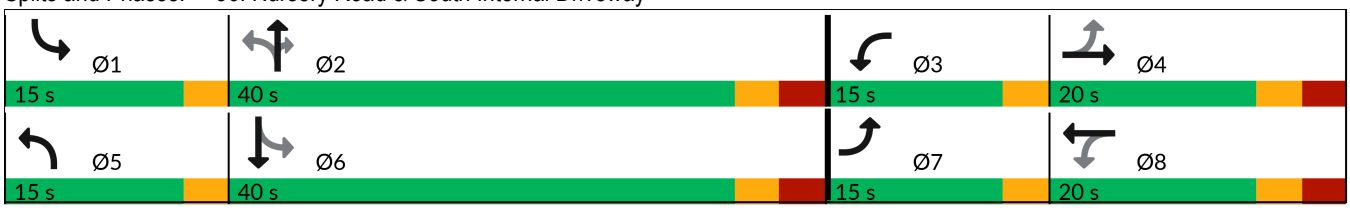
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	4	83	105	13	0	45	53	197	1	66	0
Future Volume (vph)	1	4	83	105	13	0	45	53	197	1	66	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.856							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1626	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted				0.606			0.657			0.719		
Satd. Flow (perm)	1900	1626	0	1151	1900	0	1248	1900	1615	1366	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		90							214			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	4	90	114	14	0	49	58	214	1	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	94	0	114	14	0	49	58	214	1	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	10.0	5.9		12.3	9.6		19.0	18.4	18.4	18.0	16.8	
Actuated g/C Ratio	0.30	0.18		0.37	0.29		0.57	0.55	0.55	0.54	0.50	
v/c Ratio	0.00	0.26		0.21	0.03		0.06	0.06	0.22	0.00	0.08	
Control Delay (s/veh)	7.0	7.9		7.9	12.0		7.6	12.2	3.8	8.0	14.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	7.0	7.9		7.9	12.0		7.6	12.2	3.8	8.0	14.7	
LOS	A	A		A	B		A	B	A	A	B	
Approach Delay (s/veh)		7.9			8.4			5.9			14.6	
Approach LOS		A			A			A			B	
90th %ile Green (s)	5.0	7.0		7.8	9.8		6.4	9.4	9.4	5.0	8.0	
90th %ile Term Code	Min	Gap		Gap	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.4		6.7	15.1		5.9	15.6	15.6	0.0	6.7	
70th %ile Term Code	Skip	Gap		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		5.5	13.5		0.0	5.9	5.9	0.0	5.9	
50th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	13.8	13.8	0.0	13.8	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	20.0	20.0	0.0	20.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	27		54	12		27	39	35	2	53	
Fuel Used(gal)	0	1		1	0		1	1	1	0	1	
CO Emissions (g/hr)	1	39		66	12		36	49	102	1	58	
NOx Emissions (g/hr)	0	8		13	2		7	10	20	0	11	
VOC Emissions (g/hr)	0	9		15	3		8	11	24	0	13	
Dilemma Vehicles (#)	0	8		0	1		0	4	0	0	5	
Queue Length 50th (ft)	0	1		8	1		6	8	0	0	10	
Queue Length 95th (ft)	2	31		39	14		21	36	42	2	44	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	899	801		825	889		965	1716	1479	989	1716	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.12		0.14	0.02		0.05	0.03	0.14	0.00	0.04	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 33.4		
Natural Cycle: 40		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.26		
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A
Intersection Capacity Utilization 35.0%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 47.2		
70th %ile Actuated Cycle: 42.7		
50th %ile Actuated Cycle: 31.4		
30th %ile Actuated Cycle: 19.8		
10th %ile Actuated Cycle: 26		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	50	209	0	317	14	59	426
Future Vol, veh/h	50	209	0	317	14	59	426
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	0	2	0	2	0	2	1
Mvmt Flow	58	243	0	369	16	69	495

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	762	192	495	0	0	385	0
Stage 1	377	-	-	-	-	-	-
Stage 2	385	-	-	-	-	-	-
Critical Hdwy	6.8	6.94	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.32	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	345	817	705	-	-	1170	-
Stage 1	669	-	-	-	-	-	-
Stage 2	663	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	325	817	705	-	-	1170	-
Mov Cap-2 Maneuver	325	-	-	-	-	-	-
Stage 1	669	-	-	-	-	-	-
Stage 2	624	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.66	0	1.01
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	705	-	-	325	817	1170	-
HCM Lane V/C Ratio	-	-	-	0.179	0.298	0.059	-
HCM Ctrl Dly (s/v)	0	-	-	18.5	11.3	8.3	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	1.2	0.2	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	687	9	13	526	21	7	0	6	21	0	42
Future Vol, veh/h	24	687	9	13	526	21	7	0	6	21	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	26	747	10	14	572	23	8	0	7	23	0	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	595	0	0	757	0	0	1404	1427	752	1399	1409	572
Stage 1	-	-	-	-	-	-	804	804	-	600	600	-
Stage 2	-	-	-	-	-	-	600	623	-	799	809	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	992	-	-	863	-	-	118	137	414	119	140	524
Stage 1	-	-	-	-	-	-	380	399	-	491	493	-
Stage 2	-	-	-	-	-	-	491	482	-	382	397	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	992	-	-	863	-	-	103	131	414	112	134	524
Mov Cap-2 Maneuver	-	-	-	-	-	-	103	131	-	112	134	-
Stage 1	-	-	-	-	-	-	370	388	-	483	485	-
Stage 2	-	-	-	-	-	-	441	474	-	366	386	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.29	0.21	29.98	23.36
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	158	992	-	-	863	-	-	112	524
HCM Lane V/C Ratio	0.089	0.026	-	-	0.016	-	-	0.203	0.087
HCM Ctrl Dly (s/v)	30	8.7	-	-	9.2	-	-	45	12.5
HCM Lane LOS	D	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.7	0.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	18	18	0	0	17	20	17	1	29	0
Future Vol, veh/h	0	0	18	18	0	0	17	20	17	1	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	20	20	0	0	18	22	18	1	32	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	92	111	32	102	102	31	32	0	0	40	0	0
Stage 1	34	34	-	68	68	-	-	-	-	-	-	-
Stage 2	59	77	-	34	34	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	896	783	1048	884	792	1049	1594	-	-	1582	-	-
Stage 1	987	871	-	947	842	-	-	-	-	-	-	-
Stage 2	958	835	-	987	871	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	885	773	1048	857	782	1049	1594	-	-	1582	-	-
Mov Cap-2 Maneuver	885	773	-	857	782	-	-	-	-	-	-	-
Stage 1	987	870	-	936	832	-	-	-	-	-	-	-
Stage 2	947	825	-	968	870	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.5	9.3	2.29	0.24
HCM LOS	A	A		

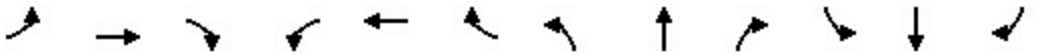
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	519	-	-	1048	857	60	-	-
HCM Lane V/C Ratio	0.012	-	-	0.019	0.023	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	9.3	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	15	15	24	0
Demand Flow Rate, veh/h	15	15	24	0
Vehicles Circulating, veh/h	15	12	0	27
Vehicles Exiting, veh/h	12	12	30	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.7	2.7	2.7	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	15	15	24	0
Cap Entry Lane, veh/h	1359	1363	1380	1342
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	15	15	24	0
Cap Entry, veh/h	1359	1363	1380	1342
V/C Ratio	0.011	0.011	0.017	0.000
Control Delay, s/veh	2.7	2.7	2.7	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

PM BUILD



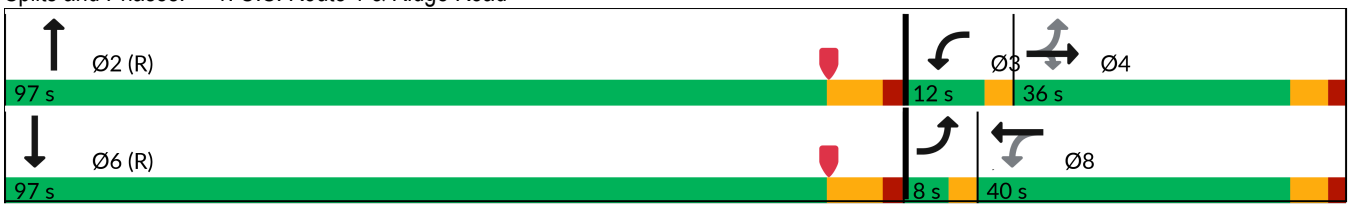
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	333	57	157	346	118	0	2431	0	0	1680	0
Future Volume (vph)	72	333	57	157	346	118	0	2431	0	0	1680	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.962							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1752	1900	1615	1787	1801	0	0	5168	0	0	5219	0
Flt Permitted	0.133			0.125								
Satd. Flow (perm)	245	1900	1615	235	1801	0	0	5168	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83		11							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	0%	0%	1%	2%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	77	358	61	169	372	127	0	2614	0	0	1806	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	358	61	169	499	0	0	2614	0	0	1806	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

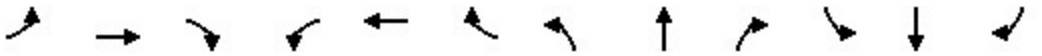
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	12.0	40.0			97.0			97.0	
Total Split (%)	5.5%	24.8%	24.8%	8.3%	27.6%			66.9%			66.9%	
Maximum Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	38.6	30.1	30.1	46.5	35.0			90.5			90.5	
Actuated g/C Ratio	0.27	0.21	0.21	0.32	0.24			0.62			0.62	
v/c Ratio	0.63	0.91	0.15	0.91	1.13			0.81			0.55	
Control Delay (s/veh)	61.4	83.4	4.6	86.4	130.6			25.3			16.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	61.4	83.4	4.6	86.4	130.6			25.3			16.3	
LOS	E	F	A	F	F			C			B	
Approach Delay (s/veh)		70.3			119.4			25.3			16.3	
Approach LOS		E			F			C			B	
90th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	6.5	30.0	30.0	10.5	34.0			87.5			87.5	
30th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
10th %ile Green (s)	6.1	30.4	30.4	14.6	38.9			83.0			83.0	
10th %ile Term Code	Gap	Hold	Hold	Gap	Max			Coord			Coord	
Stops (vph)	55	302	4	99	374			1944			916	
Fuel Used(gal)	2	9	0	4	19			54			26	
CO Emissions (g/hr)	106	627	11	310	1296			3758			1835	
NOx Emissions (g/hr)	21	122	2	60	252			731			357	
VOC Emissions (g/hr)	25	145	2	72	300			871			425	
Dilemma Vehicles (#)	0	10	0	0	13			103			58	
Queue Length 50th (ft)	53	336	0	~123	~549			805			330	
Queue Length 95th (ft)	#113	#532	17	#267	#778			327			369	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	122	394	400	186	442			3279			3311	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.63	0.91	0.15	0.91	1.13			0.80			0.55	

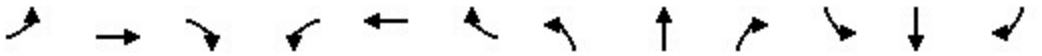
Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 16 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay (s/veh): 37.7		Intersection LOS: D	
Intersection Capacity Utilization 87.8%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	9	0	87	0	38	0	2786	10	0	2112	0
Future Volume (vph)	12	9	0	87	0	38	0	2786	10	0	2112	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	13	9	0	91	0	40	0	2902	10	0	2200	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	9	0	91	0	40	0	2912	0	0	2200	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



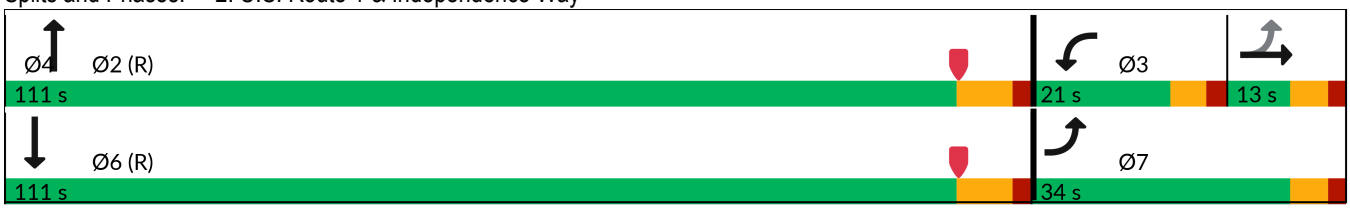
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	34.0	13.0		21.0				111.0			111.0	
Total Split (%)	23.4%	9.0%		14.5%				76.6%			76.6%	
Maximum Green (s)	28.0	7.0		15.0				103.0			103.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	11.3	7.0		11.4		145.0		120.0			120.0	
Actuated g/C Ratio	0.08	0.05		0.08		1.00		0.83			0.83	
v/c Ratio	0.05	0.10		0.65		0.02		0.67			0.51	
Control Delay (s/veh)	61.7	65.9		85.0		0.0		6.8			8.8	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	61.7	65.9		85.0		0.0		6.8			8.8	
LOS	E	E		F		A		A			A	
Approach Delay (s/veh)		63.4			59.0			6.8			8.8	
Approach LOS		E			E			A			A	
90th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	13.6	0.0		13.6				117.4			117.4	
70th %ile Term Code	Hold	Skip		Gap				Coord			Coord	
50th %ile Green (s)	0.0	0.0		11.7				119.3			119.3	
50th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
30th %ile Green (s)	0.0	0.0		9.7				121.3			121.3	
30th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
10th %ile Green (s)	0.0	0.0		6.8				124.2			124.2	
10th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
Stops (vph)	13	9		84		0		1039			988	
Fuel Used(gal)	0	0		3		0		42			30	
CO Emissions (g/hr)	20	15		183		15		2924			2073	
NOx Emissions (g/hr)	4	3		36		3		569			403	
VOC Emissions (g/hr)	5	3		42		3		678			480	
Dilemma Vehicles (#)	0	1		0		0		96			74	
Queue Length 50th (ft)	6	7		85		0		280			517	
Queue Length 95th (ft)	m10	m17		143		0		602			265	
Internal Link Dist (ft)		319			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	676	91		186		1615		4316			4320	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.02	0.10		0.49		0.02		0.67			0.51	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 9.2		Intersection LOS: A	
Intersection Capacity Utilization 71.7%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	229	347	0	0	637	105	0	0	71	0	0	0
Future Volume (vph)	229	347	0	0	637	105	0	0	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.289											
Satd. Flow (perm)	1065	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			703			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.89	0.89	0.93	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	246	373	0	0	685	113	0	0	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	246	373	0	0	685	113	0	0	76	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

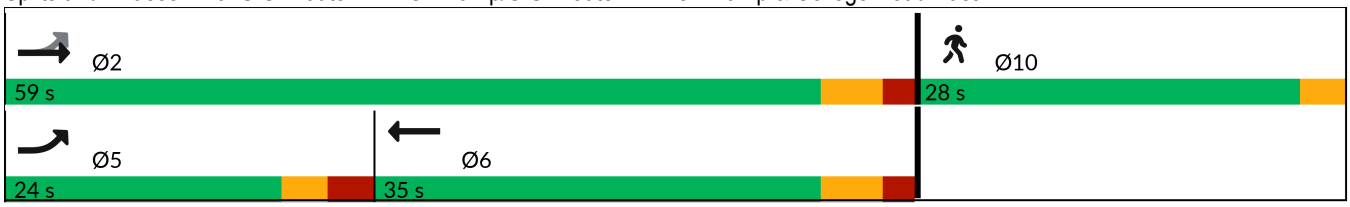
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.2	36.2			17.0	36.2			36.2			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.18	0.10			0.40	0.07			0.05			
Control Delay (s/veh)	0.8	0.1			7.2	0.1			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.8	0.1			7.2	0.1			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			6.2			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	7.9	30.9			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	23	0			365	0			0			
Fuel Used(gal)	1	1			22	3			1			
CO Emissions (g/hr)	58	60			1524	199			45			
NOx Emissions (g/hr)	11	12			296	39			9			
VOC Emissions (g/hr)	13	14			353	46			10			
Dilemma Vehicles (#)	0	0			67	0			0			
Queue Length 50th (ft)	0	0			40	0			0			
Queue Length 95th (ft)	0	0			68	0			0			
Internal Link Dist (ft)		282			478			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2101	3574			2894	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.12	0.10			0.24	0.07			0.05			

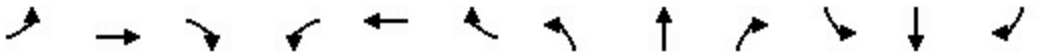
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.2			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 3.5		Intersection LOS: A	
Intersection Capacity Utilization 47.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.9			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

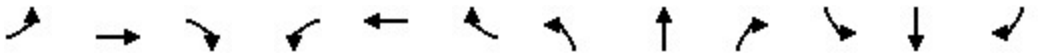


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	786	16	0	787	0	18	0	114	6	220	0
Future Volume (vph)	0	786	16	0	787	0	18	0	114	6	220	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3564	0	0	3574	0	1703	0	1583	0	3572	0
Flt Permitted							0.607				0.999	
Satd. Flow (perm)	0	3564	0	0	3574	0	1088	0	1583	0	3572	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							118			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	6%	0%	2%	0%	1%	0%
Adj. Flow (vph)	0	810	16	0	811	0	19	0	118	6	227	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	826	0	0	811	0	19	0	118	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

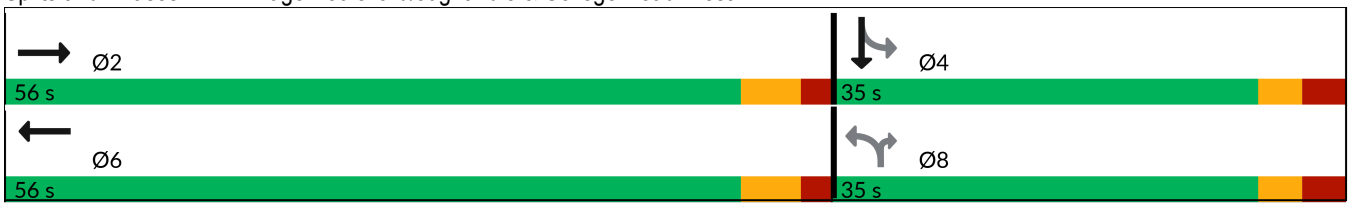


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		15.5			15.5		7.4		7.4		7.4	
Actuated g/C Ratio		0.44			0.44		0.21		0.21		0.21	
v/c Ratio		0.52			0.51		0.08		0.27		0.31	
Control Delay (s/veh)		8.6			8.5		12.3		5.3		13.0	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		8.6			8.5		12.3		5.3		13.0	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		8.6			8.5			6.2			13.0	
Approach LOS		A			A			A			B	
90th %ile Green (s)		17.4			17.4		8.8		8.8	8.8	8.8	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		15.0			15.0		7.5		7.5	7.5	7.5	
70th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Min		Min	Min	Min	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		509			499		19		27		177	
Fuel Used(gal)		8			8		0		1		2	
CO Emissions (g/hr)		580			535		15		49		135	
NOx Emissions (g/hr)		113			104		3		10		26	
VOC Emissions (g/hr)		134			124		4		11		31	
Dilemma Vehicles (#)		86			85		0		0		0	
Queue Length 50th (ft)		51			50		3		0		19	
Queue Length 95th (ft)		91			90		14		25		42	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3564			3574		905		1336		2970	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.23			0.23		0.02		0.09		0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 34.9			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 50.6%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 38.2			
70th %ile Actuated Cycle: 34.5			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



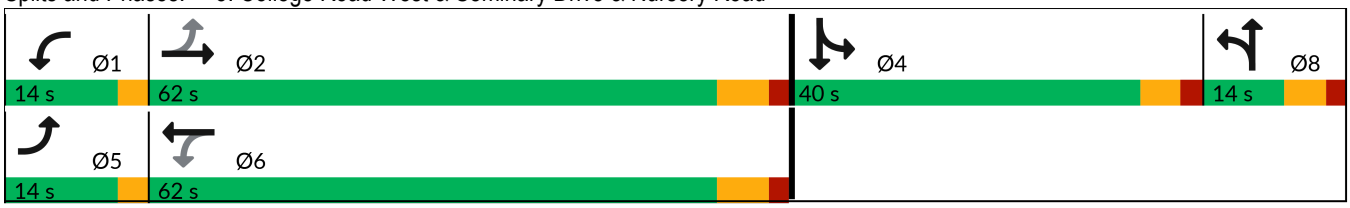
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	296	61	146	503	339	86	17	100	388	23	45
Future Volume (vph)	35	296	61	146	503	339	86	17	100	388	23	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.974				0.850		0.872			0.974	
Flt Protected	0.950			0.950			0.950			0.950	0.964	
Satd. Flow (prot)	1805	3470	0	1736	1881	1615	1805	1629	0	1643	3247	0
Flt Permitted	0.361			0.489			0.950			0.950	0.964	
Satd. Flow (perm)	686	3470	0	893	1881	1615	1805	1629	0	1643	3247	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				205		103			17	
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	3%	4%	1%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	36	305	63	151	519	349	89	18	103	400	24	46
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	36	368	0	151	519	349	89	121	0	200	270	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	14.0	62.0		14.0	62.0		14.0	14.0		40.0	40.0	
Total Split (%)	10.8%	47.7%		10.8%	47.7%		10.8%	10.8%		30.8%	30.8%	
Maximum Green (s)	11.0	55.0		11.0	55.0		8.0	8.0		34.0	34.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	41.6	31.8		47.3	38.1	85.5	7.8	7.8		15.2	15.2	
Actuated g/C Ratio	0.49	0.37		0.55	0.45	1.00	0.09	0.09		0.18	0.18	
v/c Ratio	0.09	0.28		0.26	0.62	0.22	0.54	0.50		0.68	0.46	
Control Delay (s/veh)	10.8	19.3		11.6	24.4	0.3	53.7	20.0		45.9	32.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.8	19.3		11.6	24.4	0.3	53.7	20.0		45.9	32.1	
LOS	B	B		B	C	A	D	C		D	C	
Approach Delay (s/veh)		18.5			14.2			34.3			38.0	
Approach LOS		B			B			C			D	
90th %ile Green (s)	7.3	38.8		11.0	42.5		8.0	8.0		24.7	24.7	
90th %ile Term Code	Gap	Hold		Max	Gap		Max	Max		Gap	Gap	
70th %ile Green (s)	6.0	30.0		9.7	33.7		8.0	8.0		17.7	17.7	
70th %ile Term Code	Gap	Min		Gap	Hold		Max	Max		Gap	Gap	
50th %ile Green (s)	5.3	30.0		8.4	33.1		8.0	8.0		14.5	14.5	
50th %ile Term Code	Gap	Min		Gap	Hold		Max	Max		Gap	Gap	
30th %ile Green (s)	0.0	30.0		7.2	40.2		8.0	8.0		12.2	12.2	
30th %ile Term Code	Skip	Min		Gap	Hold		Max	Max		Gap	Gap	
10th %ile Green (s)	0.0	30.0		5.8	38.8		6.6	6.6		9.1	9.1	
10th %ile Term Code	Skip	Min		Gap	Hold		Gap	Gap		Gap	Gap	
Stops (vph)	18	221		67	378	0	75	32		172	204	
Fuel Used(gal)	0	5		2	8	1	2	1		4	5	
CO Emissions (g/hr)	30	378		107	560	87	153	104		289	324	
NOx Emissions (g/hr)	6	74		21	109	17	30	20		56	63	
VOC Emissions (g/hr)	7	88		25	130	20	35	24		67	75	
Dilemma Vehicles (#)	0	16		0	22	0	0	6		0	11	
Queue Length 50th (ft)	8	65		36	217	0	45	9		108	65	
Queue Length 95th (ft)	26	120		81	395	0	#130	68		209	117	
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150			400		
Base Capacity (vph)	517	2270		603	1226	1615	171	247		662	1318	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.07	0.16		0.25	0.42	0.22	0.52	0.49		0.30	0.20	

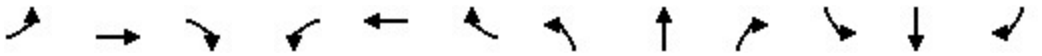
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 85.5			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 22.4		Intersection LOS: C	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 104.5			
70th %ile Actuated Cycle: 87.4			
50th %ile Actuated Cycle: 82.9			
30th %ile Actuated Cycle: 79.4			
10th %ile Actuated Cycle: 73.5			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	597	523	243	464	5	297	227	69	0	0	0
Future Volume (vph)	46	597	523	243	464	5	297	227	69	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.984				
Flt Protected		0.996		0.950				0.976				
Satd. Flow (prot)	0	1922	1641	1816	1927	0	0	1818	0	0	0	0
Flt Permitted		0.937		0.220				0.976				
Satd. Flow (perm)	0	1808	1641	421	1927	0	0	1818	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			545		1							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	1%	2%	1%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	48	622	545	253	483	5	309	236	72	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	670	545	253	488	0	0	617	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



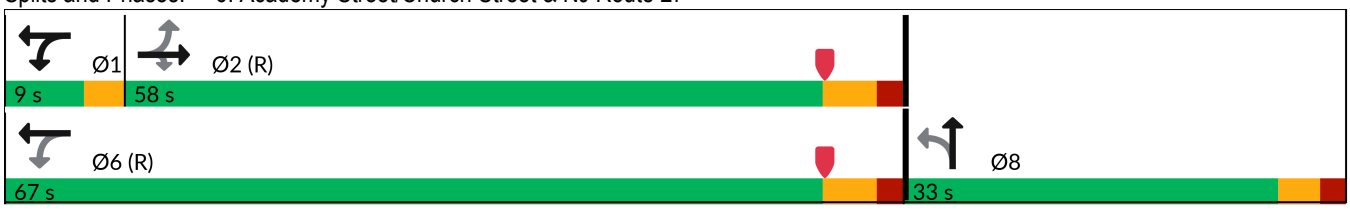
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.71	0.49	0.72	0.40			1.21				
Control Delay (s/veh)		23.6	2.8	16.7	6.3			146.0				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		23.6	2.8	16.7	6.3			146.0				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		14.3			9.8			146.0				
Approach LOS		B			A			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		480	31	94	153			480				
Fuel Used(gal)		9	2	2	4			46				
CO Emissions (g/hr)		633	171	168	247			3232				
NOx Emissions (g/hr)		123	33	33	48			629				
VOC Emissions (g/hr)		147	40	39	57			749				
Dilemma Vehicles (#)		32	0	0	0			0				
Queue Length 50th (ft)		311	0	42	94			~484				
Queue Length 95th (ft)		451	49	m61	m114			#696				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		940	1114	353	1233			509				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.71	0.49	0.72	0.40			1.21				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay (s/veh): 44.6		Intersection LOS: D	
Intersection Capacity Utilization 112.5%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	645	15	53	506	91	41	287	48	89	173	159
Future Volume (vph)	19	645	15	53	506	91	41	287	48	89	173	159
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.981			0.983			0.949	
Flt Protected		0.999			0.996			0.995			0.990	
Satd. Flow (prot)	0	2180	0	0	2140	0	0	1833	0	0	1743	0
Flt Permitted		0.974			0.901			0.870			0.674	
Satd. Flow (perm)	0	2126	0	0	1936	0	0	1602	0	0	1187	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1372			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	1%	5%	0%	4%	2%
Adj. Flow (vph)	20	665	15	55	522	94	42	296	49	92	178	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	700	0	0	671	0	0	387	0	0	434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.55			0.58			0.83			1.26	
Control Delay (s/veh)		8.2			14.7			50.5			171.6	
Queue Delay		0.2			0.0			0.0			0.0	
Total Delay (s/veh)		8.4			14.7			50.5			171.6	
LOS		A			B			D			F	
Approach Delay (s/veh)		8.4			14.7			50.5			171.6	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		175			382			328			330	
Fuel Used(gal)		5			11			24			20	
CO Emissions (g/hr)		365			788			1704			1405	
NOx Emissions (g/hr)		71			153			332			273	
VOC Emissions (g/hr)		85			183			395			326	
Dilemma Vehicles (#)		0			33			0			16	
Queue Length 50th (ft)		106			243			231			~349	
Queue Length 95th (ft)		m185			346			#388			#539	
Internal Link Dist (ft)		509			1292			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1275			1161			464			344	
Starvation Cap Reductn		115			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.60			0.58			0.83			1.26	

Intersection Summary

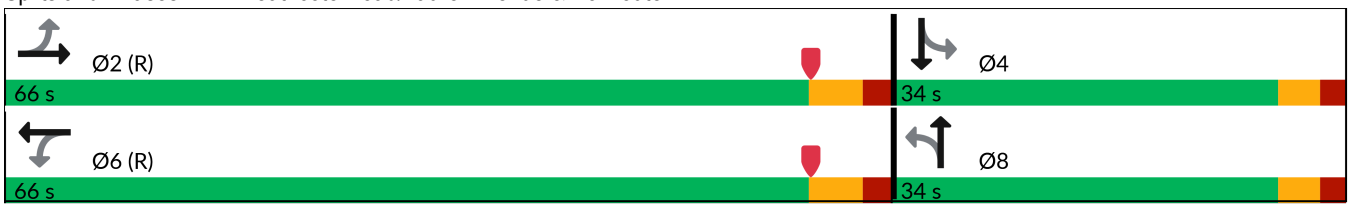
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay (s/veh): 50.1		Intersection LOS: D	
Intersection Capacity Utilization 105.8%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

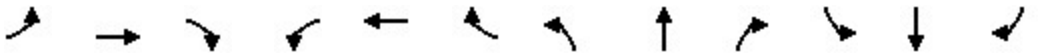
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	1	11	36	5	7	12	548	40	15	366	154
Future Volume (vph)	29	1	11	36	5	7	12	548	40	15	366	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.963			0.981			0.990			0.956	
Flt Protected		0.966			0.963		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1742	0	1805	1872	0	1805	1798	0
Flt Permitted		0.775			0.800		0.424			0.377		
Satd. Flow (perm)	0	1418	0	0	1447	0	806	1872	0	716	1798	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			7			38	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			416			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	4%	0%	0%	0%	0%	7%	0%	1%	1%
Adj. Flow (vph)	31	1	12	38	5	7	13	583	43	16	389	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	50	0	13	626	0	16	553	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

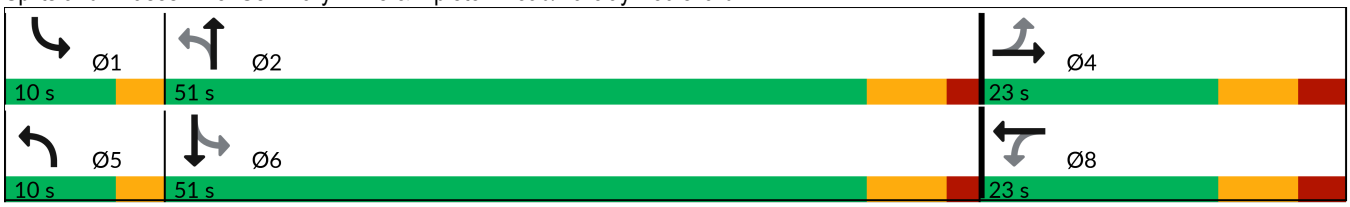


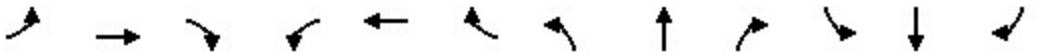
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.8			7.8		50.1	48.6		50.1	48.6	
Actuated g/C Ratio		0.13			0.13		0.80	0.78		0.80	0.78	
v/c Ratio		0.23			0.27		0.02	0.43		0.02	0.39	
Control Delay (s/veh)		25.8			29.1		2.9	7.0		2.9	6.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		25.8			29.1		2.9	7.0		2.9	6.3	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		25.8			29.1			7.0			6.2	
Approach LOS		C			C			A			A	
90th %ile Green (s)	10.2	10.2		10.2	10.2		5.0	44.0		5.1	44.1	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Gap	Hold	
70th %ile Green (s)	7.7	7.7		7.7	7.7		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		30			39		4	228		5	184	
Fuel Used(gal)		1			1		0	8		1	22	
CO Emissions (g/hr)		57			37		11	579		44	1561	
NOx Emissions (g/hr)		11			7		2	113		9	304	
VOC Emissions (g/hr)		13			8		2	134		10	362	
Dilemma Vehicles (#)		2			0		0	30		0	24	
Queue Length 50th (ft)		12			16		1	103		1	81	
Queue Length 95th (ft)		43			50		5	272		6	220	
Internal Link Dist (ft)		797			156			336			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		359			362		766	1460		704	1410	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.12			0.14		0.02	0.43		0.02	0.39	

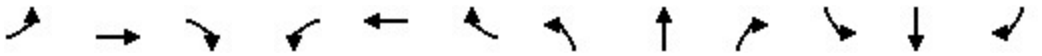
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62.4			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 8.1		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.3			
70th %ile Actuated Cycle: 66.7			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	1215	5	13	690	215	5	2	9	429	3	62
Future Volume (vph)	76	1215	5	13	690	215	5	2	9	429	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.924				0.850
Flt Protected	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (prot)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Flt Permitted	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (perm)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			222		9				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		611			1998			443			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	78	1253	5	13	711	222	5	2	9	442	3	64
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	78	1253	5	13	711	222	0	16	0	221	224	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

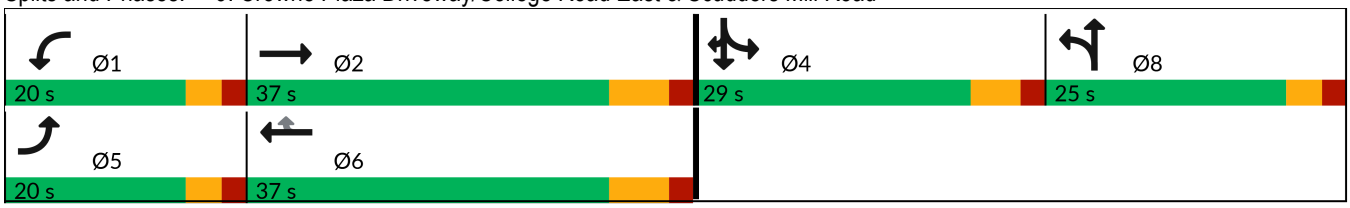


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	8.2	39.8	71.0	6.3	31.2	31.2		6.3		14.2	14.2	14.2
Actuated g/C Ratio	0.12	0.56	1.00	0.09	0.44	0.44		0.09		0.20	0.20	0.20
v/c Ratio	0.38	0.63	0.00	0.08	0.45	0.27		0.10		0.65	0.66	0.15
Control Delay (s/veh)	38.3	15.7	0.0	37.7	18.3	4.2		28.0		37.2	37.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	38.3	15.7	0.0	37.7	18.3	4.2		28.0		37.2	37.4	0.7
LOS	D	B	A	D	B	A		C		D	D	A
Approach Delay (s/veh)		16.9			15.3			28.0			32.7	
Approach LOS		B			B			C			C	
90th %ile Green (s)	11.7	35.2		6.5	30.0	30.0	6.4	6.4		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Max	Max	Max
70th %ile Green (s)	9.5	44.5		0.0	30.0	30.0	0.0	0.0		18.0	18.0	18.0
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	7.6	42.6		0.0	30.0	30.0	0.0	0.0		13.4	13.4	13.4
50th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	6.4	41.4		0.0	30.0	30.0	0.0	0.0		11.3	11.3	11.3
30th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		7.7	7.7	7.7
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
Stops (vph)	67	719	0	15	465	23		12		180	183	0
Fuel Used(gal)	2	29	0	0	18	3		0		12	12	2
CO Emissions (g/hr)	173	2001	4	35	1290	228		16		813	825	168
NOx Emissions (g/hr)	34	389	1	7	251	44		3		158	161	33
VOC Emissions (g/hr)	40	464	1	8	299	53		4		188	191	39
Dilemma Vehicles (#)	0	72	0	0	48	0		1		0	12	0
Queue Length 50th (ft)	31	144	0	5	106	0		3		92	93	0
Queue Length 95th (ft)	88	#516	0	26	249	50		24		198	201	0
Internal Link Dist (ft)		531			1918			363			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	397	2003	1615	397	1571	827		513		572	574	625
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

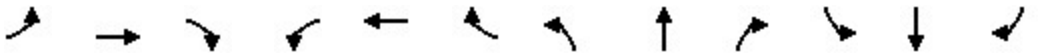
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.20	0.63	0.00	0.03	0.45	0.27		0.03		0.39	0.39	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 71			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 19.3		Intersection LOS: B	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 94.1			
70th %ile Actuated Cycle: 75.5			
50th %ile Actuated Cycle: 69			
30th %ile Actuated Cycle: 65.7			
10th %ile Actuated Cycle: 50.7			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



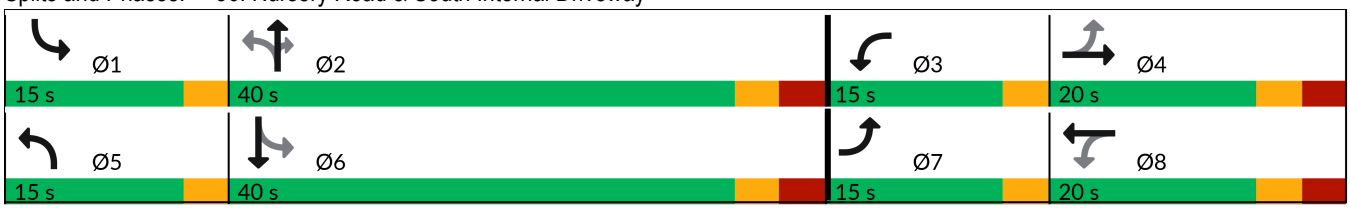
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	8	81	275	6	0	65	109	215	1	97	0
Future Volume (vph)	1	8	81	275	6	0	65	109	215	1	97	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.864							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1642	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.755			0.482			0.547			0.681		
Satd. Flow (perm)	1434	1642	0	916	1900	0	1039	1900	1615	1294	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		88							234			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			734			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	9	88	299	7	0	71	118	234	1	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	97	0	299	7	0	71	118	234	1	105	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.0	5.9		18.6	14.1		16.9	12.6	12.6	14.6	8.9	
Actuated g/C Ratio	0.29	0.14		0.44	0.34		0.40	0.30	0.30	0.35	0.21	
v/c Ratio	0.00	0.32		0.49	0.01		0.13	0.21	0.36	0.00	0.26	
Control Delay (s/veh)	8.0	10.3		11.4	12.5		9.6	14.8	4.8	9.0	20.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.0	10.3		11.4	12.5		9.6	14.8	4.8	9.0	20.1	
LOS	A	B		B	B		A	B	A	A	C	
Approach Delay (s/veh)		10.3			11.4			8.4			20.0	
Approach LOS		B			B			A			B	
90th %ile Green (s)	5.0	7.5		12.0	14.5		7.5	12.4	12.4	5.0	9.9	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.8		11.0	19.8		6.8	17.8	17.8	0.0	8.0	
70th %ile Term Code	Skip	Gap		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		9.4	17.4		6.0	15.9	15.9	0.0	6.9	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		6.8	14.8		0.0	6.0	6.0	0.0	6.0	
30th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	10.4	10.4	0.0	10.4	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	28		159	7		38	78	33	2	80	
Fuel Used(gal)	0	1		3	0		1	1	2	0	1	
CO Emissions (g/hr)	1	43		195	6		53	104	112	1	93	
NOx Emissions (g/hr)	0	8		38	1		10	20	22	0	18	
VOC Emissions (g/hr)	0	10		45	1		12	24	26	0	22	
Dilemma Vehicles (#)	0	7		0	0		0	8	0	0	7	
Queue Length 50th (ft)	0	2		47	1		11	21	0	0	25	
Queue Length 95th (ft)	2	36		105	9		32	69	45	2	66	
Internal Link Dist (ft)		266			404			654			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	759	642		703	763		674	1541	1354	704	1541	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.15		0.43	0.01		0.11	0.08	0.17	0.00	0.07	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 42		
Natural Cycle: 40		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.49		
Intersection Signal Delay (s/veh): 10.9		Intersection LOS: B
Intersection Capacity Utilization 42.2%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 54.9		
70th %ile Actuated Cycle: 49.6		
50th %ile Actuated Cycle: 45.3		
30th %ile Actuated Cycle: 32.8		
10th %ile Actuated Cycle: 27.4		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	21	88	0	364	52	162	333
Future Vol, veh/h	21	88	0	364	52	162	333
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89	89
Heavy Vehicles, %	5	0	0	0	0	2	1
Mvmt Flow	24	99	0	409	58	182	374

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	989	234	374	0	0	467	0
Stage 1	438	-	-	-	-	-	-
Stage 2	551	-	-	-	-	-	-
Critical Hdwy	6.9	6.9	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	238	774	841	-	-	1090	-
Stage 1	609	-	-	-	-	-	-
Stage 2	533	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	199	774	841	-	-	1090	-
Mov Cap-2 Maneuver	199	-	-	-	-	-	-
Stage 1	609	-	-	-	-	-	-
Stage 2	444	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.26	0	2.93
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	841	-	-	199	774	1090	-
HCM Lane V/C Ratio	-	-	-	0.119	0.128	0.167	-
HCM Ctrl Dly (s/v)	0	-	-	25.6	10.3	9	-
HCM Lane LOS	A	-	-	D	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0.6	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	366	8	5	587	40	13	0	15	9	0	37
Future Vol, veh/h	43	366	8	5	587	40	13	0	15	9	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	47	398	9	5	638	43	14	0	16	10	0	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	682	0	0	407	0	0	1145	1188	402	1140	1149	638
Stage 1	-	-	-	-	-	-	496	496	-	649	649	-
Stage 2	-	-	-	-	-	-	649	692	-	491	500	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	921	-	-	1163	-	-	178	190	652	180	200	480
Stage 1	-	-	-	-	-	-	560	549	-	462	469	-
Stage 2	-	-	-	-	-	-	462	448	-	563	546	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	921	-	-	1163	-	-	154	179	652	165	189	480
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	179	-	165	189	-
Stage 1	-	-	-	-	-	-	531	521	-	460	466	-
Stage 2	-	-	-	-	-	-	421	446	-	521	519	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.94	0.06	20.59	16.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	261	921	-	-	1163	-	-	165	480
HCM Lane V/C Ratio	0.116	0.051	-	-	0.005	-	-	0.059	0.084
HCM Ctrl Dly (s/v)	20.6	9.1	-	-	8.1	-	-	28.1	13.2
HCM Lane LOS	C	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.2	0.3

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	33	29	0	0	38	39	33	1	34	0
Future Vol, veh/h	0	0	33	29	0	0	38	39	33	1	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	36	32	0	0	41	42	36	1	37	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	164	200	37	182	182	60	37	0	0	78	0	0
Stage 1	39	39	-	143	143	-	-	-	-	-	-	-
Stage 2	125	161	-	39	39	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	805	699	1041	784	716	1011	1587	-	-	1533	-	-
Stage 1	981	866	-	865	782	-	-	-	-	-	-	-
Stage 2	884	769	-	981	866	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	783	680	1041	736	696	1011	1587	-	-	1533	-	-
Mov Cap-2 Maneuver	783	680	-	736	696	-	-	-	-	-	-	-
Stage 1	980	866	-	841	761	-	-	-	-	-	-	-
Stage 2	860	748	-	947	866	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.58	10.11	2.53	0.21
HCM LOS	A	B		

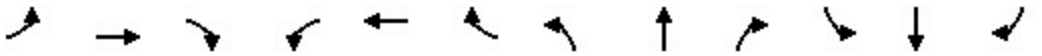
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	570	-	-	1041	736	51	-	-
HCM Lane V/C Ratio	0.026	-	-	0.034	0.043	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.6	10.1	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	2.8
Intersection LOS	A

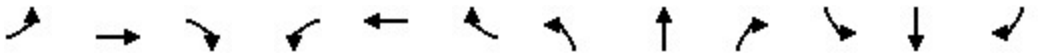
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	16	21	44	0
Demand Flow Rate, veh/h	16	21	44	0
Vehicles Circulating, veh/h	21	20	0	41
Vehicles Exiting, veh/h	20	24	37	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.8	2.9	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	16	21	44	0
Cap Entry Lane, veh/h	1351	1352	1380	1323
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	16	21	44	0
Cap Entry, veh/h	1351	1352	1380	1323
V/C Ratio	0.012	0.016	0.032	0.000
Control Delay, s/veh	2.8	2.8	2.9	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

SATURDAY BUILD



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	221	57	101	174	102	0	1817	0	0	1682	0
Future Volume (vph)	49	221	57	101	174	102	0	1817	0	0	1682	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1805	1881	1553	1787	1778	0	0	3597	0	0	3632	0
Flt Permitted	0.295			0.270								
Satd. Flow (perm)	560	1881	1553	508	1778	0	0	3597	0	0	3632	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	4%	1%	1%	1%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	50	226	58	103	178	104	0	1854	0	0	1716	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	226	58	103	282	0	0	1854	0	0	1716	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

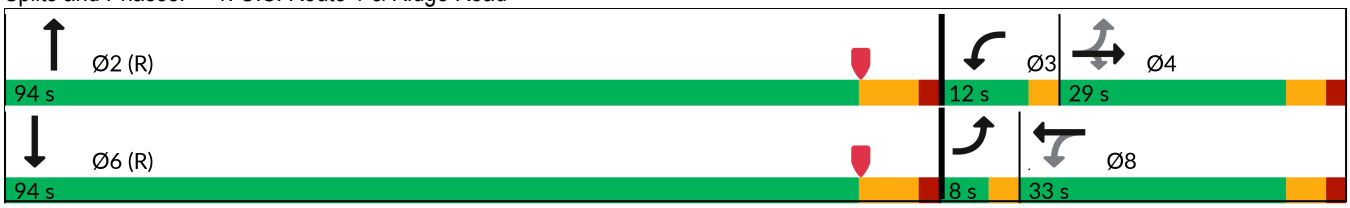


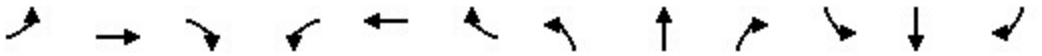
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	29.0	29.0	12.0	33.0			94.0			94.0	
Total Split (%)	5.9%	21.5%	21.5%	8.9%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	29.6	20.3	20.3	35.5	24.9			91.4			91.4	
Actuated g/C Ratio	0.22	0.15	0.15	0.26	0.18			0.68			0.68	
v/c Ratio	0.28	0.80	0.19	0.46	0.82			0.76			0.70	
Control Delay (s/veh)	40.0	75.8	4.4	44.6	68.8			16.4			16.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	40.0	75.8	4.4	44.6	68.8			16.4			16.1	
LOS	D	E	A	D	E			B			B	
Approach Delay (s/veh)		58.1			62.3			16.4			16.1	
Approach LOS		E			E			B			B	
90th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	8.2	24.2	24.2	12.2	28.2			81.6			81.6	
70th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
50th %ile Green (s)	7.3	21.8	21.8	10.4	24.9			85.8			85.8	
50th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
30th %ile Green (s)	6.2	18.9	18.9	8.7	21.4			90.4			90.4	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	13.5	13.5	6.5	23.0			98.0			98.0	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	37	209	3	77	239			1182			1005	
Fuel Used(gal)	1	6	0	2	8			32			28	
CO Emissions (g/hr)	57	398	10	154	546			2226			1946	
NOx Emissions (g/hr)	11	78	2	30	106			433			379	
VOC Emissions (g/hr)	13	92	2	36	127			516			451	
Dilemma Vehicles (#)	0	7	0	0	9			67			62	
Queue Length 50th (ft)	32	190	0	70	222			562			478	
Queue Length 95th (ft)	66	281	16	122	#324			658			558	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	181	323	341	228	373			2458			2482	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.28	0.70	0.17	0.45	0.76			0.75			0.69	

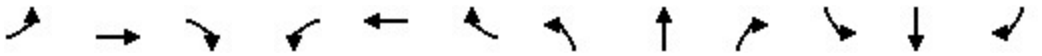
Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 23.6		Intersection LOS: C	
Intersection Capacity Utilization 81.0%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1	0	7	0	1	0	1893	6	0	1769	0
Future Volume (vph)	16	1	0	7	0	1	0	1893	6	0	1769	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	16	1	0	7	0	1	0	1952	6	0	1824	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	1	0	7	0	1	0	1958	0	0	1824	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



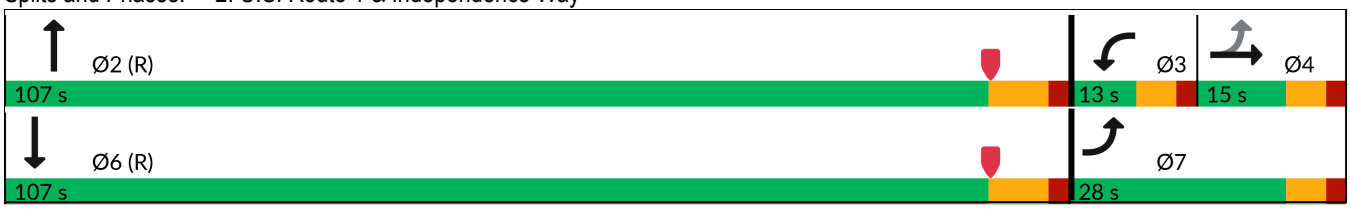
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	8.3	7.0		5.4		135.0		125.3			125.3	
Actuated g/C Ratio	0.06	0.05		0.04		1.00		0.93			0.93	
v/c Ratio	0.08	0.01		0.10		0.00		0.41			0.38	
Control Delay (s/veh)	46.0	51.0		65.1		0.0		2.1			1.6	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	46.0	51.0		65.1		0.0		2.1			1.6	
LOS	D	D		E		A		A			A	
Approach Delay (s/veh)		46.3			57.0			2.1			1.6	
Approach LOS		D			E			A			A	
90th %ile Green (s)	19.3	7.0		6.3				101.7			101.7	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
50th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	16	2		9		0		232			161	
Fuel Used(gal)	0	0		0		0		18			10	
CO Emissions (g/hr)	22	2		14		0		1242			690	
NOx Emissions (g/hr)	4	0		3		0		242			134	
VOC Emissions (g/hr)	5	0		3		0		288			160	
Dilemma Vehicles (#)	0	0		0		0		31			34	
Queue Length 50th (ft)	7	1		6		0		0			0	
Queue Length 95th (ft)	m9	m1		23		0		218			143	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	533	126		93		1615		4799			4845	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03	0.01		0.08		0.00		0.41			0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	206	236	0	0	263	10	0	0	63	0	0	0
Future Volume (vph)	206	236	0	0	263	10	0	0	63	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3574	1455	0	0	1611	0	0	0
Flt Permitted	0.432											
Satd. Flow (perm)	1592	3574	0	0	3574	1455	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			799			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	11%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	219	251	0	0	280	11	0	0	67	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	251	0	0	280	11	0	0	67	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

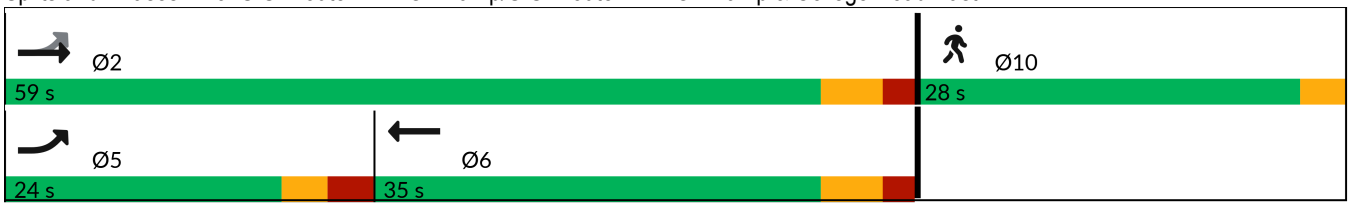
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.5	36.5			17.5	36.5			36.5			
Actuated g/C Ratio	0.84	1.00			0.48	1.00			1.00			
v/c Ratio	0.13	0.07			0.16	0.01			0.04			
Control Delay (s/veh)	0.7	0.0			5.7	0.0			0.0			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.7	0.0			5.7	0.0			0.0			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.3			5.5							
Approach LOS		A			A							
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	32.3			19.3							
10th %ile Term Code	Min	Dwell			Dwell							
Stops (vph)	21	0			131	0			0			
Fuel Used(gal)	1	1			9	0			1			
CO Emissions (g/hr)	52	41			610	19			40			
NOx Emissions (g/hr)	10	8			119	4			8			
VOC Emissions (g/hr)	12	9			141	4			9			
Dilemma Vehicles (#)	0	0			28	0			0			
Queue Length 50th (ft)	0	0			14	0			0			
Queue Length 95th (ft)	0	0			26	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2273	3574			2844	1455			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.10	0.07			0.10	0.01			0.04			

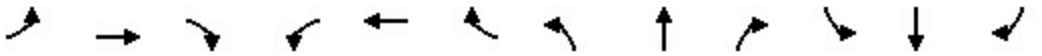
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.5			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.16			
Intersection Signal Delay (s/veh): 2.1		Intersection LOS: A	
Intersection Capacity Utilization 30.4%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 38.3			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

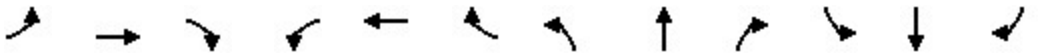


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	752	12	0	648	0	6	0	42	2	74	0
Future Volume (vph)	0	752	12	0	648	0	6	0	42	2	74	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3568	0	0	3574	0	1805	0	1615	0	3606	0
Flt Permitted							0.930				0.999	
Satd. Flow (perm)	0	3568	0	0	3574	0	1767	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							47			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	845	13	0	728	0	7	0	47	2	83	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	858	0	0	728	0	7	0	47	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

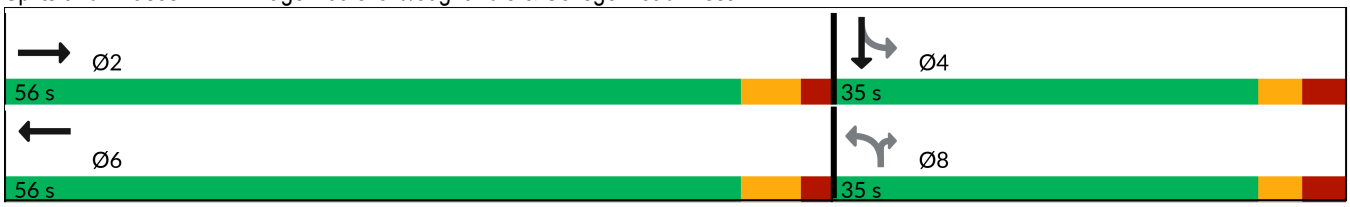


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		23.3			23.3		7.0		7.0		7.0	
Actuated g/C Ratio		0.67			0.67		0.20		0.20		0.20	
v/c Ratio		0.36			0.30		0.02		0.13		0.12	
Control Delay (s/veh)		5.7			5.4		11.3		5.7		11.8	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		5.7			5.4		11.3		5.7		11.8	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		5.7			5.4			6.5			11.8	
Approach LOS		A			A			A			B	
90th %ile Green (s)		16.1			16.1		7.0		7.0	7.0	7.0	
90th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
70th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
70th %ile Term Code		Min			Min		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
30th %ile Green (s)		29.6			29.6		0.0		0.0	0.0	0.0	
30th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		362			294		9		16		60	
Fuel Used(gal)		6			5		0		0		1	
CO Emissions (g/hr)		437			332		6		21		44	
NOx Emissions (g/hr)		85			65		1		4		9	
VOC Emissions (g/hr)		101			77		1		5		10	
Dilemma Vehicles (#)		60			52		0		0		0	
Queue Length 50th (ft)		53			43		1		0		6	
Queue Length 95th (ft)		82			68		7		15		17	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3568			3574		1467		1349		2994	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

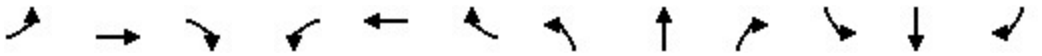
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.24			0.20		0.00		0.03		0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 34.9			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 47.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 35.1			
70th %ile Actuated Cycle: 34			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 35.6			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	212	44	96	264	495	44	24	76	469	29	47
Future Volume (vph)	55	212	44	96	264	495	44	24	76	469	29	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.974				0.850		0.886			0.977	
Flt Protected	0.950			0.950			0.950			0.950	0.964	
Satd. Flow (prot)	1805	3487	0	1752	1900	1615	1805	1646	0	1643	3257	0
Flt Permitted	0.540			0.581			0.950			0.950	0.964	
Satd. Flow (perm)	1026	3487	0	1072	1900	1615	1805	1646	0	1643	3257	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30				538		83			13	
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	3%	0%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	60	230	48	104	287	538	48	26	83	510	32	51
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	60	278	0	104	287	538	48	109	0	255	338	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

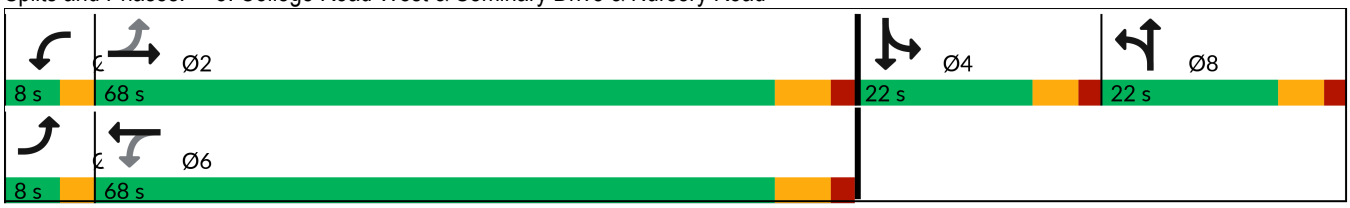


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	38.0	30.1		38.0	30.1	78.2	6.8	6.8		16.0	16.0	
Actuated g/C Ratio	0.49	0.38		0.49	0.38	1.00	0.09	0.09		0.20	0.20	
v/c Ratio	0.11	0.20		0.18	0.39	0.33	0.31	0.50		0.76	0.50	
Control Delay (s/veh)	10.3	15.5		10.9	20.3	0.6	39.5	21.1		46.8	30.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.3	15.5		10.9	20.3	0.6	39.5	21.1		46.8	30.1	
LOS	B	B		B	C	A	D	C		D	C	
Approach Delay (s/veh)		14.6			7.8			26.7			37.3	
Approach LOS		B			A			C			D	
90th %ile Green (s)	5.0	30.0		5.0	30.0		9.6	9.6		16.0	16.0	
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.4	7.4		16.0	16.0	
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.5	6.5		16.0	16.0	
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.6	5.6		16.0	16.0	
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
10th %ile Green (s)	0.0	30.0		0.0	30.0		5.0	5.0		16.0	16.0	
10th %ile Term Code	Skip	Min		Skip	Min		Min	Min		Max	Max	
Stops (vph)	28	145		47	186	0	41	36		202	256	
Fuel Used(gal)	1	4		1	4	2	1	1		5	5	
CO Emissions (g/hr)	47	248		71	270	128	71	96		350	383	
NOx Emissions (g/hr)	9	48		14	53	25	14	19		68	75	
VOC Emissions (g/hr)	11	58		17	63	30	16	22		81	89	
Dilemma Vehicles (#)	0	12		0	13	0	0	5		0	19	
Queue Length 50th (ft)	14	42		24	102	0	23	12		132	79	
Queue Length 95th (ft)	34	73		52	177	0	55	59		#271	127	
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150			400		
Base Capacity (vph)	548	2734		564	1486	1615	370	403		337	678	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.11	0.10		0.18	0.19	0.33	0.13	0.27		0.76	0.50	

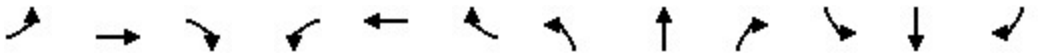
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 78.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 19.1		Intersection LOS: B	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82.6			
70th %ile Actuated Cycle: 80.4			
50th %ile Actuated Cycle: 79.5			
30th %ile Actuated Cycle: 78.6			
10th %ile Actuated Cycle: 70			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	218	253	549	12	168	59	89	0	0	0
Future Volume (vph)	15	463	218	253	549	12	168	59	89	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.962				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1891	1658	1834	1907	0	0	1780	0	0	0	0
Flt Permitted		0.977		0.379				0.974				
Satd. Flow (perm)	0	1851	1658	732	1907	0	0	1780	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			229		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	3%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	229	266	578	13	177	62	94	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	229	266	591	0	0	333	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



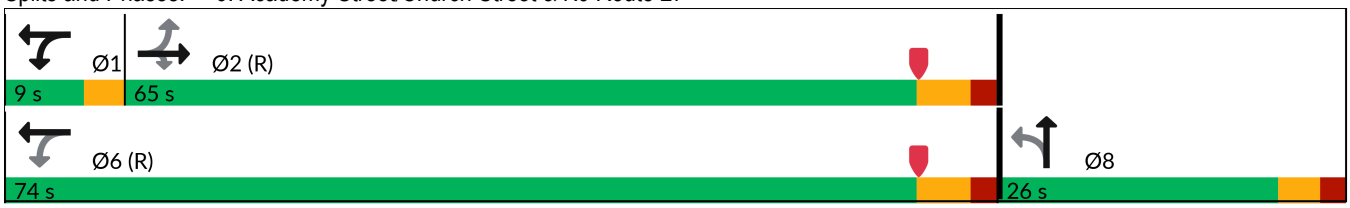
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.7	71.7			20.3				
Actuated g/C Ratio		0.59	0.59	0.72	0.72			0.20				
v/c Ratio		0.46	0.21	0.44	0.43			0.93				
Control Delay (s/veh)		13.3	1.7	4.8	4.3			72.0				
Queue Delay		0.0	0.0	0.0	0.2			0.0				
Total Delay (s/veh)		13.3	1.7	4.8	4.6			72.0				
LOS		B	A	A	A			E				
Approach Delay (s/veh)		9.7			4.7			72.0				
Approach LOS		A			A			E				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	9.7			17.3	17.3				
10th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
Stops (vph)		258	13	51	140			281				
Fuel Used(gal)		5	1	2	4			20				
CO Emissions (g/hr)		348	68	120	269			1402				
NOx Emissions (g/hr)		68	13	23	52			273				
VOC Emissions (g/hr)		81	16	28	62			325				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		168	0	31	86			208				
Queue Length 95th (ft)		245	29	m42	m104			#367				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1092	1072	599	1368			373				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	71.7
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	252			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.46	0.21	0.44	0.53			0.89				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 108.4%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	490	23	63	593	61	42	110	72	85	140	156
Future Volume (vph)	38	490	23	63	593	61	42	110	72	85	140	156
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.989			0.957			0.945	
Flt Protected		0.997			0.996			0.991			0.989	
Satd. Flow (prot)	0	2147	0	0	2148	0	0	1793	0	0	1768	0
Flt Permitted		0.917			0.906			0.814			0.812	
Satd. Flow (perm)	0	1975	0	0	1954	0	0	1473	0	0	1452	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	516	24	66	624	64	44	116	76	89	147	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	580	0	0	754	0	0	236	0	0	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

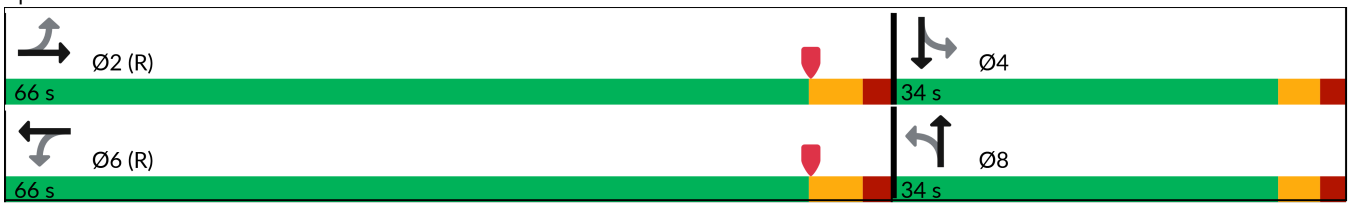
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.4			60.4			28.6			28.6	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.49			0.64			0.56			0.96	
Control Delay (s/veh)		8.2			16.0			36.3			72.5	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		8.3			16.0			36.3			72.5	
LOS		A			B			D			E	
Approach Delay (s/veh)		8.3			16.0			36.3			72.5	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	62.0	62.0		62.0	62.0		27.0	27.0		27.0	27.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		162			446			187			327	
Fuel Used(gal)		4			13			14			11	
CO Emissions (g/hr)		301			893			969			747	
NOx Emissions (g/hr)		59			174			189			145	
VOC Emissions (g/hr)		70			207			225			173	
Dilemma Vehicles (#)		0			36			0			17	
Queue Length 50th (ft)		120			290			127			249	
Queue Length 95th (ft)		m149			414			207			#436	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1193			1180			427			421	
Starvation Cap Reductn		79			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.52			0.64			0.55			0.95	

Intersection Summary

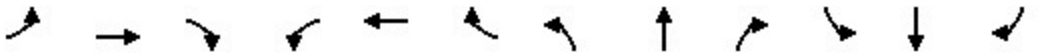
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	2	6	31	7	9	2	329	40	11	326	144
Future Volume (vph)	11	2	6	31	7	9	2	329	40	11	326	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.957			0.975			0.984			0.954	
Flt Protected		0.972			0.968		0.950			0.950		
Satd. Flow (prot)	0	1662	0	0	1793	0	1805	1870	0	1805	1813	0
Flt Permitted		0.794			0.794		0.467			0.534		
Satd. Flow (perm)	0	1358	0	0	1471	0	887	1870	0	1015	1813	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9			11			40	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	2	6	32	7	9	2	343	42	11	340	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	48	0	2	385	0	11	490	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

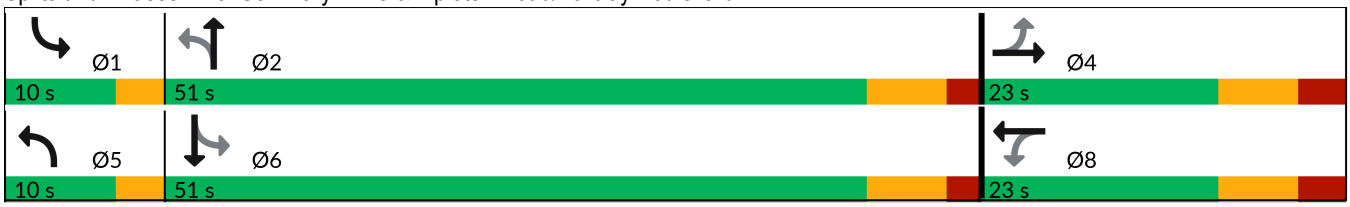


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.6			7.6		50.0	48.5		50.0	48.5	
Actuated g/C Ratio		0.12			0.12		0.81	0.78		0.81	0.78	
v/c Ratio		0.11			0.26		0.00	0.26		0.01	0.34	
Control Delay (s/veh)		25.5			28.1		2.5	5.4		2.7	5.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		25.5			28.1		2.5	5.4		2.7	5.7	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		25.5			28.1			5.4			5.6	
Approach LOS		C			C			A			A	
90th %ile Green (s)	9.4	9.4		9.4	9.4		5.0	44.0		5.0	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Min	Max	
70th %ile Green (s)	7.2	7.2		7.2	7.2		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
Stops (vph)		15			36		1	117		4	153	
Fuel Used(gal)		0			0		0	5		0	20	
CO Emissions (g/hr)		27			34		2	337		33	1398	
NOx Emissions (g/hr)		5			7		0	66		6	272	
VOC Emissions (g/hr)		6			8		0	78		8	324	
Dilemma Vehicles (#)		1			0		0	20		0	25	
Queue Length 50th (ft)		5			15		0	52		1	66	
Queue Length 95th (ft)		24			47		2	138		4	179	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		340			371		825	1463		914	1425	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

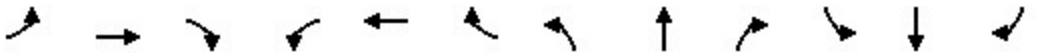
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.06			0.13		0.00	0.26		0.01	0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62.1			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 76.4			
70th %ile Actuated Cycle: 66.2			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	665	14	10	619	177	23	5	12	184	2	18
Future Volume (vph)	7	665	14	10	619	177	23	5	12	184	2	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.960				0.850
Flt Protected	0.950			0.950				0.972		0.950	0.953	
Satd. Flow (prot)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1687	1615
Flt Permitted	0.950			0.950				0.972		0.950	0.953	
Satd. Flow (perm)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1687	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			182		12				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	7%	0%	1%	2%	4%	0%	0%	2%	0%	0%
Adj. Flow (vph)	7	686	14	10	638	182	24	5	12	190	2	19
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	7	686	14	10	638	182	0	41	0	97	95	19
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	custom	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

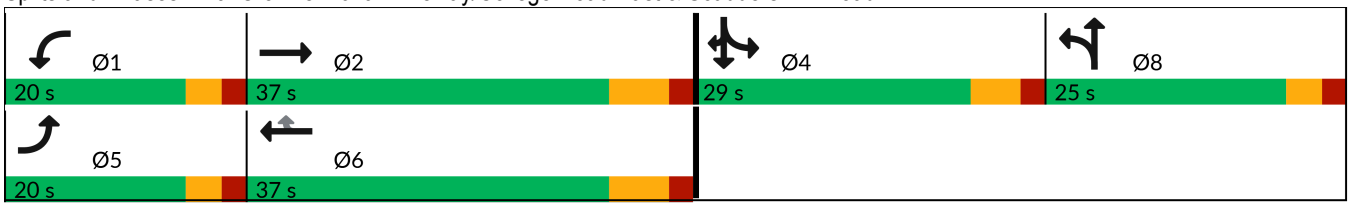


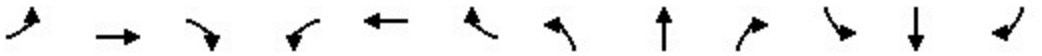
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6	8					
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.2	33.6	61.1	6.2	33.6	33.6		6.5		8.3	8.3	8.3
Actuated g/C Ratio	0.10	0.55	1.00	0.10	0.55	0.55		0.11		0.14	0.14	0.14
v/c Ratio	0.04	0.35	0.01	0.05	0.33	0.19		0.21		0.43	0.41	0.06
Control Delay (s/veh)	30.3	10.9	0.0	30.3	10.7	3.2		25.0		31.6	31.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	30.3	10.9	0.0	30.3	10.7	3.2		25.0		31.6	31.3	0.3
LOS	C	B	A	C	B	A		C		C	C	A
Approach Delay (s/veh)		10.9			9.3			25.0			28.6	
Approach LOS		B			A			C			C	
90th %ile Green (s)	6.0	30.0		6.0	30.0	30.0	8.0	8.0		12.3	12.3	12.3
90th %ile Term Code	Min	Max		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	6.2	6.2		9.1	9.1	9.1
70th %ile Term Code	Skip	Max		Skip	Max	Max	Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		7.9	7.9	7.9
50th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.4	6.4	6.4
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	43.7		0.0	43.7	43.7	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Skip	Dwell		Skip	Dwell	Dwell	Skip	Skip		Min	Min	Min
Stops (vph)	9	359	0	13	330	20		29		79	78	0
Fuel Used(gal)	0	15	0	0	14	3		1		5	5	1
CO Emissions (g/hr)	18	1015	11	27	997	186		38		349	342	49
NOx Emissions (g/hr)	4	198	2	5	194	36		7		68	67	9
VOC Emissions (g/hr)	4	235	3	6	231	43		9		81	79	11
Dilemma Vehicles (#)	0	55	0	0	51	0		2		0	6	0
Queue Length 50th (ft)	2	46	0	3	42	0		8		27	27	0
Queue Length 95th (ft)	15	184	0	20	170	38		43		92	91	0
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	456	1962	1509	456	1962	951		591		651	653	710
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.02	0.35	0.01	0.02	0.33	0.19		0.07		0.15	0.15	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 61.1			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 12.6		Intersection LOS: B	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 79.3			
70th %ile Actuated Cycle: 63.3			
50th %ile Actuated Cycle: 50.9			
30th %ile Actuated Cycle: 49.4			
10th %ile Actuated Cycle: 62.7			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



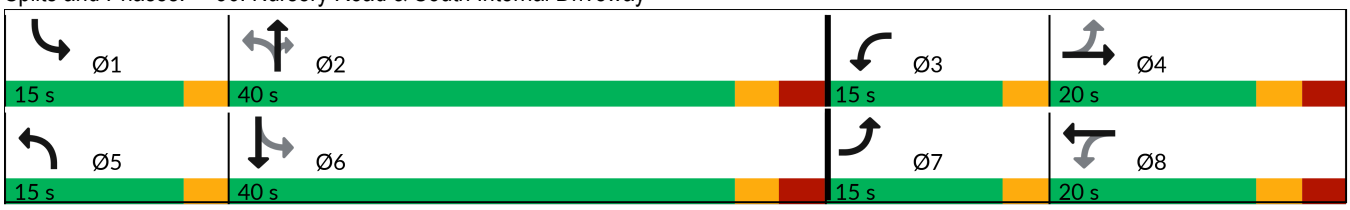


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	9	123	281	9	0	111	153	308	1	139	0
Future Volume (vph)	1	9	123	281	9	0	111	153	308	1	139	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.860							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1634	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.800			0.500			0.521			0.652		
Satd. Flow (perm)	1520	1634	0	950	1900	0	990	1900	1615	1239	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		134							335			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	10	134	305	10	0	121	166	335	1	151	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	144	0	305	10	0	121	166	335	1	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.1	6.3		19.4	14.8		20.6	16.1	16.1	16.4	9.5	
Actuated g/C Ratio	0.26	0.14		0.42	0.32		0.44	0.35	0.35	0.35	0.20	
v/c Ratio	0.00	0.43		0.52	0.02		0.21	0.25	0.43	0.00	0.39	
Control Delay (s/veh)	10.0	10.8		13.7	14.0		9.9	14.4	4.3	9.0	23.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	10.0	10.8		13.7	14.0		9.9	14.4	4.3	9.0	23.2	
LOS	A	B		B	B		A	B	A	A	C	
Approach Delay (s/veh)		10.7			13.7			8.1			23.1	
Approach LOS		B			B			A			C	
90th %ile Green (s)	5.0	8.7		12.0	15.7		9.6	17.0	17.0	5.0	12.4	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	6.2		12.0	21.2		8.7	21.5	21.5	0.0	9.8	
70th %ile Term Code	Skip	Gap		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		10.0	18.0		7.3	18.5	18.5	0.0	8.2	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		8.4	16.4		6.2	16.1	16.1	0.0	6.9	
30th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	7.6	7.6	0.0	7.6	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	34		171	9		59	100	39	2	112	
Fuel Used(gal)	0	1		3	0		1	2	2	0	2	
CO Emissions (g/hr)	1	61		213	9		88	141	153	1	139	
NOx Emissions (g/hr)	0	12		42	2		17	27	30	0	27	
VOC Emissions (g/hr)	0	14		49	2		20	33	36	0	32	
Dilemma Vehicles (#)	0	9		0	1		0	10	0	0	9	
Queue Length 50th (ft)	0	3		55	2		19	30	0	0	39	
Queue Length 95th (ft)	3	46		125	12		50	92	52	2	95	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	723	631		668	743		681	1385	1268	721	1385	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.23		0.46	0.01		0.18	0.12	0.26	0.00	0.11	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 46.6		
Natural Cycle: 50		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.52		
Intersection Signal Delay (s/veh): 11.7		Intersection LOS: B
Intersection Capacity Utilization 53.8%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 60.7		
70th %ile Actuated Cycle: 54.7		
50th %ile Actuated Cycle: 48.5		
30th %ile Actuated Cycle: 44.5		
10th %ile Actuated Cycle: 24.6		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	12	73	0	189	3	55	196
Future Vol, veh/h	12	73	0	189	3	55	196
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	2	0	3	2
Mvmt Flow	14	83	0	215	3	63	223

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	453	109	223	0	0	218	0
Stage 1	216	-	-	-	-	-	-
Stage 2	236	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.16	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.23	-
Pot Cap-1 Maneuver	541	930	1046	-	-	1341	-
Stage 1	805	-	-	-	-	-	-
Stage 2	787	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	515	930	1046	-	-	1341	-
Mov Cap-2 Maneuver	515	-	-	-	-	-	-
Stage 1	805	-	-	-	-	-	-
Stage 2	750	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.66	0	1.71
HCM LOS	A		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1046	-	-	515	930	1341	-
HCM Lane V/C Ratio	-	-	-	0.026	0.089	0.047	-
HCM Ctrl Dly (s/v)	0	-	-	12.2	9.2	7.8	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	286	16	14	294	46	17	0	8	15	0	54
Future Vol, veh/h	56	286	16	14	294	46	17	0	8	15	0	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	61	311	17	15	320	50	18	0	9	16	0	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	370	0	0	328	0	0	791	841	320	783	800	320
Stage 1	-	-	-	-	-	-	441	441	-	350	350	-
Stage 2	-	-	-	-	-	-	350	400	-	433	450	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1200	-	-	1243	-	-	310	303	726	314	320	726
Stage 1	-	-	-	-	-	-	599	580	-	671	636	-
Stage 2	-	-	-	-	-	-	671	605	-	605	575	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1200	-	-	1243	-	-	267	284	726	291	300	726
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	284	-	291	300	-
Stage 1	-	-	-	-	-	-	568	551	-	662	629	-
Stage 2	-	-	-	-	-	-	609	598	-	568	546	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.28	0.31	16.71	12.07
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	335	1200	-	-	1243	-	-	291	726
HCM Lane V/C Ratio	0.081	0.051	-	-	0.012	-	-	0.056	0.081
HCM Ctrl Dly (s/v)	16.7	8.2	-	-	7.9	-	-	18.1	10.4
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	0.2	0.3

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	49	42	0	0	54	54	47	1	49	0
Future Vol, veh/h	0	0	49	42	0	0	54	54	47	1	49	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	53	46	0	0	59	59	51	1	53	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	232	283	53	257	257	84	53	0	0	110	0	0
Stage 1	55	55	-	202	202	-	-	-	-	-	-	-
Stage 2	176	227	-	55	55	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	728	630	1020	700	650	980	1565	-	-	1493	-	-
Stage 1	962	853	-	805	738	-	-	-	-	-	-	-
Stage 2	830	720	-	962	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	698	604	1020	636	624	980	1565	-	-	1493	-	-
Mov Cap-2 Maneuver	698	604	-	636	624	-	-	-	-	-	-	-
Stage 1	961	852	-	773	709	-	-	-	-	-	-	-
Stage 2	797	691	-	911	852	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.72	11.09	2.57	0.15
HCM LOS	A	B		

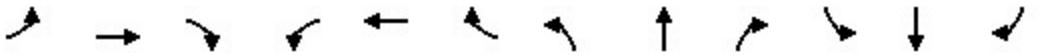
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	574	-	-	1020	636	36	-	-
HCM Lane V/C Ratio	0.037	-	-	0.052	0.072	0.001	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	8.7	11.1	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	24	30	60	0
Demand Flow Rate, veh/h	24	30	60	0
Vehicles Circulating, veh/h	30	26	0	56
Vehicles Exiting, veh/h	26	34	54	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.9	2.9	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	24	30	60	0
Cap Entry Lane, veh/h	1338	1344	1380	1303
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	24	30	60	0
Cap Entry, veh/h	1338	1344	1380	1303
V/C Ratio	0.018	0.022	0.043	0.000
Control Delay, s/veh	2.8	2.9	2.9	2.8
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

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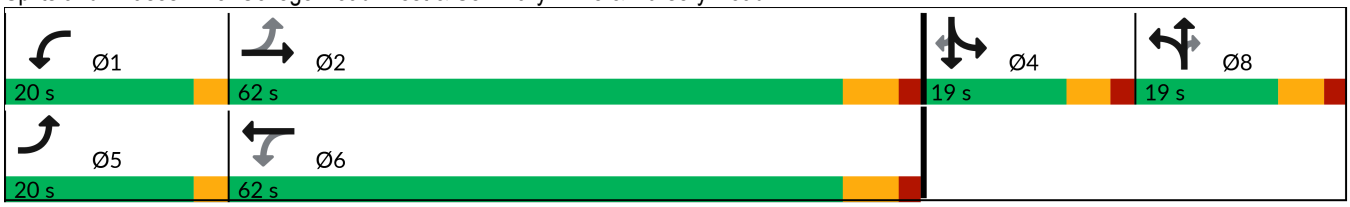
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	583	98	235	511	248	38	14	72	232	10	13
Future Volume (vph)	34	583	98	235	511	248	38	14	72	232	10	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.978				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3496	0	1787	3539	1615	3273	1900	1495	3502	1900	1615
Flt Permitted	0.422			0.239			0.950			0.950		
Satd. Flow (perm)	802	3496	0	450	3539	1615	3273	1900	1495	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				295			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	7%	0%	8%	0%	0%	0%
Adj. Flow (vph)	40	694	117	280	608	295	45	17	86	276	12	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	811	0	280	608	295	45	17	86	276	12	15
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	40.2	30.7		48.2	39.3	76.9	5.8	5.8	5.8	10.5	10.5	10.5
Actuated g/C Ratio	0.52	0.40		0.63	0.51	1.00	0.08	0.08	0.08	0.14	0.14	0.14
v/c Ratio	0.08	0.58		0.60	0.34	0.18	0.18	0.12	0.39	0.58	0.05	0.05
Control Delay (s/veh)	7.9	21.3		13.3	13.8	0.3	38.1	38.4	9.1	37.7	31.7	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.9	21.3		13.3	13.8	0.3	38.1	38.4	9.1	37.7	31.7	0.3
LOS	A	C		B	B	A	D	D	A	D	C	A
Approach Delay (s/veh)		20.7			10.3			21.3			35.6	
Approach LOS		C			B			C			D	
90th %ile Green (s)	6.4	30.9		14.6	39.1		7.0	7.0	7.0	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Gap	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.6	30.0		12.2	36.6		6.1	6.1	6.1	12.2	12.2	12.2
70th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.3	30.0		10.8	35.5		5.6	5.6	5.6	10.8	10.8	10.8
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		9.3	42.3		5.1	5.1	5.1	9.5	9.5	9.5
30th %ile Term Code	Skip	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		6.3	39.3		0.0	0.0	0.0	7.3	7.3	7.3
10th %ile Term Code	Skip	Min		Gap	Hold		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	17	499		98	289	0	35	15	7	206	11	0
Fuel Used(gal)	0	11		2	6	1	1	0	1	5	0	0
CO Emissions (g/hr)	28	794		171	427	63	60	24	44	319	14	5
NOx Emissions (g/hr)	5	155		33	83	12	12	5	9	62	3	1
VOC Emissions (g/hr)	6	184		40	99	15	14	6	10	74	3	1
Dilemma Vehicles (#)	0	33		0	25	0	0	1	0	0	1	0
Queue Length 50th (ft)	7	161		58	100	0	10	8	0	67	5	0
Queue Length 95th (ft)	19	229		96	140	0	26	27	20	104	20	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	727	2548		582	2574	1615	562	326	354	601	326	375
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.06	0.32		0.48	0.24	0.18	0.08	0.05	0.24	0.46	0.04	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 76.9			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 17.6		Intersection LOS: B	
Intersection Capacity Utilization 65.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 87.5			
70th %ile Actuated Cycle: 82.5			
50th %ile Actuated Cycle: 79.2			
30th %ile Actuated Cycle: 75.9			
10th %ile Actuated Cycle: 59.6			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



PM BUILD WITH IMPROVEMENTS

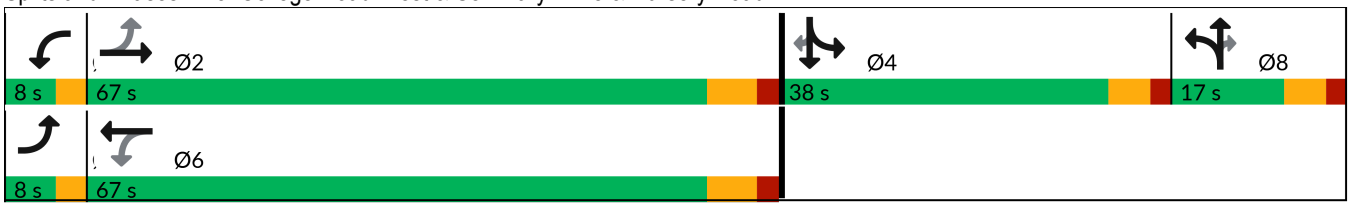
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	296	61	146	503	339	86	17	100	388	23	45
Future Volume (vph)	35	296	61	146	503	339	86	17	100	388	23	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.974				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3470	0	1736	3574	1615	3502	1900	1583	3502	1900	1615
Flt Permitted	0.460			0.499			0.950			0.950		
Satd. Flow (perm)	874	3470	0	912	3574	1615	3502	1900	1583	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				349			109			109
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	3%	4%	1%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	36	305	63	151	519	349	89	18	103	400	24	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	368	0	151	519	349	89	18	103	400	24	46
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.1	30.1		40.4	33.5	77.0	6.5	6.5	6.5	13.3	13.3	13.3
Actuated g/C Ratio	0.51	0.39		0.52	0.44	1.00	0.08	0.08	0.08	0.17	0.17	0.17
v/c Ratio	0.07	0.27		0.28	0.33	0.22	0.30	0.11	0.44	0.66	0.07	0.12
Control Delay (s/veh)	9.7	16.1		11.4	16.7	0.3	36.7	35.2	13.6	35.4	27.0	0.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.7	16.1		11.4	16.7	0.3	36.7	35.2	13.6	35.4	27.0	0.7
LOS	A	B		B	B	A	D	D	B	D	C	A
Approach Delay (s/veh)		15.6			10.3			25.2			31.6	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.2	8.2	8.2	18.0	18.0	18.0
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.1	7.1	7.1	14.6	14.6	14.6
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.5	6.5	6.5	13.1	13.1	13.1
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		5.0	38.0		5.8	5.8	5.8	11.7	11.7	11.7
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.0	5.0	5.0	9.8	9.8	9.8
10th %ile Term Code	Skip	Min		Max	Hold		Min	Min	Min	Gap	Gap	Gap
Stops (vph)	18	215		73	323	0	77	19	19	344	21	0
Fuel Used(gal)	0	5		2	7	1	2	0	1	7	0	0
CO Emissions (g/hr)	30	358		110	468	87	133	29	74	520	28	17
NOx Emissions (g/hr)	6	70		21	91	17	26	6	14	101	6	3
VOC Emissions (g/hr)	7	83		26	108	20	31	7	17	120	7	4
Dilemma Vehicles (#)	0	17		0	24	0	0	1	0	0	1	0
Queue Length 50th (ft)	7	56		33	89	0	21	8	0	92	10	0
Queue Length 95th (ft)	23	99		73	145	0	44	29	42	139	29	0
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	504	2717		532	2793	1615	501	272	320	1459	791	736
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

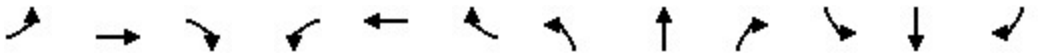
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.07	0.14		0.28	0.19	0.22	0.18	0.07	0.32	0.27	0.03	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 77			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 17.6		Intersection LOS: B	
Intersection Capacity Utilization 65.0%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 83.2			
70th %ile Actuated Cycle: 78.7			
50th %ile Actuated Cycle: 76.6			
30th %ile Actuated Cycle: 74.5			
10th %ile Actuated Cycle: 71.8			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



SATURDAY BUILD WITH IMPROVEMENTS



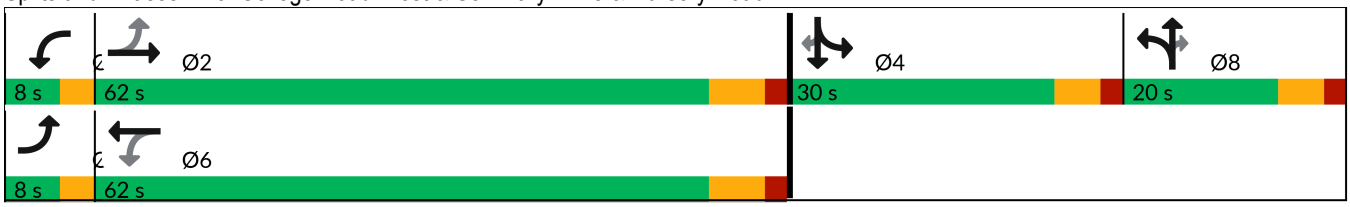
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	212	44	96	264	495	44	24	76	469	29	47
Future Volume (vph)	55	212	44	96	264	495	44	24	76	469	29	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.974				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3487	0	1752	3610	1615	3502	1900	1568	3502	1900	1615
Flt Permitted	0.576			0.581			0.950			0.950		
Satd. Flow (perm)	1094	3487	0	1072	3610	1615	3502	1900	1568	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				538			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	3%	0%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	60	230	48	104	287	538	48	26	83	510	32	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	60	278	0	104	287	538	48	26	83	510	32	51
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	38.7	30.9		38.7	30.9	75.0	5.9	5.9	5.9	15.8	15.8	15.8
Actuated g/C Ratio	0.52	0.41		0.52	0.41	1.00	0.08	0.08	0.08	0.21	0.21	0.21
v/c Ratio	0.10	0.19		0.17	0.19	0.33	0.17	0.17	0.36	0.69	0.08	0.12
Control Delay (s/veh)	10.7	15.6		11.3	17.2	0.6	37.0	38.5	8.0	33.6	25.6	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.7	15.6		11.3	17.2	0.6	37.0	38.5	8.0	33.6	25.6	0.6
LOS	B	B		B	B	A	D	D	A	C	C	A
Approach Delay (s/veh)		14.8			6.9			21.9			30.3	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		7.3	7.3	7.3	21.4	21.4	21.4
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		6.3	6.3	6.3	18.5	18.5	18.5
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		5.6	5.6	5.6	15.6	15.6	15.6
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.1	5.1	5.1	13.9	13.9	13.9
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0	0.0	10.4	10.4	10.4
10th %ile Term Code	Skip	Min		Skip	Min		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	27	143		47	164	0	41	24	7	406	24	0
Fuel Used(gal)	1	4		1	3	2	1	1	1	9	0	0
CO Emissions (g/hr)	47	247		72	243	128	70	40	45	611	34	18
NOx Emissions (g/hr)	9	48		14	47	25	14	8	9	119	7	3
VOC Emissions (g/hr)	11	57		17	56	30	16	9	10	142	8	4
Dilemma Vehicles (#)	0	13		0	13	0	0	1	0	0	1	0
Queue Length 50th (ft)	13	41		23	47	0	11	12	0	121	13	0
Queue Length 95th (ft)	36	78		57	86	0	29	38	23	174	35	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	613	2615		599	2701	1615	672	365	396	1152	625	610
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.10	0.11		0.17	0.11	0.33	0.07	0.07	0.21	0.44	0.05	0.08

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 75			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 16.3		Intersection LOS: B	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 85.7			
70th %ile Actuated Cycle: 81.8			
50th %ile Actuated Cycle: 78.2			
30th %ile Actuated Cycle: 76			
10th %ile Actuated Cycle: 53.4			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



APPENDIX E
SIGNAL WARRANT REPORT
AND
CRASH DATA SUMMARY

HCS Warrants Report

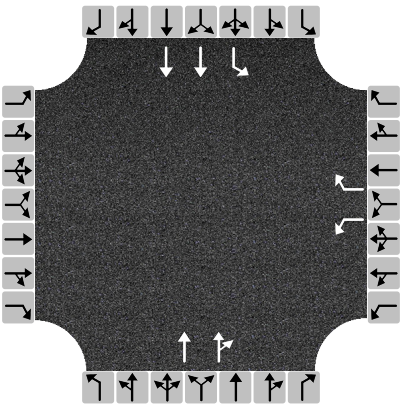
Project Information

Analyst	KAMP	Date	4/17/2025
Agency	Langan	Analysis Year	2029
Jurisdiction	College Rd E & Research Way	Time Period Analyzed	Weekday
Units	U.S. Customary	MUTCD Method	MUTCD 11 (2023)
Project Description	Projected Condition		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	7:00	Coordinated Signal System	No
Major Street Speed (mi/h)	40	Nearest Signal (ft)	0
Adequate Trials of Crash Exp. Alt.	No		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	0	0	1	0	1	0	2	0	1	2	0
Lane Usage				L		R		TR		L	T	
Vehicle Volumes Averages (veh/h)	0	0	0	29	0	85	0	198	21	60	213	0
Pedestrian median refuge available	No			No			No			No		
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay Averages (s/veh)	0.0			0.0			0.0			0.0		
Delay Averages (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)	-	Tractor-Trailer Trucks (%)	0

Volume Summary

Hours	Major Volume (veh/h)	Minor Volume (veh/h)	Total Volume (veh/h)	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (80%)	4A ** (70%)	4B ** (70%)
7:00 - 8:00	495	176	671	0	0	No	Yes	No	No	No	No	No	No	No
8:00 - 9:00	868	271	1139	0	0	Yes	Yes	No	Yes	Yes	No	No	No	No
9:00 - 10:00	544	175	719	0	0	No	Yes	No	No	No	No	No	No	No
10:00 - 11:00	273	105	378	0	0	No	No	No	No	No	No	No	No	No
11:00 - 12:00	291	89	380	0	0	No	No	No	No	No	No	No	No	No
12:00 - 13:00	449	97	546	0	0	No	No	No	No	No	No	No	No	No
13:00 - 14:00	382	112	494	0	0	No	No	No	No	No	No	No	No	No
14:00 - 15:00	381	78	459	0	0	No	No	No	No	No	No	No	No	No
15:00 - 16:00	549	64	613	0	0	No	No	No	No	No	No	No	No	No
16:00 - 17:00	806	95	901	0	0	No	No	No	Yes	No	No	No	No	No
17:00 - 18:00	882	117	999	0	0	No	No	No	Yes	No	No	No	No	No
18:00 - 19:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
Total	5920	1379	7299	0	0	1	3	0	3	1	0	0	0	0

** Warrant 4 should not be applied where the nearest traffic signal or stop-sign control is < 300 ft, unless the proposed traffic control signal will not restrict the progressive movement of traffic.

Pedestrian Volume

15th % pedestrian speed < 3.5 ft/s		Pedestrian refuge present?	NB		SB	

Hours	Major Street Vehicular Volume (veh/h)			Major Street Pedestrian Volume (ped/h)			4A ** (70%)	4B ** (70%)
	NB	SB	Total	NB	SB	Total		
7:00 - 8:00	187	308	495	0	0	0	No	No
8:00 - 9:00	338	530	868	0	0	0	No	No
9:00 - 10:00	247	297	544	0	0	0	No	No
10:00 - 11:00	109	164	273	0	0	0	No	No
11:00 - 12:00	119	172	291	0	0	0	No	No
12:00 - 13:00	185	264	449	0	0	0	No	No
13:00 - 14:00	173	209	382	0	0	0	No	No
14:00 - 15:00	178	203	381	0	0	0	No	No
15:00 - 16:00	258	291	549	0	0	0	No	No
16:00 - 17:00	426	380	806	0	0	0	No	No
17:00 - 18:00	422	460	882	0	0	0	No	No
18:00 - 19:00	0	0	0	0	0	0	No	No
Totals	2642	3278	5920	0	0	0	0	0

** Warrant 4 should not be applied where the nearest traffic signal or stop-sign control is < 300 ft, unless the proposed traffic control signal will not restrict the progressive movement of traffic.

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- more critical minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- more critical minor approach) --or--	
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 2: Four-Hour Vehicular Volume	

Four-Hour Vehicular Volume (Both major approaches --and-- more critical minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. Peak-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported Crash History --and--	
B1. Angle Crashes and Pedestrian Crashes within a 1-year Period (All Severities)	
B2. Angle Crashes and Pedestrian Crashes within a 1-year Period (Fatal-and-Injury)	
B3. Angle Crashes and Pedestrian Crashes within a 3-year Period (All Severities)	
B4. Angle Crashes and Pedestrian Crashes within a 3-year Period (Fatal-and-Injury)	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

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HCS Warrants Report

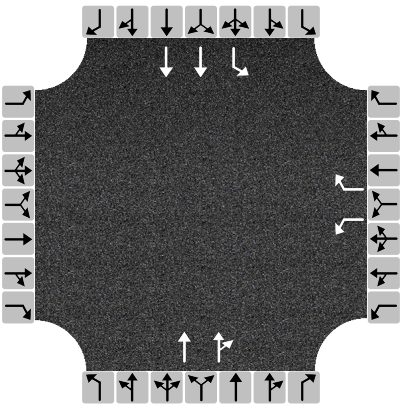
Project Information

Analyst	KAMP	Date	4/17/2025
Agency	Langan	Analysis Year	2029
Jurisdiction	College Rd E & Research Way	Time Period Analyzed	Weekday
Units	U.S. Customary	MUTCD Method	MUTCD 11 (2023)
Project Description	Build Condition		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	7:00	Coordinated Signal System	No
Major Street Speed (mi/h)	40	Nearest Signal (ft)	0
Adequate Trials of Crash Exp. Alt.	No		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	0	0	1	0	1	0	2	0	1	2	0
Lane Usage				L		R		TR		L	T	
Vehicle Volumes Averages (veh/h)	0	0	0	29	0	109	0	288	21	82	307	0
Pedestrian median refuge available	No			No			No			No		
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay Averages (s/veh)	0.0			0.0			0.0			0.0		
Delay Averages (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)	-	Tractor-Trailer Trucks (%)	0

Volume Summary

Hours	Major Volume (veh/h)	Minor Volume (veh/h)	Total Volume (veh/h)	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (80%)	4A ** (70%)	4B ** (70%)
7:00 - 8:00	654	183	837	0	0	No	Yes	No	No	No	No	No	No	No
8:00 - 9:00	1031	282	1313	0	0	Yes	Yes	Yes	Yes	Yes	No	No	No	No
9:00 - 10:00	691	194	885	0	0	No	Yes	No	No	No	No	No	No	No
10:00 - 11:00	450	132	582	0	0	No	No	No	No	No	No	No	No	No
11:00 - 12:00	514	121	635	0	0	No	No	No	No	No	No	No	No	No
12:00 - 13:00	701	134	835	0	0	No	No	No	No	No	No	No	No	No
13:00 - 14:00	623	145	768	0	0	No	No	No	No	No	No	No	No	No
14:00 - 15:00	626	108	734	0	0	No	No	No	No	No	No	No	No	No
15:00 - 16:00	808	95	903	0	0	No	No	No	Yes	No	No	No	No	No
16:00 - 17:00	1104	128	1232	0	0	No	No	Yes	Yes	No	No	No	No	No
17:00 - 18:00	1206	151	1357	0	0	No	No	Yes	Yes	Yes	No	No	No	No
18:00 - 19:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
Total	8408	1673	10081	0	0	1	3	3	4	2	0	0	0	0

** Warrant 4 should not be applied where the nearest traffic signal or stop-sign control is < 300 ft, unless the proposed traffic control signal will not restrict the progressive movement of traffic.

Pedestrian Volume

15th % pedestrian speed < 3.5 ft/s		Pedestrian refuge present?	NB		SB	

Hours	Major Street Vehicular Volume (veh/h)			Major Street Pedestrian Volume (ped/h)			4A ** (70%)	4B ** (70%)
	NB	SB	Total	NB	SB	Total		
7:00 - 8:00	235	419	654	0	0	0	No	No
8:00 - 9:00	403	628	1031	0	0	0	No	No
9:00 - 10:00	311	380	691	0	0	0	No	No
10:00 - 11:00	181	269	450	0	0	0	No	No
11:00 - 12:00	213	301	514	0	0	0	No	No
12:00 - 13:00	301	400	701	0	0	0	No	No
13:00 - 14:00	278	345	623	0	0	0	No	No
14:00 - 15:00	286	340	626	0	0	0	No	No
15:00 - 16:00	377	431	808	0	0	0	No	No
16:00 - 17:00	569	535	1104	0	0	0	No	No
17:00 - 18:00	576	630	1206	0	0	0	No	No
18:00 - 19:00	0	0	0	0	0	0	No	No
Totals	3730	4678	8408	0	0	0	0	0

** Warrant 4 should not be applied where the nearest traffic signal or stop-sign control is < 300 ft, unless the proposed traffic control signal will not restrict the progressive movement of traffic.

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- more critical minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- more critical minor approach) --or--	
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 2: Four-Hour Vehicular Volume	

Four-Hour Vehicular Volume (Both major approaches --and-- more critical minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. Peak-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported Crash History --and--	
B1. Angle Crashes and Pedestrian Crashes within a 1-year Period (All Severities)	
B2. Angle Crashes and Pedestrian Crashes within a 1-year Period (Fatal-and-Injury)	
B3. Angle Crashes and Pedestrian Crashes within a 3-year Period (All Severities)	
B4. Angle Crashes and Pedestrian Crashes within a 3-year Period (Fatal-and-Injury)	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

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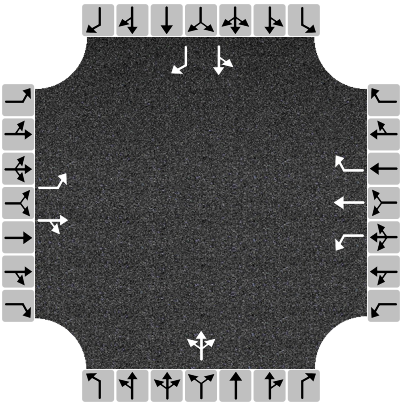
Project Information

Analyst	KAMP	Date	4/17/2025
Agency	Langan	Analysis Year	2029
Jurisdiction	Seminary Dr & Evergreen Dr / Proposed Western Dr	Time Period Analyzed	Weekday
Units	U.S. Customary	MUTCD Method	MUTCD 11 (2023)
Project Description	Build Condition		

General

Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	7:00	Coordinated Signal System	No
Major Street Speed (mi/h)	40	Nearest Signal (ft)	700
Adequate Trials of Crash Exp. Alt.	No		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	1	1	0	1	1	1	0	1	0	0	1	1
Lane Usage	L	TR		L	T	R		LTR			LT	R
Vehicle Volumes Averages (veh/h)	5	87	1	1	92	5	1	0	1	2	0	6
Pedestrian median refuge available	No			No			No			No		
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay Averages (s/veh)	0.0			0.0			0.0			0.0		
Delay Averages (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	4
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)	-	Tractor-Trailer Trucks (%)	10

Volume Summary

Hours	Major Volume (veh/h)	Minor Volume (veh/h)	Total Volume (veh/h)	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (80%)	4A (70%)	4B (70%)
7:00 - 8:00	1280	63	1356	0	0	No	No	No	No	No	No	No	No	No
8:00 - 9:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
9:00 - 10:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
10:00 - 11:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
11:00 - 12:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
12:00 - 13:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
13:00 - 14:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
14:00 - 15:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
15:00 - 16:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
16:00 - 17:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
17:00 - 18:00	1049	46	1123	0	0	No	No	No	No	No	No	No	No	No
18:00 - 19:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
Total	2329	109	2479	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Volume

15th % pedestrian speed < 3.5 ft/s		Pedestrian refuge present?	EB		WB	

Hours	Major Street Vehicular Volume (veh/h)			Major Street Pedestrian Volume (ped/h)			4A (70%)	4B (70%)
	EB	WB	Total	EB	WB	Total		
7:00 - 8:00	720	560	1280	0	0	0	No	No
8:00 - 9:00	0	0	0	0	0	0	No	No
9:00 - 10:00	0	0	0	0	0	0	No	No
10:00 - 11:00	0	0	0	0	0	0	No	No
11:00 - 12:00	0	0	0	0	0	0	No	No
12:00 - 13:00	0	0	0	0	0	0	No	No
13:00 - 14:00	0	0	0	0	0	0	No	No
14:00 - 15:00	0	0	0	0	0	0	No	No
15:00 - 16:00	0	0	0	0	0	0	No	No
16:00 - 17:00	0	0	0	0	0	0	No	No
17:00 - 18:00	417	632	1049	0	0	0	No	No
18:00 - 19:00	0	0	0	0	0	0	No	No
Totals	1137	1192	2329	0	0	0	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- more critical minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- more critical minor approach) --or--	
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 2: Four-Hour Vehicular Volume	
Four-Hour Vehicular Volume (Both major approaches --and-- more critical minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	

B. Peak-Hour Vehicular Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. Peak-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported Crash History --and--	
B1. Angle Crashes and Pedestrian Crashes within a 1-year Period (All Severities)	
B2. Angle Crashes and Pedestrian Crashes within a 1-year Period (Fatal-and-Injury)	
B3. Angle Crashes and Pedestrian Crashes within a 3-year Period (All Severities)	
B4. Angle Crashes and Pedestrian Crashes within a 3-year Period (Fatal-and-Injury)	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

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Table 1 – Crash Data Summary, NJDOT

Location	Year								Total	Total Property Damage	Total Injury	Total Fatalities	Environmental Conditions	Crash Type
	2019		2020		2021		2022							
	Total	At Intersection?	Total	At Intersection?	Total	At Intersection?	Total	At Intersection?						
Research Way and College Road East	4	Yes (1) No (3)	2	Yes (1) No (1)	-	-	2	Yes (1) No (1)	8	0	3	0	Clear (6) Rain (1) Snow (1)	MVC (4) Fixed Object (1) Animal (2) Pedalcyclist (1)
Evergreen Drive and Seminary Drive	1	No (1)	-	-	1	Yes (1)	-	-	2	0	2	0	Clear (2)	Animal (1) MVC (1)
TOTALS	**5**	**Yes (1) No (4)**	**2**	**Yes (1) No (1)**	**1**	**Yes (1)**	**2**	**Yes (1) No (1)**	**10**	**-**	**5**	**-**	**Clear (8) Rain (1) Snow (1)**	**MVC (5) Animal (3) Fixed Object (1) Pedalcyclist (1)**

Crash data obtained from NJDOT web portal

APPENDIX F
SUPPLEMENTARY ANALYSIS
BUILDINGS E1 & E2 CONCEPT

F1 – SUPPLEMENTARY ANALYSIS – BUILDINGS E1 & E2 (PLAINSBORO)

Table F1 – Intersection Capacity Analysis Summary (with Buildings E1 & E2, Plainsboro Only)

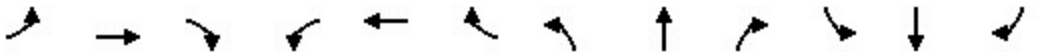
Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ GDP Mit	2029 Build with Building E1&E2 (2024 Existing Base Condition)					
				AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY
SIGNALIZED INTERSECTIONS									
U.S. Rt 1 and Ridge Rd	**Overall**	**Overall**	**Overall**	**D**	**43.8**	**D**	**38.1**	**C**	**24.2**
	EB-L	EB-L	EB-L	E	60.2	E	61.7	D	40.1
	EB-T	EB-T	EB-T	F	105.8	F	83.8	E	77.8
	EB-R	EB-R	EB-R	C	20.2	A	4.6	A	4.5
	WB-L	WB-L	WB-L	E	66.5	F	93.7	D	45.8
	WB-TR	WB-TR	WB-TR	F	94.1	F	131.1	E	68.6
	NB-TTT*	NB-TTT*	NB-TTT*	B	15.4	C	25.5	B	17.3
	SB-TTT*	SB-TTT*	SB-TTT*	D	48.5	B	16.3	B	16.1
U.S. Rt 1 and Independence Way	**Overall**	**Overall**	**Overall**	**A**	**5.7**	**A**	**9.3**	**A**	**2.2**
	EB-LL	EB-LL	EB-LL	D	43.5	E	61.8	D	46.2
	EB-TR	EB-TR	EB-TR	E	64.6	E	65.7	D	50.0
	WB-L	WB-L	WB-L	E	72.9	F	85.0	E	65.1
	WB-R	WB-R	WB-R	A	0.0	A	0.0	A	0.0
	NB-TTTR	NB-TTTR	NB-TTTR	A	4.4	A	6.9	A	2.1
	SB-TTT	SB-TTT	SB-TTT	A	5.2	A	9.0	A	1.6
U.S. Rt 1 NB Ramps and College Rd E	**Overall**	**Overall**	**Overall**	**A**	**2.3**	**A**	**3.5**	**A**	**2.2**
	EB-LL	EB-LL	EB-LL	A	0.7	A	0.9	A	0.7
	EB-TT	EB-TT	EB-TT	A	0.1	A	0.1	A	0.0
	WB-TT	WB-TT	WB-TT	A	6.4	A	7.4	A	5.8
	WB-R	WB-R	WB-R	A	0.0	A	0.1	A	0.0
	NEB-R	NEB-R	NEB-R	A	0.2	A	0.1	A	0.0
Village Blvd / Jug and College Rd W	**Overall**	**Overall**	**Overall**	**A**	**7.6**	**A**	**9.1**	**A**	**6.0**
	EB-TTR	EB-TTR	EB-TTR	A	7.4	A	8.9	A	5.8
	WB-TT	WB-TT	WB-TT	A	7.0	A	8.6	A	5.4
	NB-L	NB-L	NB-L	B	13.1	B	13.1	B	12.2
	NB-R	NB-R	NB-R	A	6.0	A	5.6	A	6.3
	SB-LTT	SB-LTT	SB-LTT	B	13.3	B	13.5	B	12.5
College Rd W and Seminary Dr and Nursey Rd	**Overall**	**Overall**	**Overall**	**B**	**17.9**	**B**	**18.3**	**B**	**16.9**
	EB-L	EB-L	EB-L	A	8.1	B	11.0	B	12.6
	EB-TTR	EB-TTR	EB-TTR	C	21.7	B	17.3	B	17.4
	WB-L	WB-L	WB-L	B	13.7	B	12.6	B	13.1
	WB-T	WB-TT	WB-TT	B	14.1	B	18.1	B	19.2
	WB-R	WB-R	WB-R	A	0.3	A	0.4	A	0.8
	NB-L	NB-LL	NB-LL	D	38.4	D	38.1	D	38.9
	NB-TR	NB-T	NB-T	D	39.0	D	37.1	D	41.4
	-	NB-R	NB-R	A	9.2	B	13.9	A	8.0
	SB-L	SB-LL	SB-LL	D	37.9	D	35.7	C	33.0
	SB-LTTR	SB-T	SB-T	C	31.5	C	26.3	C	24.8
	-	SB-R	SB-R	A	0.3	A	1.8	A	1.5
Academy St / Church St and NJ Rt 27	**Overall**	**Overall**	**Overall**	**E**	**73.1**	**D**	**47.7**	**B**	**19.2**
	EB-LT	EB-LT	EB-LT	B	11.7	C	23.6	B	13.3
	EB-R	EB-R	EB-R	A	2.9	A	2.8	A	1.7
	WB-L	WB-L	WB-L	A	4.9	B	17.5	A	5.0
	WB-TR	WB-TR	WB-TR	A	4.1	A	6.2	A	4.7
	NB-LTR	NB-LTR	NB-LTR	F	301.3	F	157.0	E	75.7
HeathcoteRd/ Laurel Ave and NJ Rt 27	**Overall**	**Overall**	**Overall**	**D**	**48.6**	**D**	**50.0**	**C**	**27.6**
	EB-LTR	EB-LTR	EB-LTR	A	7.3	A	8.5	A	8.4
	WB-LTR	WB-LTR	WB-LTR	B	15.3	B	14.9	B	16.2
	NB-LTR	NB-LTR	NB-LTR	D	39.4	D	50.5	D	36.3
	SB-LTR	SB-LTR	SB-LTR	F	134.3	F	171.6	E	72.5

Table F1 cont'd – Intersection Capacity Analysis Summary (with Buildings E1 & E2, Plainsboro Only)

Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ Imp	2029 Build with Building E1&E2 (2024 Existing Base Condition)					
				AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY
SIGNALIZED INTERSECTIONS									
Seminary Dr and Mapleton Rd/ Barclay Blvd	**Overall**	**Overall**	**-**	**C**	**21.8**	**A**	**8.4**	**A**	**7.4**
	EB-LTR	EB-LTR	-	D	41.7	C	25.8	C	25.3
	WB-LTR	WB-LTR	-	C	31.0	C	29.7	C	29.0
	NB-L	NB-L	-	A	4.4	A	3.0	A	3.0
	NB-TR	NB-TR	-	A	8.7	A	7.3	A	5.6
	SB-L	SB-L	-	A	4.1	A	3.0	A	2.8
	SB-TR	SB-TR	-	C	23.4	A	6.5	A	5.9
Crowne Plaza/ College Rd E and Scudders Mill Rd	**Overall**	**Overall**	**-**	**B**	**15.9**	**B**	**19.4**	**B**	**12.8**
	EB-L	EB-L	-	C	31.3	D	38.5	C	30.6
	EB-TT	EB-TT	-	A	9.4	B	15.8	B	11.1
	EB-R	EB-R	-	A	0.0	A	0.0	A	0.0
	WB-L	WB-L	-	C	32.0	D	37.8	C	30.5
	WB-TT	WB-TT	-	B	18.8	B	18.4	B	10.9
	WB-R	WB-R	-	A	6.0	A	4.2	A	3.2
	NB-LTR	NB-LTR	-	C	28.8	C	28.0	C	25.0
	SB-L	SB-L	-	C	32.4	D	37.3	C	31.3
	SB-LT	SB-LT	-	C	32.4	D	37.6	C	31.5
	SB-R	SB-R	-	A	5.6	A	0.7	A	0.3
PROPOSED SIGNALIZED INTERSECTIONS									
Nursery Road and Road D	-	-	**Overall**	**A**	**7.8**	**B**	**11.8**	**B**	**13.0**
	-	-	EB-L	A	8.0	A	9.0	B	11.0
	-	-	EB-TR	A	8.0	B	10.4	B	11.0
	-	-	WB-L	A	8.0	B	13.0	B	17.3
	-	-	WB-TR	B	12.1	B	13.0	B	14.9
	-	-	NB-L	A	7.7	A	10.0	B	10.3
	-	-	NB-T	B	12.2	B	15.5	B	14.9
	-	-	NB-R	A	3.7	A	4.9	A	4.4
	-	-	SB-L	A	8.0	A	9.0	A	9.0
	-	-	SB-TR	B	14.8	C	21.6	C	25.0
UNSIGNALIZED INTERSECTIONS									
College Rd E and Research Way	WB-L	-	-	C	18.8	D	26.8	B	12.7
	WB-R	-	-	B	11.3	B	10.4	A	9.3
	SB-L	-	-	A	8.3	A	9.0	A	7.9
Evergreen Dr/ Western Dr and Seminary Dr	-	EB-LT	-	A	8.8	A	9.2	A	8.2
	-	WB-LT	-	A	9.3	A	8.1	A	8.0
	-	NB-LTR	-	D	30.7	C	21.9	C	17.9
	-	SB-LT	-	E	46.6	D	29.7	C	19.3
	-	SB-R	-	B	12.6	B	13.5	B	10.6
Nursery Road and Road P	-	-	EB-LTR	A	8.5	A	8.7	A	8.8
	-	-	WB-LTR	A	9.4	B	10.7	B	12.1
	-	-	NB-LTR	A	7.3	A	7.4	A	7.4
	-	-	SB-LTR	A	7.3	A	7.4	A	7.5
ROUNDABOUT INTERSECTIONS									
Nursery Road and Road B / Road C	-	-	**Overall**	**A**	**2.7**	**A**	**2.9**	**A**	**3.0**
	-	-	EB-LTR	A	2.8	A	2.8	A	2.9
	-	-	WB-LTR	A	2.7	A	2.8	A	2.9
	-	-	NB-LTR	A	2.8	A	2.9	A	3.0
			SB-LTR	A	2.7	A	2.7	A	2.8

**Based on Synchro Software [Level of Service (Average vehicle delay [seconds per vehicle])]

* Third thru land analyzed during the AM and PM peak hours based on NJDOT congestion relief program



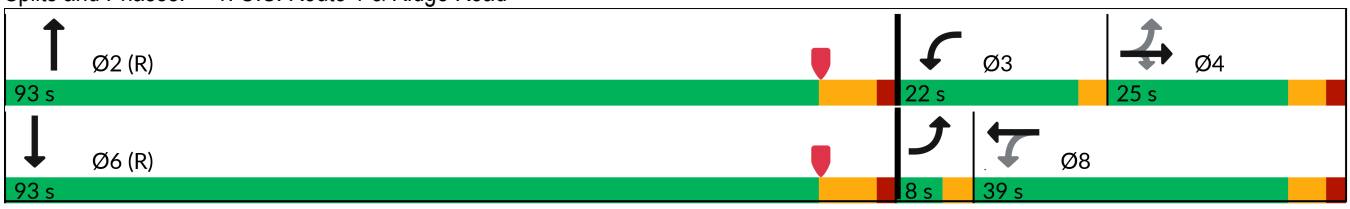
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	234	98	220	326	55	0	1813	0	0	2908	0
Future Volume (vph)	68	234	98	220	326	55	0	1813	0	0	2908	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.978							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1524	1770	1792	0	0	4975	0	0	5022	0
Flt Permitted	0.197			0.172								
Satd. Flow (perm)	367	1863	1524	320	1792	0	0	4975	0	0	5022	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		6							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	6%	2%	4%	2%	0%	7%	0%	0%	6%	0%
Adj. Flow (vph)	76	260	109	244	362	61	0	2014	0	0	3231	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	260	109	244	423	0	0	2014	0	0	3231	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

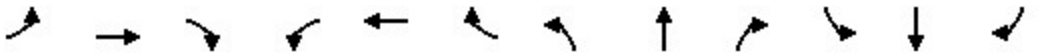
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	25.0	25.0	22.0	39.0			93.0			93.0	
Total Split (%)	5.7%	17.9%	17.9%	15.7%	27.9%			66.4%			66.4%	
Maximum Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.3	20.3	20.3	44.0	33.0			88.0			88.0	
Actuated g/C Ratio	0.20	0.15	0.15	0.31	0.24			0.63			0.63	
v/c Ratio	0.61	0.97	0.37	0.86	0.99			0.64			1.02	
Control Delay (s/veh)	60.2	105.8	20.2	66.5	94.1			15.4			48.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	60.2	105.8	20.2	66.5	94.1			15.4			48.5	
LOS	E	F	C	E	F			B			D	
Approach Delay (s/veh)		77.0			84.0			15.4			48.5	
Approach LOS		E			F			B			D	
90th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	20.2	20.2	17.8	33.0			85.0			85.0	
30th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
10th %ile Green (s)	5.0	24.2	24.2	13.8	33.0			85.0			85.0	
10th %ile Term Code	Max	Max	Max	Gap	Max			Coord			Coord	
Stops (vph)	59	197	27	166	332			853			2552	
Fuel Used(gal)	1	7	1	6	13			25			82	
CO Emissions (g/hr)	104	505	54	402	893			1773			5765	
NOx Emissions (g/hr)	20	98	10	78	174			345			1122	
VOC Emissions (g/hr)	24	117	13	93	207			411			1336	
Dilemma Vehicles (#)	0	7	0	0	12			65			99	
Queue Length 50th (ft)	50	~252	19	177	383			265			~1143	
Queue Length 95th (ft)	#110	#434	77	#301	#608			338			#1215	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	124	269	294	297	426			3127			3156	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.61	0.97	0.37	0.82	0.99			0.64			1.02	

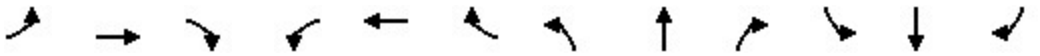
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 108 (77%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay (s/veh): 43.8		Intersection LOS: D	
Intersection Capacity Utilization 91.9%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	333	57	163	346	118	0	2437	0	0	1686	0
Future Volume (vph)	72	333	57	163	346	118	0	2437	0	0	1686	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.962							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1752	1900	1615	1787	1801	0	0	5168	0	0	5219	0
Flt Permitted	0.133			0.124								
Satd. Flow (perm)	245	1900	1615	233	1801	0	0	5168	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83		11							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	3%	0%	0%	1%	2%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	77	358	61	175	372	127	0	2620	0	0	1813	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	358	61	175	499	0	0	2620	0	0	1813	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

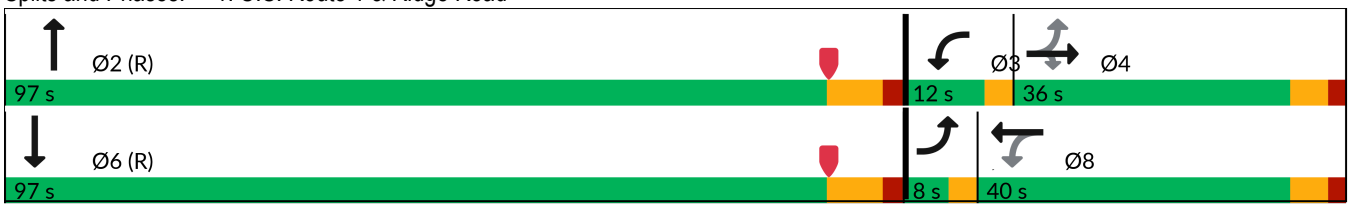


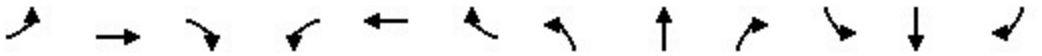
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	12.0	40.0			97.0			97.0	
Total Split (%)	5.5%	24.8%	24.8%	8.3%	27.6%			66.9%			66.9%	
Maximum Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	38.5	30.0	30.0	46.4	34.9			90.6			90.6	
Actuated g/C Ratio	0.27	0.21	0.21	0.32	0.24			0.62			0.62	
v/c Ratio	0.63	0.91	0.15	0.94	1.13			0.81			0.56	
Control Delay (s/veh)	61.7	83.8	4.6	93.7	131.1			25.5			16.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	61.7	83.8	4.6	93.7	131.1			25.5			16.3	
LOS	E	F	A	F	F			C			B	
Approach Delay (s/veh)		70.7			121.4			25.5			16.3	
Approach LOS		E			F			C			B	
90th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	6.4	30.0	30.0	10.4	34.0			87.6			87.6	
30th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
10th %ile Green (s)	6.1	30.0	30.0	14.8	38.7			83.2			83.2	
10th %ile Term Code	Gap	Hold	Hold	Max	Max			Coord			Coord	
Stops (vph)	55	302	4	102	374			1963			922	
Fuel Used(gal)	2	9	0	5	19			54			26	
CO Emissions (g/hr)	106	630	11	338	1300			3794			1845	
NOx Emissions (g/hr)	21	122	2	66	253			738			359	
VOC Emissions (g/hr)	25	146	2	78	301			879			428	
Dilemma Vehicles (#)	0	10	0	0	13			101			58	
Queue Length 50th (ft)	53	336	0	~135	~543			824			332	
Queue Length 95th (ft)	#113	#532	17	#282	#766			326			371	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	122	393	399	186	442			3279			3311	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.63	0.91	0.15	0.94	1.13			0.80			0.55	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 16 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay (s/veh): 38.1		Intersection LOS: D	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





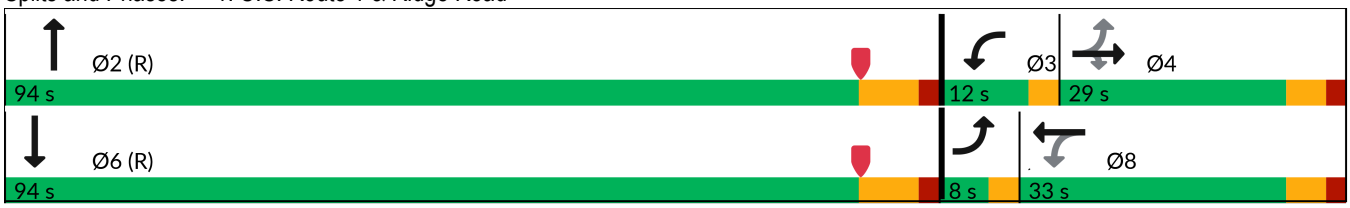
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	221	57	109	174	102	0	1824	0	0	1690	0
Future Volume (vph)	49	221	57	109	174	102	0	1824	0	0	1690	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1805	1881	1553	1787	1778	0	0	3597	0	0	3632	0
Flt Permitted	0.301			0.266								
Satd. Flow (perm)	572	1881	1553	500	1778	0	0	3597	0	0	3632	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	1%	4%	1%	1%	1%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	50	226	58	111	178	104	0	1861	0	0	1724	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	226	58	111	282	0	0	1861	0	0	1724	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

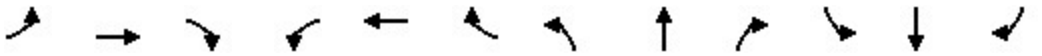
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	29.0	29.0	12.0	33.0			94.0			94.0	
Total Split (%)	5.9%	21.5%	21.5%	8.9%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	29.2	19.9	19.9	35.6	25.0			91.3			91.3	
Actuated g/C Ratio	0.22	0.15	0.15	0.26	0.19			0.68			0.68	
v/c Ratio	0.28	0.82	0.19	0.50	0.82			0.76			0.70	
Control Delay (s/veh)	40.1	77.8	4.5	45.8	68.6			16.4			16.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	40.1	77.8	4.5	45.8	68.6			16.4			16.1	
LOS	D	E	A	D	E			B			B	
Approach Delay (s/veh)		59.4			62.2			16.4			16.1	
Approach LOS		E			E			B			B	
90th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	8.1	23.5	23.5	12.8	28.2			81.7			81.7	
70th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
50th %ile Green (s)	7.2	21.2	21.2	10.9	24.9			85.9			85.9	
50th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
30th %ile Green (s)	6.2	18.5	18.5	9.1	21.4			90.4			90.4	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	13.5	13.5	6.8	23.3			97.7			97.7	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	37	209	3	83	241			1191			1014	
Fuel Used(gal)	1	6	0	2	8			32			28	
CO Emissions (g/hr)	57	405	10	168	548			2242			1962	
NOx Emissions (g/hr)	11	79	2	33	107			436			382	
VOC Emissions (g/hr)	13	94	2	39	127			520			455	
Dilemma Vehicles (#)	0	7	0	0	9			68			63	
Queue Length 50th (ft)	32	191	0	75	223			566			481	
Queue Length 95th (ft)	66	281	16	130	#338			662			563	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	181	321	339	228	373			2457			2481	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.28	0.70	0.17	0.49	0.76			0.76			0.69	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 23.8		Intersection LOS: C	
Intersection Capacity Utilization 81.2%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	57	0	10	0	3	0	2050	101	0	3180	0
Future Volume (vph)	11	57	0	10	0	3	0	2050	101	0	3180	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.993				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1626	0	1615	0	4912	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						132		18				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	11%	0%	0%	0%	8%	0%	0%	5%	0%
Adj. Flow (vph)	12	64	0	11	0	3	0	2303	113	0	3573	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	64	0	11	0	3	0	2416	0	0	3573	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	

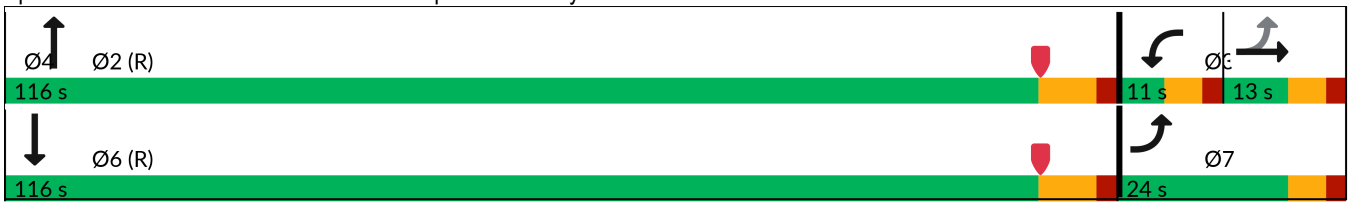
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				116.0			116.0	
Total Split (%)	17.1%	9.3%		7.9%				82.9%			82.9%	
Maximum Green (s)	18.0	7.0		5.0				108.0			108.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	11.7	7.7		5.1		140.0		120.5			120.5	
Actuated g/C Ratio	0.08	0.06		0.04		1.00		0.86			0.86	
v/c Ratio	0.04	0.62		0.19		0.00		0.57			0.82	
Control Delay (s/veh)	43.5	64.6		72.9		0.0		4.4			5.2	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	43.5	64.6		72.9		0.0		4.4			5.2	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		61.3			57.3			4.4			5.2	
Approach LOS		E			E			A			A	
90th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	0.0	9.5		0.0				116.5			116.5	
50th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
30th %ile Green (s)	0.0	8.0		0.0				118.0			118.0	
30th %ile Term Code	Skip	Gap		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				132.0			132.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	11	50		11		0		570			582	
Fuel Used(gal)	0	1		0		0		27			25	
CO Emissions (g/hr)	15	90		20		1		1877			1782	
NOx Emissions (g/hr)	3	18		4		0		365			347	
VOC Emissions (g/hr)	3	21		5		0		435			413	
Dilemma Vehicles (#)	0	1		0		0		64			70	
Queue Length 50th (ft)	5	53		10		0		173			197	
Queue Length 95th (ft)	m5	m60		32		0		299			m100	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	450	104		59		1615		4230			4363	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03	0.62		0.19		0.00		0.57			0.82	

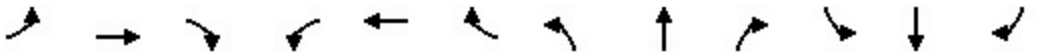
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 74.9%		ICU Level of Service D	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	9	0	87	0	38	0	2798	10	0	2123	0
Future Volume (vph)	12	9	0	87	0	38	0	2798	10	0	2123	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5214	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	13	9	0	91	0	40	0	2915	10	0	2211	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	9	0	91	0	40	0	2925	0	0	2211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



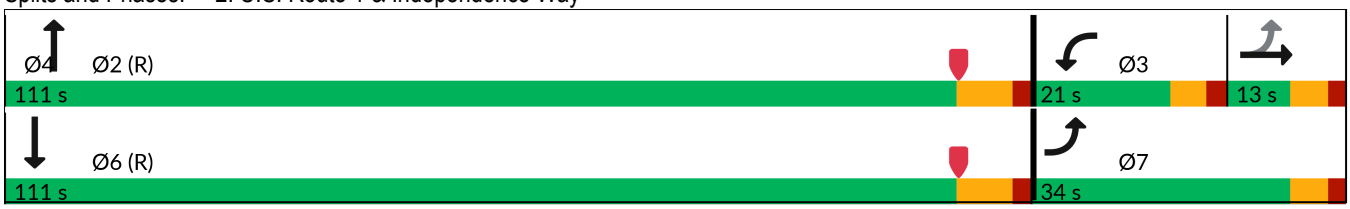
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	34.0	13.0		21.0				111.0			111.0	
Total Split (%)	23.4%	9.0%		14.5%				76.6%			76.6%	
Maximum Green (s)	28.0	7.0		15.0				103.0			103.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	11.3	7.0		11.4		145.0		120.0			120.0	
Actuated g/C Ratio	0.08	0.05		0.08		1.00		0.83			0.83	
v/c Ratio	0.05	0.10		0.65		0.02		0.68			0.51	
Control Delay (s/veh)	61.8	65.7		85.0		0.0		6.9			9.0	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	61.8	65.7		85.0		0.0		6.9			9.0	
LOS	E	E		F		A		A			A	
Approach Delay (s/veh)		63.4			59.0			6.9			9.0	
Approach LOS		E			E			A			A	
90th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	13.6	0.0		13.6				117.4			117.4	
70th %ile Term Code	Hold	Skip		Gap				Coord			Coord	
50th %ile Green (s)	0.0	0.0		11.7				119.3			119.3	
50th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
30th %ile Green (s)	0.0	0.0		9.7				121.3			121.3	
30th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
10th %ile Green (s)	0.0	0.0		6.8				124.2			124.2	
10th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
Stops (vph)	13	9		84		0		1050			1026	
Fuel Used(gal)	0	0		3		0		42			30	
CO Emissions (g/hr)	20	15		183		15		2947			2131	
NOx Emissions (g/hr)	4	3		36		3		573			415	
VOC Emissions (g/hr)	5	3		42		3		683			494	
Dilemma Vehicles (#)	0	1		0		0		97			83	
Queue Length 50th (ft)	6	7		85		0		283			515	
Queue Length 95th (ft)	m9	m17		143		0		608			268	
Internal Link Dist (ft)		319			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	676	91		186		1615		4316			4320	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.02	0.10		0.49		0.02		0.68			0.51	

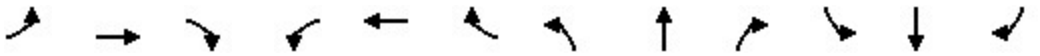
Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 9.3		Intersection LOS: A	
Intersection Capacity Utilization 71.9%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1	0	7	0	1	0	1908	6	0	1785	0
Future Volume (vph)	16	1	0	7	0	1	0	1908	6	0	1785	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3273	1900	0	1805	0	1615	0	5169	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137		1				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	7%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	0%
Adj. Flow (vph)	16	1	0	7	0	1	0	1967	6	0	1840	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	1	0	7	0	1	0	1973	0	0	1840	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



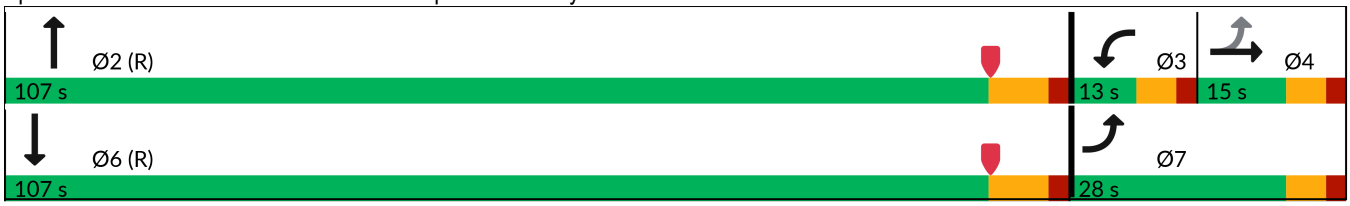
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	8.3	7.0		5.4		135.0		125.3			125.3	
Actuated g/C Ratio	0.06	0.05		0.04		1.00		0.93			0.93	
v/c Ratio	0.08	0.01		0.10		0.00		0.41			0.38	
Control Delay (s/veh)	46.3	50.0		65.1		0.0		2.1			1.6	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	46.3	50.0		65.1		0.0		2.1			1.6	
LOS	D	D		E		A		A			A	
Approach Delay (s/veh)		46.5			57.0			2.1			1.6	
Approach LOS		D			E			A			A	
90th %ile Green (s)	19.3	7.0		6.3				101.7			101.7	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
50th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	16	2		9		0		236			164	
Fuel Used(gal)	0	0		0		0		18			10	
CO Emissions (g/hr)	22	2		14		0		1255			699	
NOx Emissions (g/hr)	4	0		3		0		244			136	
VOC Emissions (g/hr)	5	0		3		0		291			162	
Dilemma Vehicles (#)	0	0		0		0		31			36	
Queue Length 50th (ft)	7	1		6		0		0			0	
Queue Length 95th (ft)	m9	m1		23		0		221			143	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	533	126		93		1615		4799			4845	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.03	0.01		0.08		0.00		0.41			0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 52.1%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	191	462	0	0	463	61	0	0	191	0	0	0
Future Volume (vph)	191	462	0	0	463	61	0	0	191	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3433	3539	0	0	3505	1583	0	0	1611	0	0	0
Flt Permitted	0.350											
Satd. Flow (perm)	1265	3539	0	0	3505	1583	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			624			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	0%	0%	3%	2%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	208	502	0	0	503	66	0	0	208	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	502	0	0	503	66	0	0	208	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	



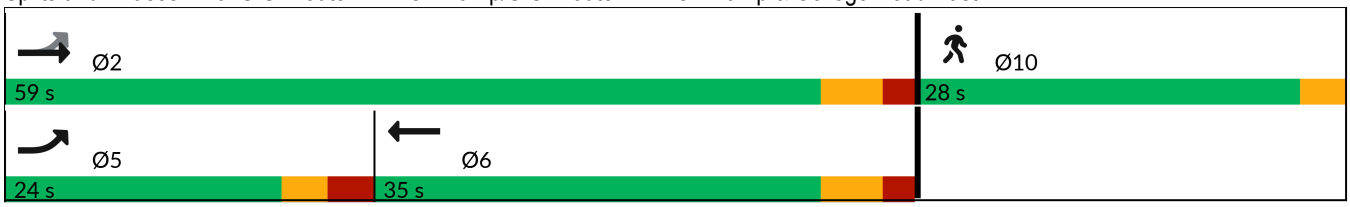
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.9	36.9			17.9	36.9			36.9			
Actuated g/C Ratio	0.84	1.00			0.49	1.00			1.00			
v/c Ratio	0.14	0.14			0.30	0.04			0.13			
Control Delay (s/veh)	0.7	0.1			6.4	0.0			0.2			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.7	0.1			6.4	0.0			0.2			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.3			5.7			0.2				
Approach LOS		A			A			A				
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	34.6			21.6							
10th %ile Term Code	Min	Dwell			Dwell							
Stops (vph)	20	0			246	0			0			
Fuel Used(gal)	1	1			16	2			2			
CO Emissions (g/hr)	49	80			1089	116			122			
NOx Emissions (g/hr)	9	16			212	23			24			
VOC Emissions (g/hr)	11	19			252	27			28			
Dilemma Vehicles (#)	0	0			50	0			0			
Queue Length 50th (ft)	0	0			27	0			0			
Queue Length 95th (ft)	0	0			46	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2118	3539			2759	1583			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.10	0.14			0.18	0.04			0.13			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.9			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 2.3		Intersection LOS: A	
Intersection Capacity Utilization 40.3%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 40.6			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	252	361	0	0	651	105	0	0	71	0	0	0
Future Volume (vph)	252	361	0	0	651	105	0	0	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.285											
Satd. Flow (perm)	1051	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			693			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.89	0.89	0.93	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	271	388	0	0	700	113	0	0	76	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	271	388	0	0	700	113	0	0	76	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

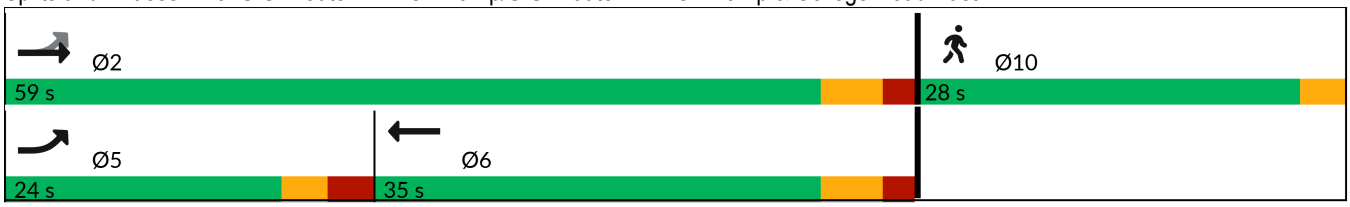
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.3	36.3			17.0	36.3			36.3			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.20	0.11			0.41	0.07			0.05			
Control Delay (s/veh)	0.9	0.1			7.4	0.1			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.9	0.1			7.4	0.1			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			6.4			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	8.4	31.4			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.1	30.1			17.0							
70th %ile Term Code	Gap	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	25	0			378	0			0			
Fuel Used(gal)	1	1			22	3			1			
CO Emissions (g/hr)	64	62			1562	199			45			
NOx Emissions (g/hr)	12	12			304	39			9			
VOC Emissions (g/hr)	15	14			362	46			10			
Dilemma Vehicles (#)	0	0			68	0			0			
Queue Length 50th (ft)	0	0			41	0			0			
Queue Length 95th (ft)	0	0			73	0			0			
Internal Link Dist (ft)		282			478			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2093	3574			2885	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.13	0.11			0.24	0.07			0.05			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.3			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay (s/veh): 3.5		Intersection LOS: A	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 37.4			
70th %ile Actuated Cycle: 36.1			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	236	254	0	0	283	10	0	0	63	0	0	0
Future Volume (vph)	236	254	0	0	283	10	0	0	63	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3574	0	0	3574	1455	0	0	1611	0	0	0
Flt Permitted	0.420											
Satd. Flow (perm)	1548	3574	0	0	3574	1455	0	0	1611	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			783			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	11%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	251	270	0	0	301	11	0	0	67	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	251	270	0	0	301	11	0	0	67	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

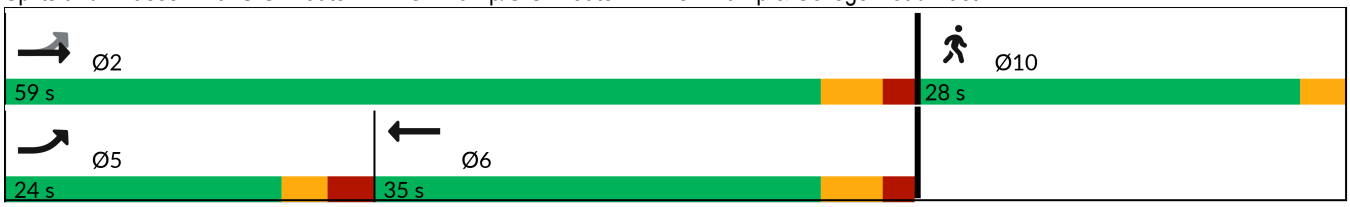
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.0	36.0			17.0	36.0			36.0			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.15	0.08			0.18	0.01			0.04			
Control Delay (s/veh)	0.7	0.0			5.8	0.0			0.0			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.7	0.0			5.8	0.0			0.0			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			5.6							
Approach LOS		A			A							
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	24	0			140	0			0			
Fuel Used(gal)	1	1			9	0			1			
CO Emissions (g/hr)	59	44			656	19			40			
NOx Emissions (g/hr)	12	9			128	4			8			
VOC Emissions (g/hr)	14	10			152	4			9			
Dilemma Vehicles (#)	0	0			30	0			0			
Queue Length 50th (ft)	0	0			15	0			0			
Queue Length 95th (ft)	0	0			28	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2267	3574			2879	1455			1611			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.11	0.08			0.10	0.01			0.04			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.18			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 33.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

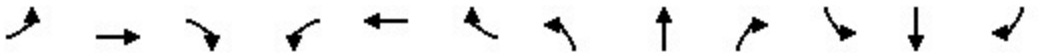
Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	894	12	0	807	0	15	0	90	1	131	0
Future Volume (vph)	0	894	12	0	807	0	15	0	90	1	131	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950					
Satd. Flow (prot)	0	3533	0	0	3539	0	1805	0	1568	0	3506	0
Flt Permitted							0.690					
Satd. Flow (perm)	0	3533	0	0	3539	0	1311	0	1568	0	3506	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2							98			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	3%	0%	3%	0%
Adj. Flow (vph)	0	972	13	0	877	0	16	0	98	1	142	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	985	0	0	877	0	16	0	98	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

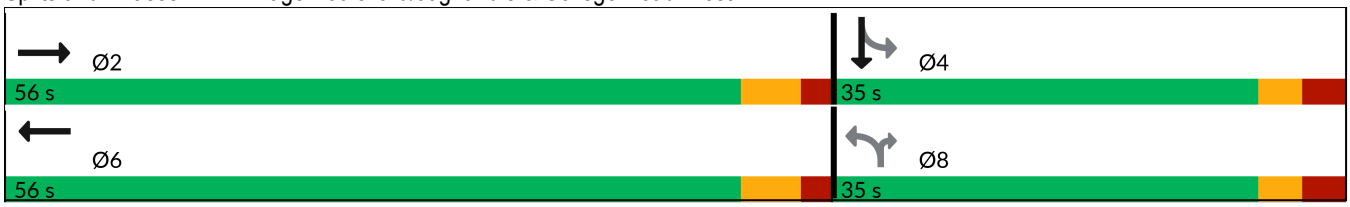


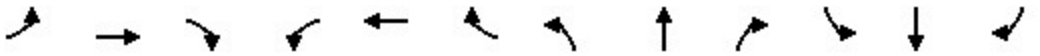
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		20.5			20.5		7.2		7.2		7.2	
Actuated g/C Ratio		0.57			0.57		0.20		0.20		0.20	
v/c Ratio		0.49			0.43		0.06		0.25		0.20	
Control Delay (s/veh)		7.4			7.0		13.1		6.0		13.3	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		7.4			7.0		13.1		6.0		13.3	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		7.4			7.0			7.0			13.3	
Approach LOS		A			A			A			B	
90th %ile Green (s)		20.2			20.2		7.8		7.8	7.8	7.8	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		16.5			16.5		7.0		7.0	7.0	7.0	
70th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		526			451		16		24		107	
Fuel Used(gal)		9			7		0		1		1	
CO Emissions (g/hr)		607			490		13		41		81	
NOx Emissions (g/hr)		118			95		3		8		16	
VOC Emissions (g/hr)		141			113		3		10		19	
Dilemma Vehicles (#)		84			75		0		0		0	
Queue Length 50th (ft)		64			55		2		0		12	
Queue Length 95th (ft)		107			92		14		26		34	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3533			3539		1062		1289		2842	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.28			0.25		0.02		0.08		0.05	

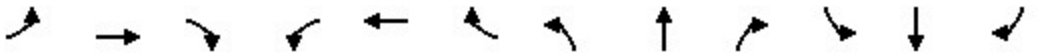
Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 35.9			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 7.6		Intersection LOS: A	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 40			
70th %ile Actuated Cycle: 35.5			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	867	16	0	841	0	18	0	114	6	220	0
Future Volume (vph)	0	867	16	0	841	0	18	0	114	6	220	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3564	0	0	3574	0	1703	0	1583	0	3572	0
Flt Permitted							0.607				0.999	
Satd. Flow (perm)	0	3564	0	0	3574	0	1088	0	1583	0	3572	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							118			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	6%	0%	2%	0%	1%	0%
Adj. Flow (vph)	0	894	16	0	867	0	19	0	118	6	227	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	910	0	0	867	0	19	0	118	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

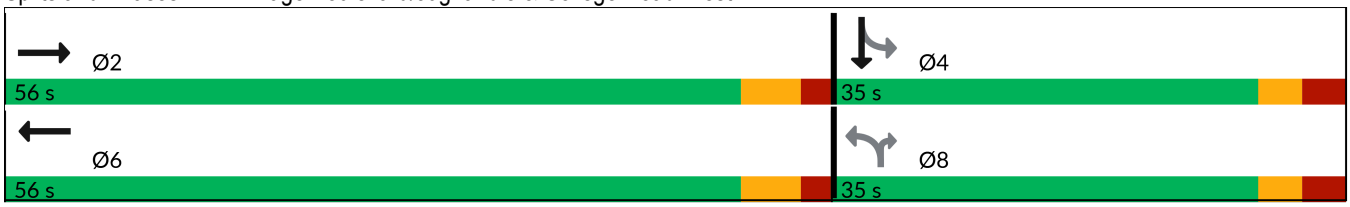


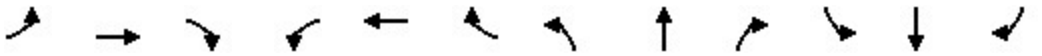
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		16.2			16.2		7.6		7.6		7.6	
Actuated g/C Ratio		0.45			0.45		0.21		0.21		0.21	
v/c Ratio		0.56			0.54		0.08		0.28		0.31	
Control Delay (s/veh)		8.9			8.6		13.1		5.6		13.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		8.9			8.6		13.1		5.6		13.5	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		8.9			8.6			6.6			13.5	
Approach LOS		A			A			A			B	
90th %ile Green (s)		19.9			19.9		9.2		9.2	9.2	9.2	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		16.1			16.1		7.7		7.7	7.7	7.7	
70th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Min		Min	Min	Min	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		567			532		19		27		177	
Fuel Used(gal)		9			8		0		1		2	
CO Emissions (g/hr)		647			572		16		50		137	
NOx Emissions (g/hr)		126			111		3		10		27	
VOC Emissions (g/hr)		150			133		4		12		32	
Dilemma Vehicles (#)		93			88		0		0		0	
Queue Length 50th (ft)		57			54		3		0		19	
Queue Length 95th (ft)		105			98		15		28		46	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3564			3574		886		1311		2910	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.26			0.24		0.02		0.09		0.08	

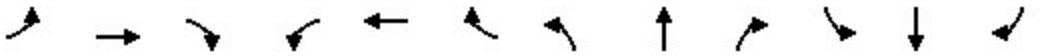
Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 35.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 9.1		Intersection LOS: A	
Intersection Capacity Utilization 52.8%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 41.1			
70th %ile Actuated Cycle: 35.8			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	857	12	0	725	0	6	0	42	2	74	0
Future Volume (vph)	0	857	12	0	725	0	6	0	42	2	74	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3568	0	0	3574	0	1805	0	1615	0	3606	0
Flt Permitted							0.952				0.999	
Satd. Flow (perm)	0	3568	0	0	3574	0	1809	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2							47			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	963	13	0	815	0	7	0	47	2	83	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	976	0	0	815	0	7	0	47	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

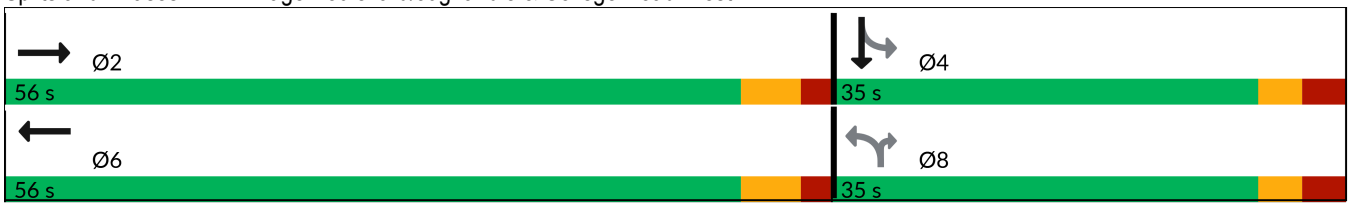


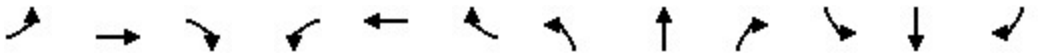
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		24.2			24.2		7.0		7.0		7.0	
Actuated g/C Ratio		0.68			0.68		0.20		0.20		0.20	
v/c Ratio		0.40			0.34		0.02		0.13		0.12	
Control Delay (s/veh)		5.8			5.4		12.2		6.3		12.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		5.8			5.4		12.2		6.3		12.5	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		5.8			5.4			7.0			12.5	
Approach LOS		A			A			A			B	
90th %ile Green (s)		18.9			18.9		7.0		7.0	7.0	7.0	
90th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
70th %ile Green (s)		15.8			15.8		7.0		7.0	7.0	7.0	
70th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
30th %ile Green (s)		29.6			29.6		0.0		0.0	0.0	0.0	
30th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
10th %ile Green (s)		30.0			30.0		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		415			326		9		16		61	
Fuel Used(gal)		7			5		0		0		1	
CO Emissions (g/hr)		501			369		6		21		46	
NOx Emissions (g/hr)		97			72		1		4		9	
VOC Emissions (g/hr)		116			86		1		5		11	
Dilemma Vehicles (#)		66			56		0		0		0	
Queue Length 50th (ft)		63			50		1		0		6	
Queue Length 95th (ft)		97			77		8		17		20	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3568			3574		1473		1323		2936	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.27			0.23		0.00		0.04		0.03	

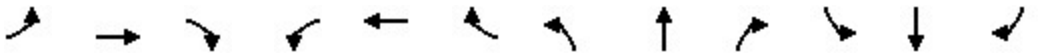
Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 35.7			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 6.0		Intersection LOS: A	
Intersection Capacity Utilization 50.7%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 37.9			
70th %ile Actuated Cycle: 34.8			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 35.6			
10th %ile Actuated Cycle: 36			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	584	98	235	513	268	38	17	72	253	11	14
Future Volume (vph)	37	584	98	235	513	268	38	17	72	253	11	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.978				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3496	0	1787	3539	1615	3273	1900	1495	3502	1900	1615
Flt Permitted	0.421			0.237			0.950			0.950		
Satd. Flow (perm)	800	3496	0	446	3539	1615	3273	1900	1495	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				319			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	7%	0%	8%	0%	0%	0%
Adj. Flow (vph)	44	695	117	280	611	319	45	20	86	301	13	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	812	0	280	611	319	45	20	86	301	13	17
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

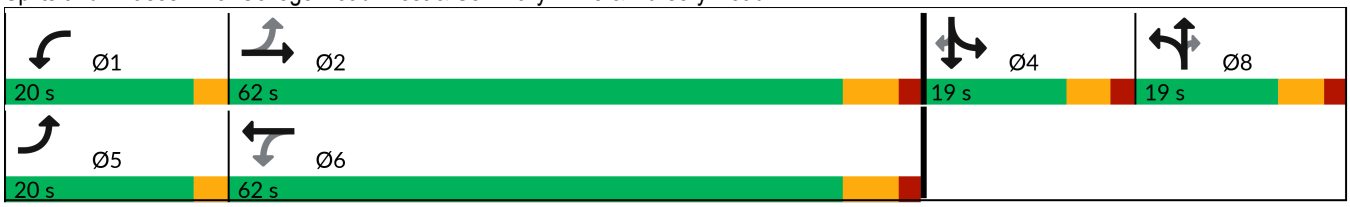


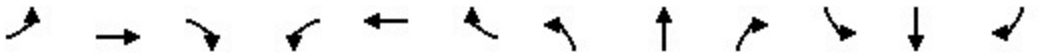
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	40.3	30.7		48.3	39.3	77.6	5.8	5.8	5.8	11.1	11.1	11.1
Actuated g/C Ratio	0.52	0.40		0.62	0.51	1.00	0.07	0.07	0.07	0.14	0.14	0.14
v/c Ratio	0.09	0.58		0.61	0.34	0.20	0.19	0.14	0.39	0.60	0.05	0.05
Control Delay (s/veh)	8.1	21.7		13.7	14.1	0.3	38.4	39.0	9.2	37.9	31.5	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.1	21.7		13.7	14.1	0.3	38.4	39.0	9.2	37.9	31.5	0.3
LOS	A	C		B	B	A	D	D	A	D	C	A
Approach Delay (s/veh)		21.0			10.4			21.8			35.7	
Approach LOS		C			B			C			D	
90th %ile Green (s)	6.6	30.9		14.6	38.9		7.0	7.0	7.0	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Gap	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.8	30.0		12.2	36.4		6.1	6.1	6.1	13.0	13.0	13.0
70th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Max	Max	Max
50th %ile Green (s)	5.3	30.0		10.8	35.5		5.6	5.6	5.6	11.7	11.7	11.7
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		9.4	42.4		5.1	5.1	5.1	10.3	10.3	10.3
30th %ile Term Code	Skip	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		6.4	39.4		0.0	0.0	0.0	7.9	7.9	7.9
10th %ile Term Code	Skip	Min		Gap	Hold		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	19	503		101	295	0	35	18	7	224	11	0
Fuel Used(gal)	0	11		2	6	1	1	0	1	5	0	0
CO Emissions (g/hr)	31	801		174	435	68	61	29	44	348	15	5
NOx Emissions (g/hr)	6	156		34	85	13	12	6	9	68	3	1
VOC Emissions (g/hr)	7	186		40	101	16	14	7	10	81	3	1
Dilemma Vehicles (#)	0	33		0	25	0	0	1	0	0	1	0
Queue Length 50th (ft)	8	165		60	103	0	11	10	0	73	6	0
Queue Length 95th (ft)	20	230		96	141	0	26	30	20	112	21	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	720	2525		576	2550	1615	557	323	352	596	323	372
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.06	0.32		0.49	0.24	0.20	0.08	0.06	0.24	0.51	0.04	0.05

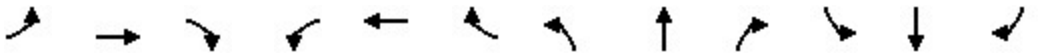
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 77.6			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 66.1%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 87.5			
70th %ile Actuated Cycle: 83.3			
50th %ile Actuated Cycle: 80.1			
30th %ile Actuated Cycle: 76.8			
10th %ile Actuated Cycle: 60.3			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	294	60	145	501	419	86	21	100	471	30	56
Future Volume (vph)	45	294	60	145	501	419	86	21	100	471	30	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.975				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3473	0	1736	3574	1615	3502	1900	1583	3502	1900	1615
Flt Permitted	0.461			0.501			0.950			0.950		
Satd. Flow (perm)	876	3473	0	915	3574	1615	3502	1900	1583	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				432			109			109
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	3%	4%	1%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	46	303	62	149	516	432	89	22	103	486	31	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	365	0	149	516	432	89	22	103	486	31	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

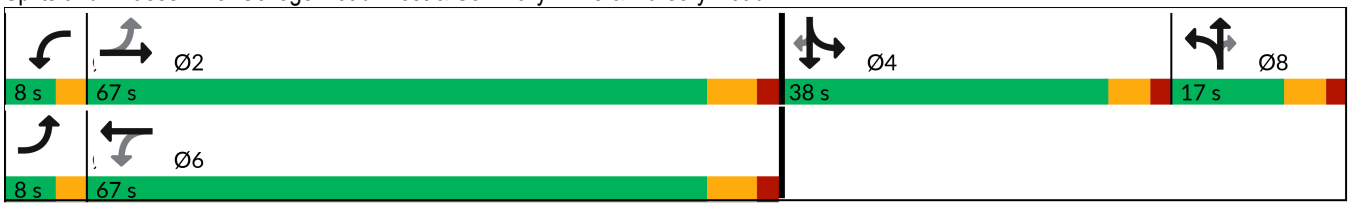


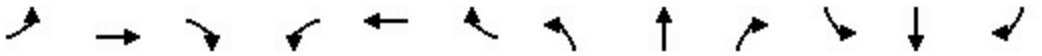
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.1	30.1		40.4	33.5	79.4	6.6	6.6	6.6	15.7	15.7	15.7
Actuated g/C Ratio	0.49	0.38		0.51	0.42	1.00	0.08	0.08	0.08	0.20	0.20	0.20
v/c Ratio	0.09	0.27		0.29	0.34	0.27	0.31	0.14	0.45	0.70	0.08	0.14
Control Delay (s/veh)	11.0	17.3		12.6	18.1	0.4	38.1	37.1	13.9	35.7	26.3	1.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.0	17.3		12.6	18.1	0.4	38.1	37.1	13.9	35.7	26.3	1.8
LOS	B	B		B	B	A	D	D	B	D	C	A
Approach Delay (s/veh)		16.6			10.4			26.3			31.8	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.4	8.4	8.4	20.8	20.8	20.8
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.3	7.3	7.3	18.1	18.1	18.1
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.5	6.5	6.5	15.3	15.3	15.3
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		5.0	38.0		5.9	5.9	5.9	13.6	13.6	13.6
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.0	5.0	5.0	11.3	11.3	11.3
10th %ile Term Code	Skip	Min		Max	Hold		Min	Min	Min	Gap	Gap	Gap
Stops (vph)	23	217		75	329	0	76	22	19	419	26	2
Fuel Used(gal)	1	5		2	7	2	2	0	1	9	1	0
CO Emissions (g/hr)	39	364		114	480	108	134	35	74	634	36	23
NOx Emissions (g/hr)	8	71		22	93	21	26	7	14	123	7	5
VOC Emissions (g/hr)	9	84		26	111	25	31	8	17	147	8	5
Dilemma Vehicles (#)	0	17		0	24	0	0	1	0	0	1	0
Queue Length 50th (ft)	10	58		35	93	0	21	10	0	115	13	0
Queue Length 95th (ft)	30	104		77	152	0	45	34	43	169	35	7
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	490	2637		517	2708	1615	486	264	313	1415	767	717
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.09	0.14		0.29	0.19	0.27	0.18	0.08	0.33	0.34	0.04	0.08

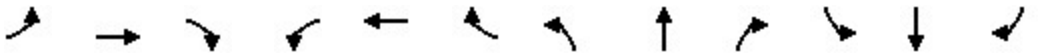
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 79.4			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 86.2			
70th %ile Actuated Cycle: 82.4			
50th %ile Actuated Cycle: 78.8			
30th %ile Actuated Cycle: 76.5			
10th %ile Actuated Cycle: 73.3			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	211	43	94	261	612	44	30	76	575	36	60
Future Volume (vph)	69	211	43	94	261	612	44	30	76	575	36	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.974				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3487	0	1752	3610	1615	3502	1900	1568	3502	1900	1615
Flt Permitted	0.578			0.582			0.950			0.950		
Satd. Flow (perm)	1098	3487	0	1074	3610	1615	3502	1900	1568	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				665			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	3%	0%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	75	229	47	102	284	665	48	33	83	625	39	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	75	276	0	102	284	665	48	33	83	625	39	65
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

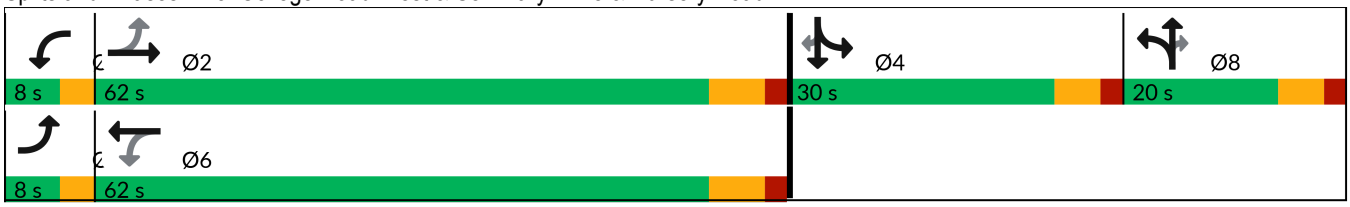


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	38.7	30.8		38.7	30.8	79.3	6.2	6.2	6.2	19.9	19.9	19.9
Actuated g/C Ratio	0.49	0.39		0.49	0.39	1.00	0.08	0.08	0.08	0.25	0.25	0.25
v/c Ratio	0.13	0.20		0.18	0.20	0.41	0.18	0.22	0.36	0.71	0.08	0.13
Control Delay (s/veh)	12.6	17.4		13.1	19.2	0.8	38.9	41.4	8.0	33.0	24.8	1.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.6	17.4		13.1	19.2	0.8	38.9	41.4	8.0	33.0	24.8	1.5
LOS	B	B		B	B	A	D	D	A	C	C	A
Approach Delay (s/veh)		16.4			7.0			23.8			29.8	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		7.8	7.8	7.8	24.0	24.0	24.0
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.0	30.0		5.0	30.0		6.7	6.7	6.7	23.2	23.2	23.2
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		5.9	5.9	5.9	21.1	21.1	21.1
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.2	5.2	5.2	17.9	17.9	17.9
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0	0.0	13.6	13.6	13.6
10th %ile Term Code	Skip	Min		Skip	Min		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	35	148		48	168	0	41	30	6	495	29	2
Fuel Used(gal)	1	4		1	4	2	1	1	1	11	1	0
CO Emissions (g/hr)	61	256		74	252	160	71	51	44	743	41	25
NOx Emissions (g/hr)	12	50		14	49	31	14	10	9	145	8	5
VOC Emissions (g/hr)	14	59		17	58	37	16	12	10	172	10	6
Dilemma Vehicles (#)	0	12		0	12	0	0	1	0	0	2	0
Queue Length 50th (ft)	20	46		27	54	0	12	17	0	155	16	0
Queue Length 95th (ft)	46	82		59	90	0	30	46	23	217	40	7
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	581	2494		568	2573	1615	635	344	381	1089	591	583
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.13	0.11		0.18	0.11	0.41	0.08	0.10	0.22	0.57	0.07	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 79.3			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 16.9		Intersection LOS: B	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 88.8			
70th %ile Actuated Cycle: 86.9			
50th %ile Actuated Cycle: 84			
30th %ile Actuated Cycle: 80.1			
10th %ile Actuated Cycle: 56.6			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	311	686	317	441	5	302	160	67	0	0	0
Future Volume (vph)	14	311	686	317	441	5	302	160	67	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.983				
Flt Protected		0.998		0.950				0.972				
Satd. Flow (prot)	0	1841	1641	1834	1837	0	0	1796	0	0	0	0
Flt Permitted		0.973		0.479				0.972				
Satd. Flow (perm)	0	1794	1641	925	1837	0	0	1796	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			771		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	6%	1%	1%	6%	0%	0%	1%	6%	0%	0%	0%
Adj. Flow (vph)	16	349	771	356	496	6	339	180	75	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	365	771	356	502	0	0	594	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.34	0.60	0.50	0.38			1.58				
Control Delay (s/veh)		11.7	2.9	4.9	4.1			301.3				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		11.7	2.9	4.9	4.1			301.3				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		5.7			4.5			301.3				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		159	36	72	113			390				
Fuel Used(gal)		3	3	2	3			58				
CO Emissions (g/hr)		221	223	153	213			4042				
NOx Emissions (g/hr)		43	43	30	41			786				
VOC Emissions (g/hr)		51	52	35	49			937				
Dilemma Vehicles (#)		16	0	0	0			0				
Queue Length 50th (ft)		111	0	43	68			~541				
Queue Length 95th (ft)		165	43	m55	m83			#740				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1058	1284	711	1304			377				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.34	0.60	0.50	0.38			1.58				

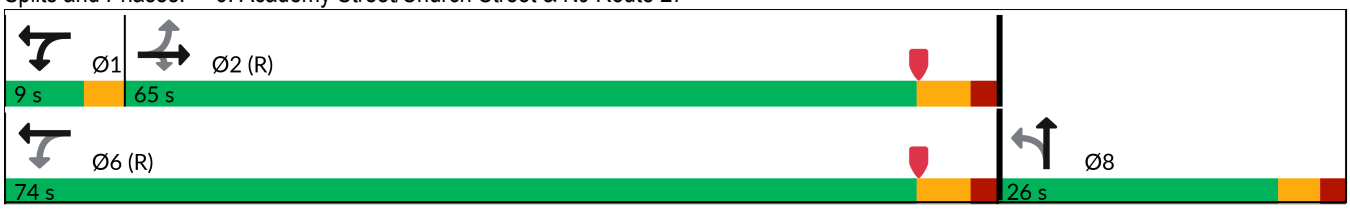
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.58			
Intersection Signal Delay (s/veh): 73.1		Intersection LOS: E	
Intersection Capacity Utilization 113.8%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	597	529	248	464	5	303	227	75	0	0	0
Future Volume (vph)	46	597	529	248	464	5	303	227	75	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.983				
Flt Protected		0.996		0.950				0.976				
Satd. Flow (prot)	0	1922	1641	1816	1927	0	0	1816	0	0	0	0
Flt Permitted		0.937		0.220				0.976				
Satd. Flow (perm)	0	1808	1641	421	1927	0	0	1816	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			551		1							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	1%	2%	1%	0%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	48	622	551	258	483	5	316	236	78	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	670	551	258	488	0	0	630	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.71	0.49	0.73	0.40			1.24				
Control Delay (s/veh)		23.6	2.8	17.5	6.2			157.0				
Queue Delay		0.0	0.0	0.0	0.0			0.0				
Total Delay (s/veh)		23.6	2.8	17.5	6.2			157.0				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		14.2			10.1			157.0				
Approach LOS		B			B			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		480	31	95	152			487				
Fuel Used(gal)		9	2	2	4			49				
CO Emissions (g/hr)		633	173	174	246			3396				
NOx Emissions (g/hr)		123	34	34	48			661				
VOC Emissions (g/hr)		147	40	40	57			787				
Dilemma Vehicles (#)		32	0	0	0			0				
Queue Length 50th (ft)		311	0	43	93			~501				
Queue Length 95th (ft)		451	50	m66	m114			#715				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		940	1117	353	1233			508				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	0			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.71	0.49	0.73	0.40			1.24				

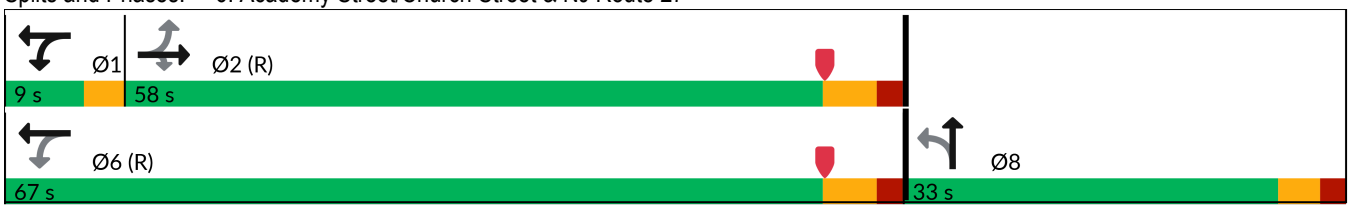
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay (s/veh): 47.7		Intersection LOS: D	
Intersection Capacity Utilization 113.2%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27

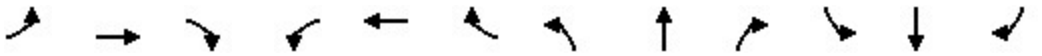


Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	226	260	549	12	176	59	95	0	0	0
Future Volume (vph)	15	463	226	260	549	12	176	59	95	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.961				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1891	1658	1834	1907	0	0	1778	0	0	0	0
Flt Permitted		0.977		0.379				0.974				
Satd. Flow (perm)	0	1851	1658	732	1907	0	0	1778	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			238		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	3%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	238	274	578	13	185	62	100	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	238	274	591	0	0	347	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



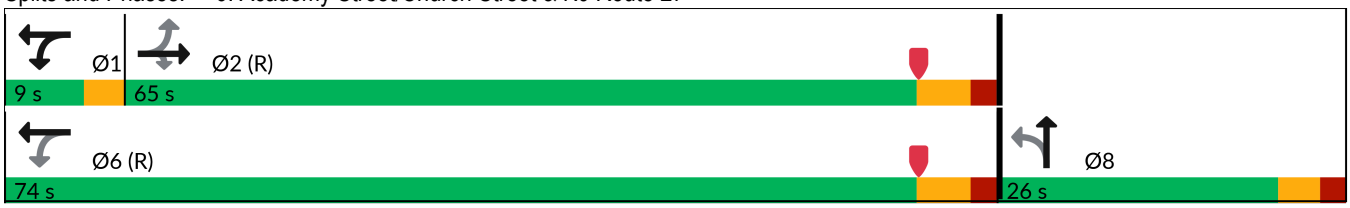
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.4	71.4			20.6				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.46	0.22	0.46	0.43			0.95				
Control Delay (s/veh)		13.3	1.7	5.0	4.4			75.7				
Queue Delay		0.0	0.0	0.0	0.3			0.0				
Total Delay (s/veh)		13.3	1.7	5.0	4.7			75.7				
LOS		B	A	A	A			E				
Approach Delay (s/veh)		9.6			4.8			75.7				
Approach LOS		A			A			E				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	7.8			19.2	19.2				
10th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
Stops (vph)		258	13	53	142			289				
Fuel Used(gal)		5	1	2	4			21				
CO Emissions (g/hr)		348	70	124	270			1479				
NOx Emissions (g/hr)		68	14	24	53			288				
VOC Emissions (g/hr)		81	16	29	63			343				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		168	0	32	85			219				
Queue Length 95th (ft)		245	30	m43	m103			#389				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1092	1075	592	1361			373				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	69.8
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	255			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.46	0.22	0.46	0.53			0.93				

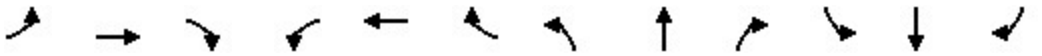
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 19.2		Intersection LOS: B	
Intersection Capacity Utilization 109.2%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	353	6	62	545	40	26	227	29	67	190	208
Future Volume (vph)	21	353	6	62	545	40	26	227	29	67	190	208
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.992			0.986			0.940	
Flt Protected		0.997			0.995			0.995			0.993	
Satd. Flow (prot)	0	2077	0	0	2054	0	0	1771	0	0	1726	0
Flt Permitted		0.950			0.923			0.880			0.836	
Satd. Flow (perm)	0	1979	0	0	1905	0	0	1566	0	0	1453	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	6%	0%	5%	6%	11%	13%	4%	8%	2%	5%	1%
Adj. Flow (vph)	22	376	6	66	580	43	28	241	31	71	202	221
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	404	0	0	689	0	0	300	0	0	494	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.34			0.60			0.66			1.17	
Control Delay (s/veh)		7.3			15.3			39.4			134.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		7.3			15.3			39.4			134.3	
LOS		A			B			D			F	
Approach Delay (s/veh)		7.3			15.3			39.4			134.3	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		117			391			245			379	
Fuel Used(gal)		3			11			18			19	
CO Emissions (g/hr)		204			795			1236			1310	
NOx Emissions (g/hr)		40			155			241			255	
VOC Emissions (g/hr)		47			184			287			304	
Dilemma Vehicles (#)		0			32			0			19	
Queue Length 50th (ft)		79			255			168			~378	
Queue Length 95th (ft)		m101			365			263			#575	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1187			1143			454			421	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.60			0.66			1.17	

Intersection Summary

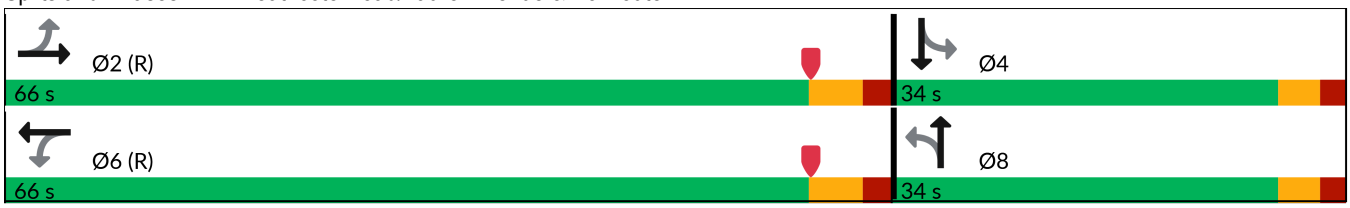
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.17		
Intersection Signal Delay (s/veh): 48.6	Intersection LOS: D	
Intersection Capacity Utilization 100.2%	ICU Level of Service G	
Analysis Period (min) 15		

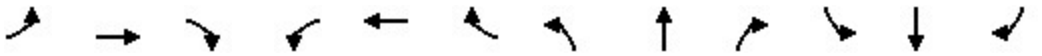
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

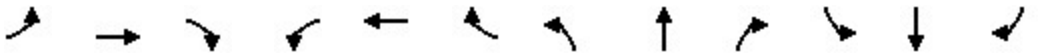
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	651	15	53	511	91	41	287	48	89	173	159
Future Volume (vph)	19	651	15	53	511	91	41	287	48	89	173	159
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.981			0.983			0.949	
Flt Protected		0.999			0.996			0.995			0.990	
Satd. Flow (prot)	0	2180	0	0	2140	0	0	1833	0	0	1743	0
Flt Permitted		0.974			0.900			0.870			0.674	
Satd. Flow (perm)	0	2126	0	0	1933	0	0	1602	0	0	1187	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1372			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	1%	5%	0%	4%	2%
Adj. Flow (vph)	20	671	15	55	527	94	42	296	49	92	178	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	706	0	0	676	0	0	387	0	0	434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.55			0.58			0.83			1.26	
Control Delay (s/veh)		8.3			14.9			50.5			171.6	
Queue Delay		0.2			0.0			0.0			0.0	
Total Delay (s/veh)		8.5			14.9			50.5			171.6	
LOS		A			B			D			F	
Approach Delay (s/veh)		8.5			14.9			50.5			171.6	
Approach LOS		A			B			D			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
Stops (vph)		179			389			328			330	
Fuel Used(gal)		5			11			24			20	
CO Emissions (g/hr)		369			798			1704			1405	
NOx Emissions (g/hr)		72			155			332			273	
VOC Emissions (g/hr)		86			185			395			326	
Dilemma Vehicles (#)		0			33			0			16	
Queue Length 50th (ft)		109			246			231			~349	
Queue Length 95th (ft)		m189			352			#388			#539	
Internal Link Dist (ft)		509			1292			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1275			1159			464			344	
Starvation Cap Reductn		115			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.61			0.58			0.83			1.26	

Intersection Summary

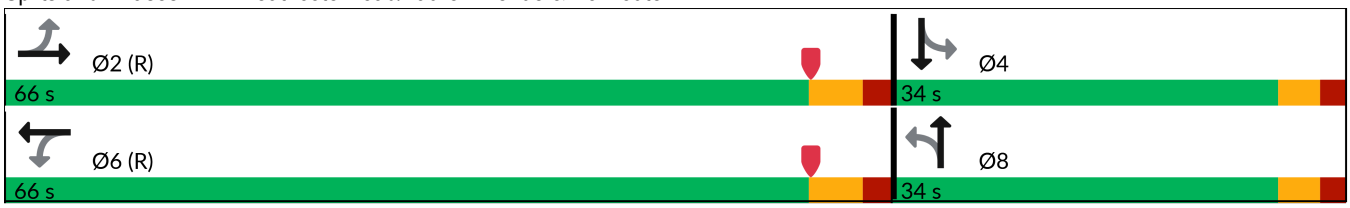
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay (s/veh): 50.0		Intersection LOS: D	
Intersection Capacity Utilization 106.2%		ICU Level of Service G	
Analysis Period (min) 15			

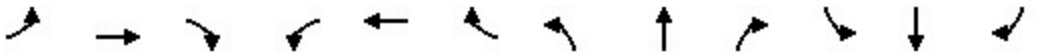
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

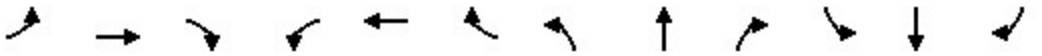
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	496	23	63	600	61	42	110	72	85	140	156
Future Volume (vph)	38	496	23	63	600	61	42	110	72	85	140	156
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.989			0.957			0.945	
Flt Protected		0.997			0.996			0.991			0.989	
Satd. Flow (prot)	0	2147	0	0	2148	0	0	1793	0	0	1768	0
Flt Permitted		0.917			0.906			0.814			0.812	
Satd. Flow (perm)	0	1975	0	0	1954	0	0	1473	0	0	1452	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	522	24	66	632	64	44	116	76	89	147	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	586	0	0	762	0	0	236	0	0	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	



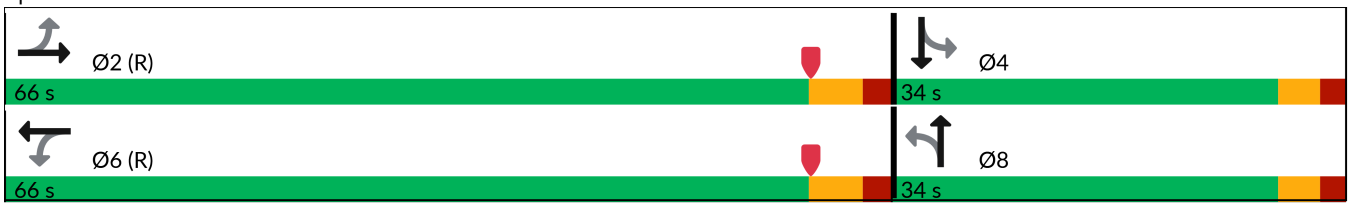
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.4			60.4			28.6			28.6	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.49			0.65			0.56			0.96	
Control Delay (s/veh)		8.3			16.2			36.3			72.5	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		8.4			16.2			36.3			72.5	
LOS		A			B			D			E	
Approach Delay (s/veh)		8.4			16.2			36.3			72.5	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	62.0	62.0		62.0	62.0		27.0	27.0		27.0	27.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		169			456			187			327	
Fuel Used(gal)		4			13			14			11	
CO Emissions (g/hr)		307			908			969			747	
NOx Emissions (g/hr)		60			177			189			145	
VOC Emissions (g/hr)		71			210			225			173	
Dilemma Vehicles (#)		0			36			0			17	
Queue Length 50th (ft)		124			295			127			249	
Queue Length 95th (ft)		m153			421			207			#436	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1193			1180			427			421	
Starvation Cap Reductn		79			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.53			0.65			0.55			0.95	

Intersection Summary

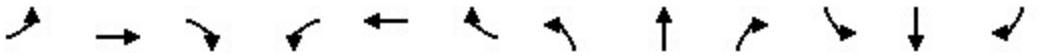
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 92.3%		ICU Level of Service F	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	6	38	51	20	28	9	336	24	10	692	205
Future Volume (vph)	93	6	38	51	20	28	9	336	24	10	692	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.962			0.990			0.966	
Flt Protected		0.967			0.975		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1639	0	1805	1817	0	1805	1817	0
Flt Permitted		0.731			0.805		0.105			0.512		
Satd. Flow (perm)	0	1336	0	0	1353	0	200	1817	0	973	1817	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			21			6			27	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	17%	0%	0%	0%	1%	39%	0%	1%	1%
Adj. Flow (vph)	102	7	42	56	22	31	10	369	26	11	760	225
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	151	0	0	109	0	10	395	0	11	985	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

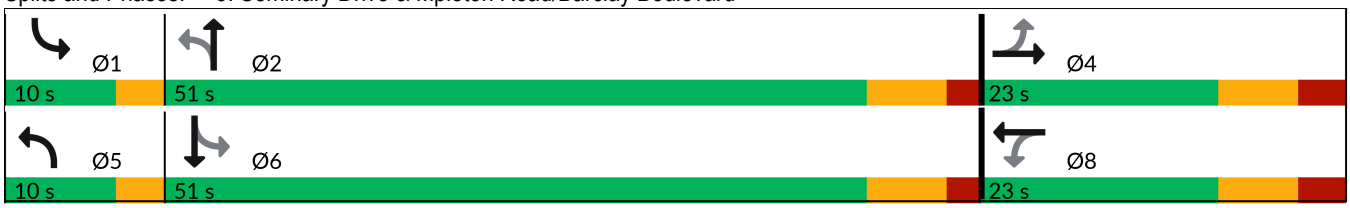


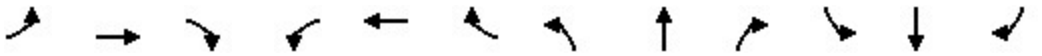
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		10.9			10.9		49.2	44.3		49.2	44.3	
Actuated g/C Ratio		0.15			0.15		0.69	0.62		0.69	0.62	
v/c Ratio		0.69			0.49		0.04	0.35		0.02	0.87	
Control Delay (s/veh)		41.7			31.0		4.4	8.7		4.1	23.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		41.7			31.0		4.4	8.7		4.1	23.4	
LOS		D			C		A	A		A	C	
Approach Delay (s/veh)		41.7			31.0			8.6			23.2	
Approach LOS		D			C			A			C	
90th %ile Green (s)	15.0	15.0		15.0	15.0		5.0	44.0		5.0	44.0	
90th %ile Term Code	Max	Max		Max	Max		Min	Max		Min	Max	
70th %ile Green (s)	13.5	13.5		13.5	13.5		0.0	44.0		0.0	44.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
50th %ile Green (s)	11.0	11.0		11.0	11.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
30th %ile Green (s)	8.8	8.8		8.8	8.8		0.0	44.0		0.0	44.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Max		Skip	Max	
10th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Min	Min		Hold	Hold		Skip	Max		Skip	Max	
Stops (vph)		110			71		4	165		4	614	
Fuel Used(gal)		3			1		0	5		0	45	
CO Emissions (g/hr)		232			77		9	380		30	3112	
NOx Emissions (g/hr)		45			15		2	74		6	605	
VOC Emissions (g/hr)		54			18		2	88		7	721	
Dilemma Vehicles (#)		8			0		0	25		0	59	
Queue Length 50th (ft)		53			35		1	69		1	289	
Queue Length 95th (ft)		123			89		6	173		6	#758	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		297			301		295	1124		753	1132	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.51			0.36		0.03	0.35		0.01	0.87	

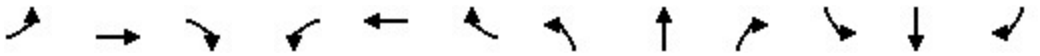
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 71.7			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 21.8		Intersection LOS: C	
Intersection Capacity Utilization 72.3%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82			
70th %ile Actuated Cycle: 72.5			
50th %ile Actuated Cycle: 70			
30th %ile Actuated Cycle: 67.8			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	1	11	40	5	7	12	560	45	15	376	154
Future Volume (vph)	29	1	11	40	5	7	12	560	45	15	376	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.963			0.983			0.989			0.956	
Flt Protected		0.966			0.962		0.950			0.950		
Satd. Flow (prot)	0	1767	0	0	1742	0	1805	1869	0	1805	1798	0
Flt Permitted		0.758			0.792		0.416			0.365		
Satd. Flow (perm)	0	1387	0	0	1434	0	790	1869	0	694	1798	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			7			7			37	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			416			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	4%	0%	0%	0%	0%	7%	0%	1%	1%
Adj. Flow (vph)	31	1	12	43	5	7	13	596	48	16	400	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	55	0	13	644	0	16	564	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

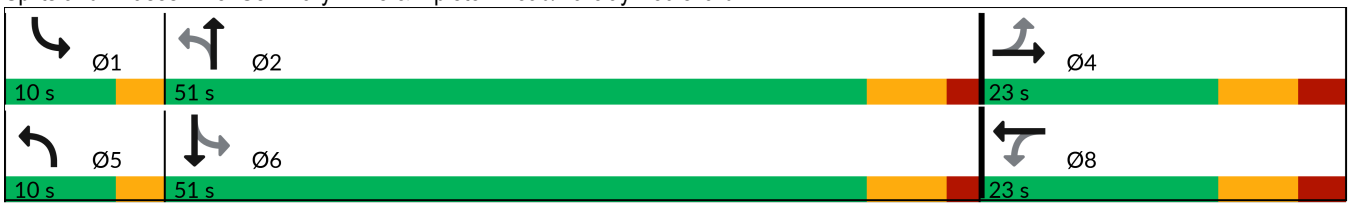


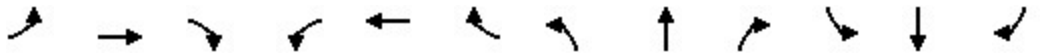
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		8.0			8.0		50.2	48.7		50.2	48.7	
Actuated g/C Ratio		0.13			0.13		0.80	0.78		0.80	0.78	
v/c Ratio		0.24			0.29		0.02	0.44		0.02	0.40	
Control Delay (s/veh)		25.8			29.7		3.0	7.3		3.0	6.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		25.8			29.7		3.0	7.3		3.0	6.5	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		25.8			29.7			7.2			6.4	
Approach LOS		C			C			A			A	
90th %ile Green (s)	10.7	10.7		10.7	10.7		5.0	44.0		5.1	44.1	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Gap	Hold	
70th %ile Green (s)	8.0	8.0		8.0	8.0		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		30			42		4	240		6	191	
Fuel Used(gal)		1			1		0	9		1	23	
CO Emissions (g/hr)		57			41		11	602		45	1595	
NOx Emissions (g/hr)		11			8		2	117		9	310	
VOC Emissions (g/hr)		13			9		2	139		10	370	
Dilemma Vehicles (#)		2			0		0	31		0	25	
Queue Length 50th (ft)		12			18		1	108		1	83	
Queue Length 95th (ft)		43			54		5	289		6	231	
Internal Link Dist (ft)		797			156			336			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		350			358		753	1455		687	1407	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.13			0.15		0.02	0.44		0.02	0.40	

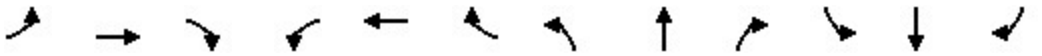
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 8.4		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.8			
70th %ile Actuated Cycle: 67			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	2	6	37	7	9	2	344	45	11	342	144
Future Volume (vph)	11	2	6	37	7	9	2	344	45	11	342	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.957			0.978			0.983			0.956	
Flt Protected		0.972			0.966		0.950			0.950		
Satd. Flow (prot)	0	1662	0	0	1795	0	1805	1868	0	1805	1816	0
Flt Permitted		0.790			0.778		0.456			0.524		
Satd. Flow (perm)	0	1351	0	0	1446	0	866	1868	0	996	1816	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			9			12			38	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	2	6	39	7	9	2	358	47	11	356	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	55	0	2	405	0	11	506	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

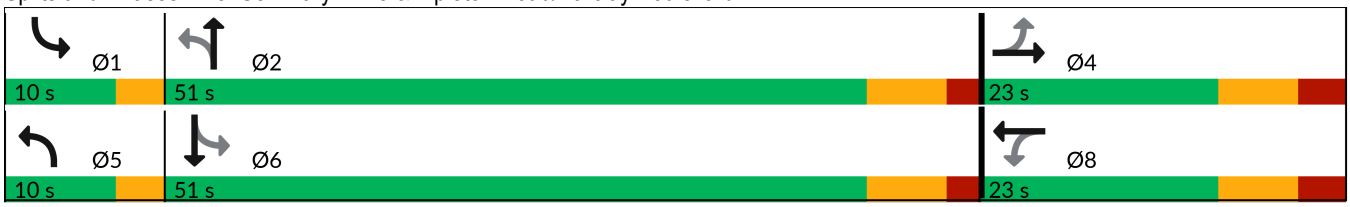


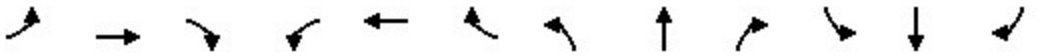
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.8			7.8		50.1	48.6		50.1	48.6	
Actuated g/C Ratio		0.13			0.13		0.80	0.78		0.80	0.78	
v/c Ratio		0.11			0.29		0.00	0.28		0.01	0.36	
Control Delay (s/veh)		25.3			29.0		3.0	5.6		2.8	5.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		25.3			29.0		3.0	5.6		2.8	5.9	
LOS		C			C		A	A		A	A	
Approach Delay (s/veh)		25.3			29.0			5.6			5.9	
Approach LOS		C			C			A			A	
90th %ile Green (s)	10.1	10.1		10.1	10.1		5.0	44.0		5.0	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Min	Max	
70th %ile Green (s)	7.6	7.6		7.6	7.6		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
Stops (vph)		15			41		1	126		4	162	
Fuel Used(gal)		0			1		0	5		0	21	
CO Emissions (g/hr)		27			40		2	358		33	1450	
NOx Emissions (g/hr)		5			8		0	70		6	282	
VOC Emissions (g/hr)		6			9		0	83		8	336	
Dilemma Vehicles (#)		1			0		0	21		0	25	
Queue Length 50th (ft)		5			18		0	56		1	70	
Queue Length 95th (ft)		24			53		2	150		5	192	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		338			363		808	1459		898	1424	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.06			0.15		0.00	0.28		0.01	0.36	

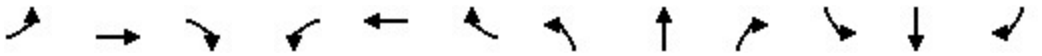
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62.3			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 7.4		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.1			
70th %ile Actuated Cycle: 66.6			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	531	6	1	1327	404	9	2	3	232	0	102
Future Volume (vph)	39	531	6	1	1327	404	9	2	3	232	0	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.971				0.850
Flt Protected	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (prot)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Flt Permitted	0.950			0.950				0.969		0.950	0.950	
Satd. Flow (perm)	1805	3438	1615	1805	3539	1599	0	1788	0	1603	1603	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			303		3				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	5%	0%	0%	2%	1%	0%	0%	0%	7%	0%	0%
Adj. Flow (vph)	41	559	6	1	1397	425	9	2	3	244	0	107
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	41	559	6	1	1397	425	0	14	0	122	122	107
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

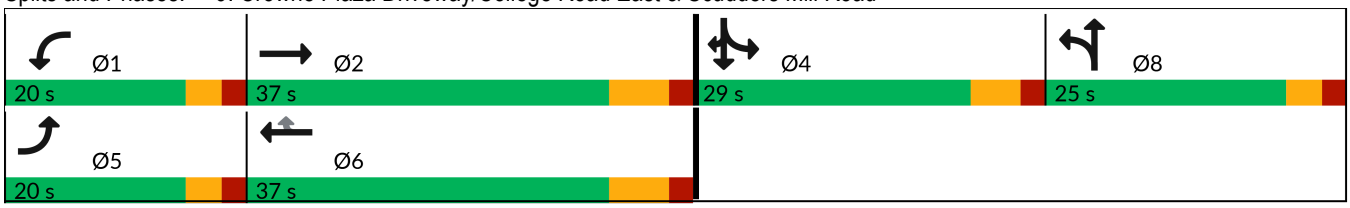


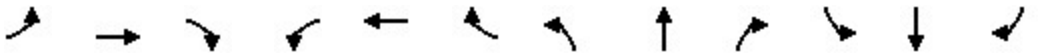
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.7	33.7	59.8	6.2	31.2	31.2		6.3		9.4	9.4	9.4
Actuated g/C Ratio	0.11	0.56	1.00	0.10	0.52	0.52		0.11		0.16	0.16	0.16
v/c Ratio	0.20	0.29	0.00	0.01	0.76	0.43		0.07		0.49	0.49	0.29
Control Delay (s/veh)	31.3	9.4	0.0	32.0	18.8	6.0		28.8		32.4	32.4	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	31.3	9.4	0.0	32.0	18.8	6.0		28.8		32.4	32.4	5.6
LOS	C	A	A	C	B	A		C		C	C	A
Approach Delay (s/veh)		10.8			15.9			28.8			24.3	
Approach LOS		B			B			C			C	
90th %ile Green (s)	8.5	32.5		6.0	30.0	30.0	6.2	6.2		14.8	14.8	14.8
90th %ile Term Code	Gap	Hold		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	6.7	41.7		0.0	30.0	30.0	0.0	0.0		10.7	10.7	10.7
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		9.2	9.2	9.2
50th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		7.1	7.1	7.1
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Min	Min	Min
Stops (vph)	36	256	0	3	863	87		14		96	96	10
Fuel Used(gal)	1	11	0	0	35	7		0		6	6	4
CO Emissions (g/hr)	87	765	5	5	2457	486		16		432	432	290
NOx Emissions (g/hr)	17	149	1	1	478	95		3		84	84	56
VOC Emissions (g/hr)	20	177	1	1	569	113		4		100	100	67
Dilemma Vehicles (#)	0	41	0	0	107	0		1		0	7	0
Queue Length 50th (ft)	12	40	0	0	136	15		3		35	35	0
Queue Length 95th (ft)	50	150	0	5	#562	123		24		113	113	26
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				350		
Base Capacity (vph)	470	1937	1615	470	1845	979		623		640	640	728
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.09	0.29	0.00	0.00	0.76	0.43		0.02		0.19	0.19	0.15

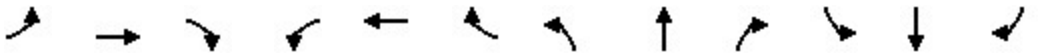
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 59.8			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 15.9		Intersection LOS: B	
Intersection Capacity Utilization 63.0%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82.5			
70th %ile Actuated Cycle: 65.4			
50th %ile Actuated Cycle: 52.2			
30th %ile Actuated Cycle: 50.1			
10th %ile Actuated Cycle: 49			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	1215	5	13	690	224	5	2	9	438	3	62
Future Volume (vph)	76	1215	5	13	690	224	5	2	9	438	3	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.924				0.850
Flt Protected	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (prot)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Flt Permitted	0.950			0.950				0.985		0.950	0.953	
Satd. Flow (perm)	1805	3574	1615	1805	3574	1599	0	1729	0	1698	1703	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			231		9				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		611			1998			443			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	78	1253	5	13	711	231	5	2	9	452	3	64
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	78	1253	5	13	711	231	0	16	0	226	229	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

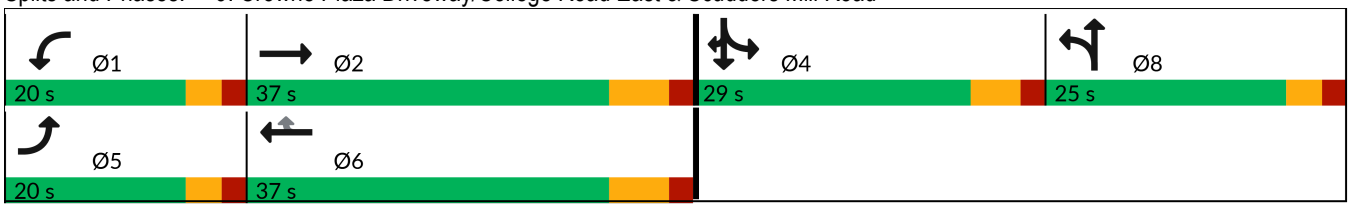


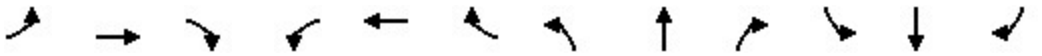
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	8.2	39.8	71.2	6.3	31.2	31.2		6.3		14.4	14.4	14.4
Actuated g/C Ratio	0.12	0.56	1.00	0.09	0.44	0.44		0.09		0.20	0.20	0.20
v/c Ratio	0.38	0.63	0.00	0.08	0.45	0.28		0.10		0.66	0.66	0.15
Control Delay (s/veh)	38.5	15.8	0.0	37.8	18.4	4.2		28.0		37.3	37.6	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	38.5	15.8	0.0	37.8	18.4	4.2		28.0		37.3	37.6	0.7
LOS	D	B	A	D	B	A		C		D	D	A
Approach Delay (s/veh)		17.1			15.2			28.0			32.9	
Approach LOS		B			B			C			C	
90th %ile Green (s)	11.7	35.2		6.5	30.0	30.0	6.4	6.4		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Max	Max	Max
70th %ile Green (s)	9.5	44.5		0.0	30.0	30.0	0.0	0.0		18.3	18.3	18.3
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	7.6	42.6		0.0	30.0	30.0	0.0	0.0		13.7	13.7	13.7
50th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	6.4	41.4		0.0	30.0	30.0	0.0	0.0		11.5	11.5	11.5
30th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		7.9	7.9	7.9
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
Stops (vph)	67	721	0	15	465	25		12		185	189	0
Fuel Used(gal)	2	29	0	0	18	3		0		12	12	2
CO Emissions (g/hr)	173	2005	4	35	1291	239		16		833	846	167
NOx Emissions (g/hr)	34	390	1	7	251	46		3		162	165	33
VOC Emissions (g/hr)	40	465	1	8	299	55		4		193	196	39
Dilemma Vehicles (#)	0	71	0	0	48	0		1		0	12	0
Queue Length 50th (ft)	32	146	0	5	107	0		3		94	95	0
Queue Length 95th (ft)	88	#516	0	26	249	50		24		203	206	0
Internal Link Dist (ft)		531			1918			363			583	
Turn Bay Length (ft)	165		170	75		270				350		
Base Capacity (vph)	395	1996	1615	395	1567	830		511		570	572	623
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.20	0.63	0.00	0.03	0.45	0.28		0.03		0.40	0.40	0.10

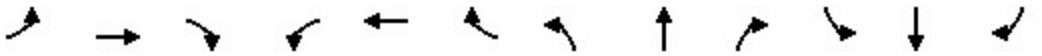
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 71.2			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 19.4		Intersection LOS: B	
Intersection Capacity Utilization 72.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 94.1			
70th %ile Actuated Cycle: 75.8			
50th %ile Actuated Cycle: 69.3			
30th %ile Actuated Cycle: 65.9			
10th %ile Actuated Cycle: 50.9			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	665	14	10	619	189	23	5	12	195	2	18
Future Volume (vph)	7	665	14	10	619	189	23	5	12	195	2	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.960				0.850
Flt Protected	0.950			0.950				0.972		0.950	0.953	
Satd. Flow (prot)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1687	1615
Flt Permitted	0.950			0.950				0.972		0.950	0.953	
Satd. Flow (perm)	1805	3574	1509	1805	3574	1583	0	1732	0	1681	1687	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			195		12				138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	7%	0%	1%	2%	4%	0%	0%	2%	0%	0%
Adj. Flow (vph)	7	686	14	10	638	195	24	5	12	201	2	19
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	7	686	14	10	638	195	0	41	0	100	103	19
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	custom	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

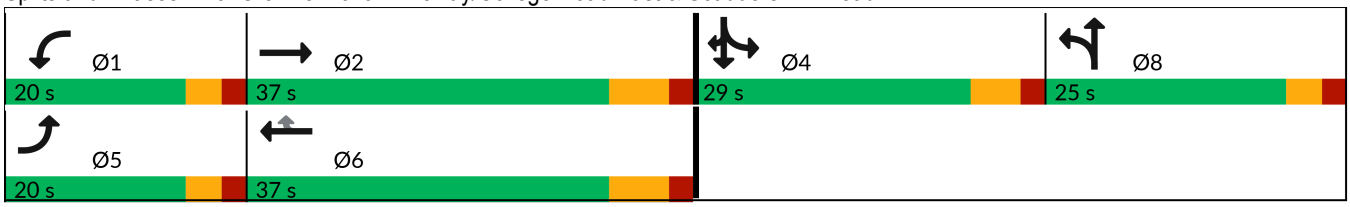


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6	8					
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	6.2	32.5	60.1	6.2	32.5	32.5		6.5		8.5	8.5	8.5
Actuated g/C Ratio	0.10	0.54	1.00	0.10	0.54	0.54		0.11		0.14	0.14	0.14
v/c Ratio	0.04	0.36	0.01	0.05	0.33	0.21		0.21		0.42	0.43	0.06
Control Delay (s/veh)	30.6	11.1	0.0	30.5	10.9	3.2		25.0		31.3	31.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	30.6	11.1	0.0	30.5	10.9	3.2		25.0		31.3	31.5	0.3
LOS	C	B	A	C	B	A		C		C	C	A
Approach Delay (s/veh)		11.1			9.4			25.0			28.7	
Approach LOS		B			A			C			C	
90th %ile Green (s)	6.0	30.0		6.0	30.0	30.0	8.0	8.0		12.7	12.7	12.7
90th %ile Term Code	Min	Max		Min	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	6.3	6.3		9.4	9.4	9.4
70th %ile Term Code	Skip	Max		Skip	Max	Max	Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		8.1	8.1	8.1
50th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		6.5	6.5	6.5
30th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
10th %ile Green (s)	0.0	37.3		0.0	37.3	37.3	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Skip	Dwell		Skip	Dwell	Dwell	Skip	Skip		Min	Min	Min
Stops (vph)	9	363	0	13	332	21		29		81	83	0
Fuel Used(gal)	0	15	0	0	14	3		1		5	5	1
CO Emissions (g/hr)	18	1022	11	27	1001	199		38		360	371	49
NOx Emissions (g/hr)	4	199	2	5	195	39		7		70	72	9
VOC Emissions (g/hr)	4	237	3	6	232	46		9		83	86	11
Dilemma Vehicles (#)	0	55	0	0	52	0		2		0	6	0
Queue Length 50th (ft)	2	46	0	3	42	0		8		28	29	0
Queue Length 95th (ft)	15	185	0	20	171	39		43		95	97	0
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				350		
Base Capacity (vph)	464	1932	1509	464	1932	945		602		663	665	720
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.02	0.36	0.01	0.02	0.33	0.21		0.07		0.15	0.15	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 60.1			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 12.8		Intersection LOS: B	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 79.7			
70th %ile Actuated Cycle: 63.7			
50th %ile Actuated Cycle: 51.1			
30th %ile Actuated Cycle: 49.5			
10th %ile Actuated Cycle: 56.3			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road

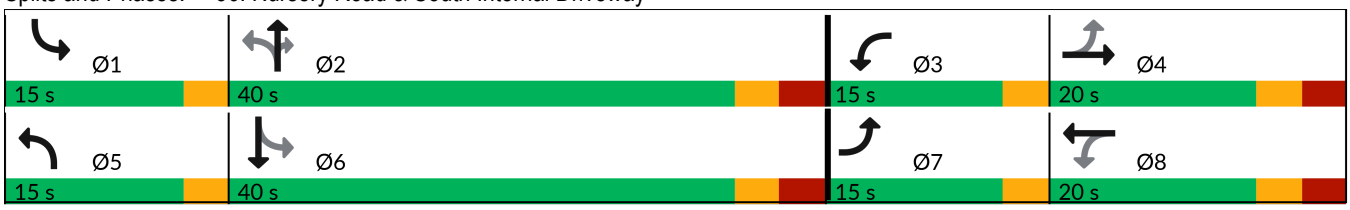


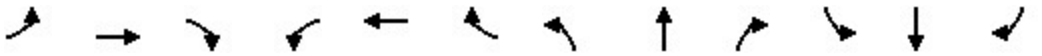
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	5	88	117	13	0	47	61	211	1	72	0
Future Volume (vph)	1	5	88	117	13	0	47	61	211	1	72	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.857							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1628	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted				0.597			0.654			0.714		
Satd. Flow (perm)	1900	1628	0	1134	1900	0	1243	1900	1615	1357	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96							229			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	5	96	127	14	0	51	66	229	1	78	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	101	0	127	14	0	51	66	229	1	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	10.0	6.0		12.5	9.8		19.1	18.5	18.5	18.0	16.9	
Actuated g/C Ratio	0.30	0.18		0.37	0.29		0.57	0.55	0.55	0.54	0.50	
v/c Ratio	0.00	0.27		0.23	0.03		0.06	0.06	0.23	0.00	0.08	
Control Delay (s/veh)	8.0	8.0		8.0	12.1		7.7	12.2	3.7	8.0	14.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.0	8.0		8.0	12.1		7.7	12.2	3.7	8.0	14.8	
LOS	A	A		A	B		A	B	A	A	B	
Approach Delay (s/veh)		8.0			8.4			5.9			14.7	
Approach LOS		A			A			A			B	
90th %ile Green (s)	5.0	7.1		8.1	10.2		6.5	9.8	9.8	5.0	8.3	
90th %ile Term Code	Min	Gap		Gap	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.5		6.9	15.4		6.0	15.8	15.8	0.0	6.8	
70th %ile Term Code	Skip	Gap		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		5.6	13.6		0.0	6.1	6.1	0.0	6.1	
50th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	12.5	12.5	0.0	12.5	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	20.0	20.0	0.0	20.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	28		59	12		27	44	36	2	57	
Fuel Used(gal)	0	1		1	0		1	1	2	0	1	
CO Emissions (g/hr)	1	42		73	12		37	56	108	1	63	
NOx Emissions (g/hr)	0	8		14	2		7	11	21	0	12	
VOC Emissions (g/hr)	0	10		17	3		9	13	25	0	15	
Dilemma Vehicles (#)	0	9		0	1		0	5	0	0	6	
Queue Length 50th (ft)	0	1		9	1		6	9	0	0	11	
Queue Length 95th (ft)	2	33		44	14		22	40	43	2	48	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	915	816		837	906		964	1708	1475	986	1708	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.12		0.15	0.02		0.05	0.04	0.16	0.00	0.05	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 33.5		
Natural Cycle: 40		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.27		
Intersection Signal Delay (s/veh): 7.8		Intersection LOS: A
Intersection Capacity Utilization 36.3%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 48		
70th %ile Actuated Cycle: 43.2		
50th %ile Actuated Cycle: 31.7		
30th %ile Actuated Cycle: 18.5		
10th %ile Actuated Cycle: 26		

Splits and Phases: 36: Nursery Road & South Internal Driveway



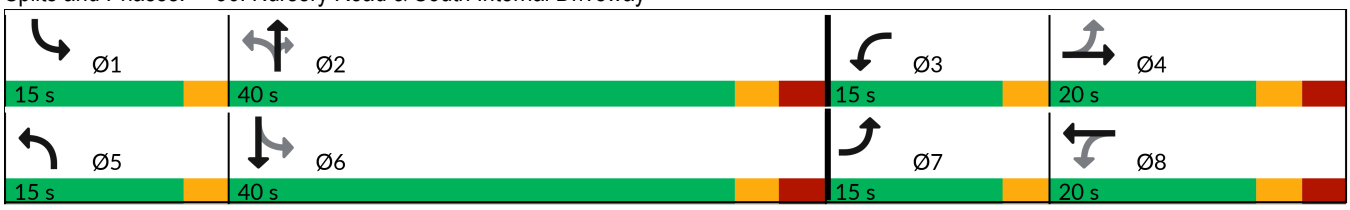


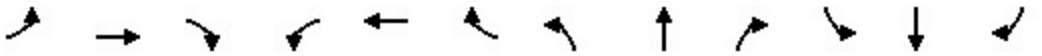
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	8	91	335	6	0	74	138	272	1	126	0
Future Volume (vph)	1	8	91	335	6	0	74	138	272	1	126	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.862							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1638	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.800			0.500			0.526			0.662		
Satd. Flow (perm)	1520	1638	0	950	1900	0	999	1900	1615	1258	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		99							296			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			734			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	9	99	364	7	0	80	150	296	1	137	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	108	0	364	7	0	80	150	296	1	137	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.1	6.1		19.6	15.0		17.1	12.6	12.6	14.7	8.9	
Actuated g/C Ratio	0.28	0.14		0.45	0.35		0.39	0.29	0.29	0.34	0.21	
v/c Ratio	0.00	0.34		0.57	0.01		0.15	0.27	0.44	0.00	0.35	
Control Delay (s/veh)	9.0	10.4		13.0	13.0		10.0	15.5	4.9	9.0	21.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	9.0	10.4		13.0	13.0		10.0	15.5	4.9	9.0	21.6	
LOS	A	B		B	B		A	B	A	A	C	
Approach Delay (s/veh)		10.4			13.0			8.7			21.5	
Approach LOS		B			B			A			C	
90th %ile Green (s)	5.0	7.9		12.0	14.9		7.8	14.2	14.2	5.0	11.4	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.9		12.0	20.9		7.2	19.4	19.4	0.0	9.2	
70th %ile Term Code	Skip	Gap		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		11.5	19.5		6.3	17.1	17.1	0.0	7.8	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		8.1	16.1		0.0	6.7	6.7	0.0	6.7	
30th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	7.0	7.0	0.0	7.0	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	29		200	7		43	95	38	2	102	
Fuel Used(gal)	0	1		4	0		1	2	2	0	2	
CO Emissions (g/hr)	1	47		249	6		61	131	140	1	123	
NOx Emissions (g/hr)	0	9		48	1		12	26	27	0	24	
VOC Emissions (g/hr)	0	11		58	1		14	30	32	0	29	
Dilemma Vehicles (#)	0	7		0	0		0	10	0	0	9	
Queue Length 50th (ft)	0	2		64	1		13	29	0	0	36	
Queue Length 95th (ft)	2	39		139	10		35	84	50	2	84	
Internal Link Dist (ft)		266			404			654			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	774	648		722	801		672	1490	1330	703	1490	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.17		0.50	0.01		0.12	0.10	0.22	0.00	0.09	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 43.4		
Natural Cycle: 50		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.57		
Intersection Signal Delay (s/veh): 11.8		Intersection LOS: B
Intersection Capacity Utilization 50.0%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 57.1		
70th %ile Actuated Cycle: 52.3		
50th %ile Actuated Cycle: 48.6		
30th %ile Actuated Cycle: 34.8		
10th %ile Actuated Cycle: 24		

Splits and Phases: 36: Nursery Road & South Internal Driveway



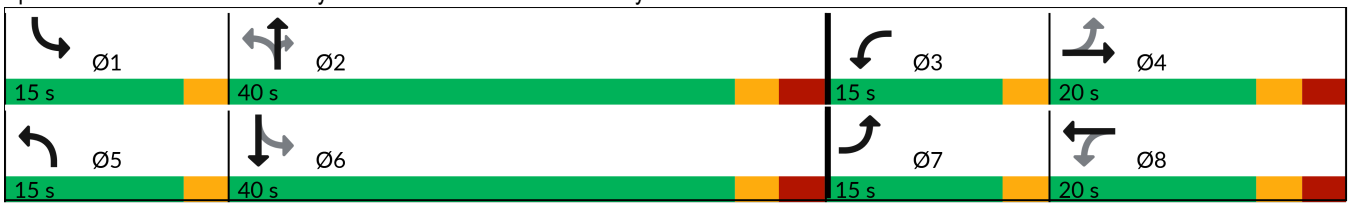


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	9	137	357	9	0	126	192	392	1	175	0
Future Volume (vph)	1	9	137	357	9	0	126	192	392	1	175	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.859							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1632	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.816			0.506			0.510			0.627		
Satd. Flow (perm)	1550	1632	0	961	1900	0	969	1900	1615	1191	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		149							426			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	10	149	388	10	0	137	209	426	1	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	159	0	388	10	0	137	209	426	1	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.3	6.5		20.9	16.2		21.7	17.1	17.1	17.2	10.2	
Actuated g/C Ratio	0.25	0.13		0.42	0.33		0.44	0.35	0.35	0.35	0.21	
v/c Ratio	0.00	0.46		0.63	0.02		0.24	0.32	0.51	0.00	0.48	
Control Delay (s/veh)	11.0	11.0		17.3	14.9		10.3	14.9	4.4	9.0	25.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	11.0	11.0		17.3	14.9		10.3	14.9	4.4	9.0	25.0	
LOS	B	B		B	B		B	B	A	A	C	
Approach Delay (s/veh)		11.0			17.2			8.3			24.9	
Approach LOS		B			B			A			C	
90th %ile Green (s)	5.0	9.2		12.0	16.2		10.2	19.8	19.8	5.0	14.6	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	6.4		12.0	21.4		9.2	23.5	23.5	0.0	11.3	
70th %ile Term Code	Skip	Gap		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		12.0	20.0		7.9	20.4	20.4	0.0	9.5	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		12.0	20.0		6.8	17.9	17.9	0.0	8.1	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.5	5.5		0.0	6.2	6.2	0.0	6.2	
10th %ile Term Code	Skip	Skip		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
Stops (vph)	2	35		233	9		65	125	43	2	145	
Fuel Used(gal)	0	1		4	0		1	3	3	0	3	
CO Emissions (g/hr)	1	67		297	9		99	177	192	1	181	
NOx Emissions (g/hr)	0	13		58	2		19	35	37	0	35	
VOC Emissions (g/hr)	0	15		69	2		23	41	45	0	42	
Dilemma Vehicles (#)	0	9		0	0		0	13	0	0	11	
Queue Length 50th (ft)	0	3		80	2		24	43	0	0	54	
Queue Length 95th (ft)	3	50		#178	13		56	113	56	2	118	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	703	624		666	760		679	1314	1248	715	1314	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.25		0.58	0.01		0.20	0.16	0.34	0.00	0.14	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 49.4	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay (s/veh): 13.0	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 64	
70th %ile Actuated Cycle: 56.9	
50th %ile Actuated Cycle: 52.4	
30th %ile Actuated Cycle: 49.9	
10th %ile Actuated Cycle: 23.7	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	50	211	0	322	14	61	431
Future Vol, veh/h	50	211	0	322	14	61	431
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86	86
Heavy Vehicles, %	0	2	0	2	0	2	1
Mvmt Flow	58	245	0	374	16	71	501

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	775	195	501	0	0	391	0
Stage 1	383	-	-	-	-	-	-
Stage 2	392	-	-	-	-	-	-
Critical Hdwy	6.8	6.94	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.32	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	339	813	700	-	-	1164	-
Stage 1	665	-	-	-	-	-	-
Stage 2	657	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	318	813	700	-	-	1164	-
Mov Cap-2 Maneuver	318	-	-	-	-	-	-
Stage 1	665	-	-	-	-	-	-
Stage 2	617	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.77	0	1.03
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	700	-	-	318	813	1164	-
HCM Lane V/C Ratio	-	-	-	0.183	0.302	0.061	-
HCM Ctrl Dly (s/v)	0	-	-	18.8	11.3	8.3	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	1.3	0.2	-

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	21	94	0	372	52	168	342
Future Vol, veh/h	21	94	0	372	52	168	342
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89	89
Heavy Vehicles, %	5	0	0	0	0	2	1
Mvmt Flow	24	106	0	418	58	189	384

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1017	238	384	0	0	476	0
Stage 1	447	-	-	-	-	-	-
Stage 2	570	-	-	-	-	-	-
Critical Hdwy	6.9	6.9	6.4	-	-	4.14	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	2.5	-	-	2.22	-
Pot Cap-1 Maneuver	229	769	829	-	-	1082	-
Stage 1	603	-	-	-	-	-	-
Stage 2	521	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	189	769	829	-	-	1082	-
Mov Cap-2 Maneuver	189	-	-	-	-	-	-
Stage 1	603	-	-	-	-	-	-
Stage 2	430	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.41	0	2.97
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	829	-	-	189	769	1082	-
HCM Lane V/C Ratio	-	-	-	0.125	0.137	0.174	-
HCM Ctrl Dly (s/v)	0	-	-	26.8	10.4	9	-
HCM Lane LOS	A	-	-	D	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.5	0.6	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	12	81	0	201	3	63	207
Future Vol, veh/h	12	81	0	201	3	63	207
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	2	0	3	2
Mvmt Flow	14	92	0	228	3	72	235

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	491	116	235	0	0	232	0
Stage 1	230	-	-	-	-	-	-
Stage 2	261	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.16	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.23	-
Pot Cap-1 Maneuver	512	921	1027	-	-	1326	-
Stage 1	792	-	-	-	-	-	-
Stage 2	765	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	484	921	1027	-	-	1326	-
Mov Cap-2 Maneuver	484	-	-	-	-	-	-
Stage 1	792	-	-	-	-	-	-
Stage 2	724	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.77	0	1.84
HCM LOS	A		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1027	-	-	484	921	1326	-
HCM Lane V/C Ratio	-	-	-	0.028	0.1	0.054	-
HCM Ctrl Dly (s/v)	0	-	-	12.7	9.3	7.9	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.2	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	690	9	13	527	23	7	0	6	22	0	46
Future Vol, veh/h	27	690	9	13	527	23	7	0	6	22	0	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	29	750	10	14	573	25	8	0	7	24	0	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	598	0	0	760	0	0	1415	1440	755	1410	1420	573
Stage 1	-	-	-	-	-	-	814	814	-	601	601	-
Stage 2	-	-	-	-	-	-	601	626	-	809	818	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	989	-	-	861	-	-	116	134	412	117	138	523
Stage 1	-	-	-	-	-	-	375	394	-	490	492	-
Stage 2	-	-	-	-	-	-	490	480	-	377	392	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	989	-	-	861	-	-	100	128	412	110	132	523
Mov Cap-2 Maneuver	-	-	-	-	-	-	100	128	-	110	132	-
Stage 1	-	-	-	-	-	-	364	383	-	482	484	-
Stage 2	-	-	-	-	-	-	436	472	-	360	381	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.33	0.21	30.69	23.6
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	154	989	-	-	861	-	-	110	523
HCM Lane V/C Ratio	0.092	0.03	-	-	0.016	-	-	0.217	0.096
HCM Ctrl Dly (s/v)	30.7	8.8	-	-	9.3	-	-	46.6	12.6
HCM Lane LOS	D	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.1	-	-	0.8	0.3

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	374	8	5	596	40	13	0	15	9	0	45
Future Vol, veh/h	50	374	8	5	596	40	13	0	15	9	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	54	407	9	5	648	43	14	0	16	10	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	691	0	0	415	0	0	1178	1222	411	1174	1183	648
Stage 1	-	-	-	-	-	-	520	520	-	659	659	-
Stage 2	-	-	-	-	-	-	659	702	-	515	524	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	913	-	-	1155	-	-	169	181	645	170	191	474
Stage 1	-	-	-	-	-	-	543	536	-	456	464	-
Stage 2	-	-	-	-	-	-	456	443	-	546	533	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	913	-	-	1155	-	-	142	170	645	155	179	474
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	170	-	155	179	-
Stage 1	-	-	-	-	-	-	511	504	-	454	462	-
Stage 2	-	-	-	-	-	-	407	441	-	501	501	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.06	0.06	21.85	16.17
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	244	913	-	-	1155	-	-	155	474
HCM Lane V/C Ratio	0.125	0.06	-	-	0.005	-	-	0.063	0.103
HCM Ctrl Dly (s/v)	21.9	9.2	-	-	8.1	-	-	29.7	13.5
HCM Lane LOS	C	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.2	0.3

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	297	16	14	304	47	17	0	8	16	0	64
Future Vol, veh/h	66	297	16	14	304	47	17	0	8	16	0	64
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	72	323	17	15	330	51	18	0	9	17	0	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	382	0	0	340	0	0	836	887	332	827	845	330
Stage 1	-	-	-	-	-	-	475	475	-	361	361	-
Stage 2	-	-	-	-	-	-	361	412	-	466	484	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1188	-	-	1230	-	-	289	285	715	293	302	716
Stage 1	-	-	-	-	-	-	574	561	-	662	629	-
Stage 2	-	-	-	-	-	-	662	598	-	581	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1188	-	-	1230	-	-	242	265	715	269	280	716
Mov Cap-2 Maneuver	-	-	-	-	-	-	242	265	-	269	280	-
Stage 1	-	-	-	-	-	-	540	527	-	653	622	-
Stage 2	-	-	-	-	-	-	590	590	-	539	522	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.43	0.31	17.86	12.32
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	307	1188	-	-	1230	-	-	269	716
HCM Lane V/C Ratio	0.088	0.06	-	-	0.012	-	-	0.065	0.097
HCM Ctrl Dly (s/v)	17.9	8.2	-	-	8	-	-	19.3	10.6
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	0.2	0.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	20	0	0	19	23	19	1	31	0
Future Vol, veh/h	0	0	20	20	0	0	19	23	19	1	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	22	22	0	0	21	25	21	1	34	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	102	123	34	112	112	35	34	0	0	46	0	0
Stage 1	36	36	-	77	77	-	-	-	-	-	-	-
Stage 2	66	87	-	36	36	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	883	771	1045	870	781	1043	1591	-	-	1575	-	-
Stage 1	985	869	-	937	835	-	-	-	-	-	-	-
Stage 2	949	827	-	985	869	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	871	760	1045	840	770	1043	1591	-	-	1575	-	-
Mov Cap-2 Maneuver	871	760	-	840	770	-	-	-	-	-	-	-
Stage 1	984	868	-	925	824	-	-	-	-	-	-	-
Stage 2	937	816	-	964	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.52	9.4	2.27	0.23
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	514	-	-	1045	840	56	-	-
HCM Lane V/C Ratio	0.013	-	-	0.021	0.026	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	9.4	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	44	39	0	0	48	48	42	1	44	0
Future Vol, veh/h	0	0	44	39	0	0	48	48	42	1	44	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	48	42	0	0	52	52	46	1	48	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	207	252	48	229	229	75	48	0	0	98	0	0
Stage 1	50	50	-	179	179	-	-	-	-	-	-	-
Stage 2	157	202	-	50	50	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	755	655	1027	730	674	992	1572	-	-	1508	-	-
Stage 1	968	857	-	827	755	-	-	-	-	-	-	-
Stage 2	851	738	-	968	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	728	631	1027	671	650	992	1572	-	-	1508	-	-
Mov Cap-2 Maneuver	728	631	-	671	650	-	-	-	-	-	-	-
Stage 1	967	857	-	798	728	-	-	-	-	-	-	-
Stage 2	821	712	-	922	857	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.68	10.73	2.56	0.16
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	573	-	-	1027	671	40	-	-
HCM Lane V/C Ratio	0.033	-	-	0.047	0.063	0.001	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	8.7	10.7	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	62	53	0	0	68	66	58	1	61	0
Future Vol, veh/h	0	0	62	53	0	0	68	66	58	1	61	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	67	58	0	0	74	72	63	1	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	288	351	66	320	320	103	66	0	0	135	0	0
Stage 1	68	68	-	251	251	-	-	-	-	-	-	-
Stage 2	220	283	-	68	68	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	668	577	1003	637	600	957	1548	-	-	1462	-	-
Stage 1	947	842	-	758	703	-	-	-	-	-	-	-
Stage 2	787	681	-	947	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	633	546	1003	563	569	957	1548	-	-	1462	-	-
Mov Cap-2 Maneuver	633	546	-	563	569	-	-	-	-	-	-	-
Stage 1	946	841	-	718	666	-	-	-	-	-	-	-
Stage 2	746	646	-	882	841	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.85	12.12	2.64	0.12
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	583	-	-	1003	563	29	-	-
HCM Lane V/C Ratio	0.048	-	-	0.067	0.102	0.001	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	8.8	12.1	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	17	17	26	0
Demand Flow Rate, veh/h	17	17	26	0
Vehicles Circulating, veh/h	17	13	0	30
Vehicles Exiting, veh/h	13	13	34	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.7	2.8	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	17	17	26	0
Cap Entry Lane, veh/h	1356	1362	1380	1338
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	17	17	26	0
Cap Entry, veh/h	1356	1362	1380	1338
V/C Ratio	0.013	0.012	0.019	0.000
Control Delay, s/veh	2.8	2.7	2.8	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	21	27	52	0
Demand Flow Rate, veh/h	21	27	52	0
Vehicles Circulating, veh/h	27	23	0	50
Vehicles Exiting, veh/h	23	29	48	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.8	2.9	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	21	27	52	0
Cap Entry Lane, veh/h	1342	1348	1380	1311
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	21	27	52	0
Cap Entry, veh/h	1342	1348	1380	1311
V/C Ratio	0.016	0.020	0.038	0.000
Control Delay, s/veh	2.8	2.8	2.9	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection	
Intersection Delay, s/veh	3.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	29	38	73	0
Demand Flow Rate, veh/h	29	38	73	0
Vehicles Circulating, veh/h	38	32	0	70
Vehicles Exiting, veh/h	32	41	67	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.9	2.9	3.0	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	29	38	73	0
Cap Entry Lane, veh/h	1327	1336	1380	1285
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	29	38	73	0
Cap Entry, veh/h	1327	1336	1380	1285
V/C Ratio	0.022	0.028	0.053	0.000
Control Delay, s/veh	2.9	2.9	3.0	2.8
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

APPENDIX G
SUPPLEMENTARY ANALYSIS
PRE-COVID CONDITIONS

G1 – SUPPLEMENTARY ANALYSIS – PRE-COVID CONDITIONS

Table G1 – Intersection Capacity Analysis Summary (Pre-COVID Conditions)

Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ GDP Mit	2029 Projected						2029 Projected with GDP						2029 Build					
				AM		PM		SAT		AM		PM		SAT		AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
SIGNALIZED INTERSECTIONS																					
U.S. Rt 1 and Ridge Rd	**Overall**	**Overall**	**Overall**	**D**	**49.3**	**C**	**29.5**	**C**	**25.9**	**D**	**53.5**	**C**	**31.3**	**C**	**28.5**	**D**	**51.6**	**C**	**29.8**	**C**	**27.5**
	EB-L	EB-L	EB-L	F	89.7	F	140.3	D	44.4	E	77.0	F	125.7	D	44.0	E	77.0	F	125.7	D	44.3
	EB-T	EB-T	EB-T	F	175.7	F	88.8	E	63.6	F	165.9	F	93.5	E	69.3	F	165.9	F	93.5	E	66.6
	EB-R	EB-R	EB-R	E	40.9	B	17.3	B	12.4	D	35.8	A	9.3	A	5.8	D	35.8	A	9.3	A	5.8
	WB-L	WB-L	WB-L	F	144.6	F	107.6	D	46.8	F	190.3	F	106.4	D	54.1	F	181.4	F	91.1	D	49.8
	WB-TR	WB-TR	WB-TR	F	99.2	F	95.0	E	79.8	F	108.4	F	84.8	E	77.5	F	108.4	F	84.8	E	78.4
	NB-TTT*	NB-TTT*	NB-TTT*	B	15.0	B	15.7	B	16.5	B	14.4	B	19.8	B	18.8	B	14.3	B	17.7	B	18.1
	SB-TTT*	SB-TTT*	SB-TTT*	D	36.4	B	15.7	C	21.3	D	40.5	B	17.2	C	25.0	D	37.6	B	17.1	C	23.7
U.S. Rt 1 and Independence Way	**Overall**	**Overall**	**Overall**	**A**	**6.6**	**B**	**17.2**	**A**	**3.3**	**A**	**6.9**	**B**	**18.5**	**A**	**3.2**	**A**	**6.8**	**B**	**18.2**	**A**	**3.3**
	EB-LL	EB-LL	EB-LL	D	52.8	D	43.0	D	49.1	D	47.1	D	39.0	D	49.7	D	47.2	D	39.1	D	49.5
	EB-TR	EB-TR	EB-TR	E	79.9	E	61.0	E	63.0	E	74.5	E	60.6	D	55.0	E	75.5	E	59.9	D	55.0
	WB-L	WB-L	WB-L	F	84.6	F	96.5	E	65.8	E	77.8	F	99.1	E	65.8	E	77.8	F	92.2	E	65.8
	WB-R	WB-R	WB-R	A	0.0	A	0.1	A	0.0	A	0.0	A	0.1	A	0.0	A	0.0	A	0.1	A	0.0
	NB-TTTR	NB-TTTR	NB-TTTR	A	5.1	B	18.0	A	2.7	A	5.6	C	20.9	A	2.9	A	5.5	C	20.7	A	2.8
	SB-TTT	SB-TTT	SB-TTT	A	4.4	A	8.6	A	3.2	A	5.0	A	7.9	A	2.8	A	4.8	A	8.1	A	3.0
U.S. Rt 1 NB Ramps and College Rd E	**Overall**	**Overall**	**Overall**	**A**	**2.2**	**A**	**4.0**	**A**	**1.8**	**A**	**2.9**	**A**	**4.7**	**A**	**2.4**	**A**	**2.7**	**A**	**4.4**	**A**	**2.2**
	EB-LL	EB-LL	EB-LL	A	0.7	A	1.1	A	0.6	A	1.0	A	3.8	A	0.9	A	0.9	A	2.3	A	0.8
	EB-TT	EB-TT	EB-TT	A	0.2	A	0.1	A	0.0	A	0.2	A	0.1	A	0.1	A	0.2	A	0.1	A	0.1
	WB-TT	WB-TT	WB-TT	A	6.5	A	9.1	A	5.2	A	8.6	B	10.3	A	6.3	A	8.3	A	9.7	A	5.9
	WB-R	WB-R	WB-R	A	0.2	A	0.5	A	0.0	A	0.2	A	0.5	A	0.0	A	0.2	A	0.5	A	0.0
	NEB-R	NEB-R	NEB-R	A	0.6	A	0.3	A	0.0	A	0.6	A	0.3	A	0.0	A	0.6	A	0.3	A	0.0
Village Blvd / Jug and College Rd W	**Overall**	**Overall**	**Overall**	**A**	**9.6**	**A**	**9.0**	**A**	**7.0**	**B**	**11.0**	**B**	**13.6**	**A**	**8.9**	**B**	**10.5**	**B**	**11.4**	**A**	**7.3**
	EB-TTR	EB-TTR	EB-TTR	A	8.9	A	7.2	A	5.6	B	10.6	B	12.2	A	8.9	B	10.2	A	9.4	A	7.1
	WB-TT	WB-TT	WB-TT	A	8.2	A	9.2	A	5.7	A	9.6	B	12.6	A	7.7	A	9.0	B	11.0	A	6.5
	NB-L	NB-L	NB-L	B	11.3	B	13.4	B	11.2	B	14.7	B	18.0	B	14.0	B	13.6	B	16.3	B	11.6
	NB-R	NB-R	NB-R	A	4.9	A	5.6	A	5.2	A	5.9	C	20.5	A	7.5	A	5.6	B	14.5	A	5.3
	SB-LTT	SB-LTT	SB-LTT	B	13.8	B	14.0	B	12.2	B	16.5	B	18.0	B	14.5	B	15.5	B	16.5	B	12.4
College Rd W and Seminary Dr and Nursey Rd	**Overall**	**Overall**	**Overall**	**B**	**13.3**	**B**	**13.0**	**B**	**10.2**	**C**	**20.9**	**C**	**22.6**	**C**	**20.1**	**D**	**35.8**	**C**	**30.6**	**C**	**21.6**
	EB-L	EB-L	EB-L	A	5.0	A	4.0	A	5.0	A	8.4	B	16.8	B	14.2	A	8.8	B	11.8	B	10.9
	EB-TTR	EB-TTR	EB-TTR	B	10.3	A	7.7	A	7.4	C	24.3	B	18.0	B	18.0	B	18.4	B	14.6	B	14.3
	WB-L	WB-L	WB-L	C	23.9	A	4.4	A	5.0	C	30.1	B	18.7	B	14.5	F	133.7	B	11.1	B	11.7
	WB-T	WB-TT	WB-TT	A	9.3	B	12.8	A	8.2	B	14.0	C	27.8	C	21.3	C	21.1	C	34.7	B	19.9
	WB-R	WB-R	WB-R	A	0.0	A	0.0	A	0.0	A	0.4	A	0.6	A	1.5	A	0.2	A	0.3	A	0.7
	NB-L	NB-LL	NB-LL	C	29.4	D	44.3	C	30.9	D	41.6	D	44.5	D	41.0	D	39.1	F	113.7	D	42.6
	NB-TR	NB-T	NB-T	B	13.0	B	12.2	B	11.1	D	42.6	D	42.4	D	44.5	B	18.8	C	23.2	B	18.9
	-	NB-R	NB-R	-	-	-	-	-	-	B	14.5	B	15.4	B	13.4	-	-	-	-	-	-
	SB-L	SB-LL	SB-LL	C	27.0	C	35.0	C	28.0	D	42.0	D	37.3	D	42.0	D	41.3	E	59.4	E	61.7
	SB-LTTR	SB-T	SB-T	C	27.0	C	34.0	C	27.5	D	35.7	C	25.7	C	25.0	C	30.9	D	40.7	C	32.7
	-	SB-R	SB-R	-	-	-	-	-	-	A	0.4	A	4.6	A	4.3	-	-	-	-	-	-
Academy St / Church St and NJ Rt 27	**Overall**	**Overall**	**Overall**	**D**	**48.3**	**F**	**119.9**	**B**	**14.2**	**E**	**67.1**	**F**	**154.3**	**C**	**21.7**	**E**	**62.4**	**F**	**140.8**	**B**	**18.2**
	EB-LT	EB-LT	EB-LT	B	13.8	C	24.6	B	12.8	B	13.8	C	24.6	B	13.2	B	13.8	C	24.6	B	13.2
	EB-R	EB-R	EB-R	A	3.0	A	2.4	A	1.8	A	3.3	A	2.5	A	1.7	A	3.2	A	2.5	A	1.7
	WB-L	WB-L	WB-L	A	5.9	B	12.4	A	3.8	A	6.8	B	18.8	A	5.3	A	6.4	B	16.7	A	4.8
	WB-TR	WB-TR	WB-TR	A	5.1	A	6.7	A	3.9	A	5.2	A	6.9	A	4.7	A	5.2	A	6.8	A	4.6
	NB-LTR	NB-LTR	NB-LTR	F	235.7	F	357.9	E	59.0	F	314.8	F	447.0	F	87.0	F	294.6	F	413.2	E	72.0
HeathcoteRd/ Laurel Ave and NJ Rt 27	**Overall**	**Overall**	**Overall**	**F**	**88.3**	**F**	**87.3**	**C**	**27.0**	**F**	**94.7**	**F**	**88.5**	**C**	**27.9**	**F**	**91.9**	**F**	**88.9**	**C**	**27.6**
	EB-LTR	EB-LTR	EB-LTR	A	7.4	B	10.4	A	7.9	A	7.6	A	10.0	A	8.6	A	7.5	B	10.4	A	8.3
	WB-LTR	WB-LTR	WB-LTR	B	18.9	B	188.0	B	15.3	B	19.6	B	19.1	B	16.5	B	19.4	B	18.7	B	16.0
	NB-LTR	NB-LTR	NB-LTR	F	184.0	F	104.4	D	36.5	F	197.9	F	106.2	D	36.2	F	192.5	F	106.2	D	36.3
	SB-LTR	SB-LTR	SB-LTR	F	195.5	F	278.1	E	70.6	F	211.8	F	286.5	E	73.1	F	204.4	F	285.3	E	72.5

Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ GDP Mit	2029 Build with GDP Mitigation						2029 Build with Building E1&E2 with GDP Mitigation (Pre-COVID Condition)					
				AM		PM		SAT		AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
U.S. Rt 1 and Ridge Rd	**Overall**	**Overall**	**Overall**	**-**	**-**	**-**	**-**	**-**	**-**	**D**	**51.8**	**C**	**30.2**	**C**	**27.8**
	EB-L	EB-L	EB-L	-	-	-	-	-	-	E	77.0	F	125.7	D	44.1
	EB-T	EB-T	EB-T	-	-	-	-	-	-	F	165.9	F	93.5	E	68.8
	EB-R	EB-R	EB-R	-	-	-	-	-	-	D	35.8	A	9.3	A	5.8
	WB-L	WB-L	WB-L	-	-	-	-	-	-	F	183.9	F	99.0	D	51.3
	WB-TR	WB-TR	WB-TR	-	-	-	-	-	-	F	108.4	F	84.8	E	78.0
	NB-TTT*	NB-TTT*	NB-TTT*	-	-	-	-	-	-	B	14.3	B	18.2	B	18.3
	SB-TTT*	SB-TTT*	SB-TTT*	-	-	-	-	-	-	D	37.9	B	17.1	C	24.0
U.S. Rt 1 and Independence Way	**Overall**	**Overall**	**Overall**	**-**	**-**	**-**	**-**	**-**	**-**	**A**	**6.8**	**B**	**18.4**	**A**	**3.2**
	EB-LL	EB-LL	EB-LL	-	-	-	-	-	-	D	47.2	D	39.1	D	49.4
	EB-TR	EB-TR	EB-TR	-	-	-	-	-	-	E	75.4	E	60.4	D	55.0
	WB-L	WB-L	WB-L	-	-	-	-	-	-	E	77.8	F	92.8	E	65.8
	WB-R	WB-R	WB-R	-	-	-	-	-	-	A	0.0	A	0.1	A	0.0
	NB-TTTR	NB-TTTR	NB-TTTR	-	-	-	-	-	-	A	5.5	C	20.9	A	2.9
	SB-TTT	SB-TTT	SB-TTT	-	-	-	-	-	-	A	4.8	A	8.1	A	3.0
U.S. Rt 1 NB Ramps and College Rd E	**Overall**	**Overall**	**Overall**	**-**	**-**	**-**	**-**	**-**	**-**	**A**	**2.8**	**A**	**4.4**	**A**	**2.2**
	EB-LL	EB-LL	EB-LL	-	-	-	-	-	-	A	0.9	A	2.6	A	0.8
	EB-TT	EB-TT	EB-TT	-	-	-	-	-	-	A	0.2	A	0.1	A	0.1
	WB-TT	WB-TT	WB-TT	-	-	-	-	-	-	A	8.3	A	9.7	A	6.0
	WB-R	WB-R	WB-R	-	-	-	-	-	-	A	0.2	A	0.5	A	0.0
	NEB-R	NEB-R	NEB-R	-	-	-	-	-	-	A	0.6	A	0.3	A	0.0
Village Blvd / Jug and College Rd W	**Overall**	**Overall**	**Overall**	**-**	**-**	**-**	**-**	**-**	**-**	**B**	**10.6**	**B**	**12.2**	**A**	**7.5**
	EB-TTR	EB-TTR	EB-TTR	-	-	-	-	-	-	B	10.4	B	10.1	A	7.3
	WB-TT	WB-TT	WB-TT	-	-	-	-	-	-	A	9.1	B	11.6	A	6.6
	NB-L	NB-L	NB-L	-	-	-	-	-	-	B	13.7	B	17.3	B	12.6
	NB-R	NB-R	NB-R	-	-	-	-	-	-	A	5.6	B	16.9	A	5.7
	SB-LTT	SB-LTT	SB-LTT	-	-	-	-	-	-	B	15.6	B	17.3	B	13.2
College Rd W and Seminary Dr and Nursey Rd	**Overall**	**Overall**	**Overall**	**C**	**20.2**	**B**	**18.9**	**B**	**17.6**	**C**	**20.5**	**B**	**19.8**	**B**	**17.9**
	EB-L	EB-L	EB-L	A	7.9	B	11.2	B	12.1	A	8.0	B	12.7	B	13.5
	EB-TTR	EB-TTR	EB-TTR	C	22.9	B	14.0	B	15.6	C	23.1	B	14.9	B	17.0
	WB-L	WB-L	WB-L	C	25.2	B	13.4	B	12.9	C	25.8	B	14.8	B	14.3
	WB-T	WB-TT	WB-TT	B	12.5	C	20.5	B	18.7	B	12.7	C	22.1	C	20.4
	WB-R	WB-R	WB-R	A	0.2	A	0.3	A	0.7	A	0.2	A	0.4	A	1.0
	NB-L	NB-LL	NB-LL	D	40.2	D	38.1	D	39.5	D	40.7	D	40.1	D	41.4
	NB-TR	NB-T	NB-T	D	40.6	D	35.6	D	40.0	D	41.4	D	38.0	D	43.0
	-	NB-R	NB-R	B	14.2	B	13.9	B	13.3	B	14.3	B	14.3	B	13.8
	SB-L	SB-LL	SB-LL	D	40.4	D	36.6	D	35.4	D	41.1	D	37.2	C	34.3
	SB-LTTR	SB-T	SB-T	C	35.0	C	28.1	C	25.2	D	35.2	C	27.7	C	24.6
	-	SB-R	SB-R	A	0.3	A	0.7	A	0.7	A	0.3	A	1.9	A	2.2
Academy St / Church St and NJ Rt 27	**Overall**	**Overall**	**Overall**	**-**	**-**	**-**	**-**	**-**	**-**	**E**	**64.0**	**F**	**145.7**	**B**	**19.2**
	EB-LT	EB-LT	EB-LT	-	-	-	-	-	-	B	13.8	C	24.6	B	13.2
	EB-R	EB-R	EB-R	-	-	-	-	-	-	A	3.2	A	2.5	A	1.7
	WB-L	WB-L	WB-L	-	-	-	-	-	-	A	6.5	B	17.6	A	5.0
	WB-TR	WB-TR	WB-TR	-	-	-	-	-	-	A	5.2	A	6.9	A	4.6
	NB-LTR	NB-LTR	NB-LTR	-	-	-	-	-	-	F	301.3	F	426.1	E	75.7
HeathcoteRd/ Laurel Ave and NJ Rt 27	**Overall**	**Overall**	**Overall**	**-**	**-**	**-**	**-**	**-**	**-**	**F**	**91.8**	**F**	**88.4**	**C**	**27.6**
	EB-LTR	EB-LTR	EB-LTR	-	-	-	-	-	-	A	7.6	A	9.9	A	8.4
	WB-LTR	WB-LTR	WB-LTR	-	-	-	-	-	-	B	19.5	B	18.9	B	16.2
	NB-LTR	NB-LTR	NB-LTR	-	-	-	-	-	-	F	192.5	F	106.2	D	36.3
	SB-LTR	SB-LTR	SB-LTR	-	-	-	-	-	-	F	204.4	F	285.3	E	72.5

Table G1 cont'd – Intersection Capacity Analysis Summary (Pre-COVID Conditions)

Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ Imp	2029 Projected						2029 Projected with GDP						2029 Build						2029 Build with GDP Mitigation						2029 Build with Building E1&E2 with GDP Mitigation (Pre-COVID Condition)					
				AM		PM		SAT		AM		AM		PM		SAT		PM		SAT		AM		PM		SAT		AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
SIGNALIZED INTERSECTIONS																																	
Seminary Dr and Mapleton Rd/ Barclay Blvd	**Overall**	**Overall**	-	**C**	**23.2**	**A**	**9.1**	**A**	**5.8**	**C**	**30.7**	**B**	**11.8**	**A**	**9.0**	**C**	**27.1**	**B**	**10.8**	**A**	**7.1**	-	-	-	-	-	-	**C**	**27.6**	**B**	**11.3**	**A**	**8.3**
	EB-LTR	EB-LTR	-	C	32.3	A	6.5	A	0.7	C	31.5	A	6.5	A	1.0	C	32.1	A	6.5	A	0.8	-	-	-	-	-	-	C	31.9	A	6.5	A	1.0
	WB-LTR	WB-LTR	-	C	34.7	C	28.6	C	23.5	D	37.7	C	31.4	C	31.3	D	36.8	C	30.5	C	27.0	-	-	-	-	-	-	D	37.1	C	31.1	C	29.5
	NB-L	NB-L	-	A	4.9	A	2.4	A	2.6	A	5.1	A	2.7	A	3.4	A	5.0	A	2.6	A	3.0	-	-	-	-	-	-	A	5.0	A	2.7	A	3.0
	NB-TR	NB-TR	-	A	7.6	B	10.4	A	4.7	A	8.5	B	13.9	A	6.8	A	8.1	B	12.6	A	5.4	-	-	-	-	-	-	A	8.2	B	13.1	A	6.4
	SB-L	SB-L	-	A	3.4	A	2.5	A	2.6	A	3.6	A	3.0	A	3.3	A	3.4	A	2.8	A	3.0	-	-	-	-	-	-	A	3.6	A	3.0	A	3.1
	SB-TR	SB-TR	-	C	29.2	A	7.0	A	5.0	D	41.5	A	8.2	A	8.1	D	35.8	A	7.8	A	6.2	-	-	-	-	-	-	D	36.6	A	8.1	A	7.4
Crowne Plaza/ College Rd E and Scudders Mill Rd	**Overall**	**Overall**	**Overall**	**E**	**79.5**	**C**	**30.7**	-	-	**F**	**97.5**	**D**	**35.5**	-	-	**F**	**91.9**	**C**	**33.1**	-	-	**C**	**24.2**	**C**	**32.1**	-	-	**C**	**24.3**	**C**	**32.4**	-	-
	EB-L	EB-L	EB-L	D	45.9	D	48.9	-	-	D	49.2	D	49.3	-	-	D	48.6	D	49.2	-	-	D	48.6	D	49.2	-	-	D	48.8	D	49.2	-	-
	EB-TT	EB-TT	EB-TT	B	19.4	C	28.0	-	-	C	21.7	C	27.8	-	-	C	21.2	C	27.8	-	-	C	21.2	C	27.8	-	-	C	21.3	C	27.8	-	-
	EB-R	EB-R	EB-R	A	0.1	A	0.0	-	-	A	0.1	A	0.0	-	-	A	0.1	A	0.0	-	-	A	0.1	A	0.0	-	-	A	0.1	A	0.0	-	-
	WB-L	WB-L	WB-L	D	43.6	D	44.0	-	-	D	46.3	D	44.2	-	-	D	45.6	D	44.2	-	-	D	45.6	D	44.2	-	-	D	45.8	D	44.2	-	-
	WB-TT	WB-TT	WB-TTT	F	140.4	C	27.9	-	-	F	165.3	C	28.0	-	-	F	159.9	C	28.0	-	-	C	34.8	C	24.7	-	-	D	35.1	C	24.7	-	-
	WB-R	WB-R	WB-R	E	57.3	A	5.1	-	-	F	93.4	A	5.0	-	-	E	78.9	A	5.0	-	-	A	2.9	A	0.2	-	-	A	2.9	A	0.3	-	-
	NB-LTR	NB-LTR	NB-LTR	C	32.4	D	39.5	-	-	C	34.5	D	39.7	-	-	C	34.0	D	39.6	-	-	C	34.0	D	39.6	-	-	C	34.1	D	39.6	-	-
	SB-L	SB-L	SB-L	D	45.4	D	47.2	-	-	D	46.9	E	66.5	-	-	D	46.5	E	57.9	-	-	D	46.5	E	57.9	-	-	D	46.5	E	59.5	-	-
	SB-LT	SB-LT	SB-LT	D	44.2	D	48.1	-	-	D	45.9	E	68.5	-	-	D	45.1	E	59.0	-	-	D	45.1	E	59.0	-	-	D	45.1	E	60.6	-	-
	SB-R	SB-R	SB-R	B	10.7	A	7.0	-	-	A	9.0	A	7.0	-	-	A	9.3	A	7.0	-	-	A	9.3	A	7.0	-	-	A	9.2	A	7.0	-	-
PROPOSED SIGNALIZED INTERSECTIONS																																	
Nursery Road and Road D	-	-	**Overall**	-	-	-	-	-	-	-	-	-	-	-	-	**A**	**7.7**	**A**	**10.9**	**B**	**11.7**	-	-	-	-	-	-	**A**	**7.8**	**B**	**11.8**	**B**	**13.0**
	-	-	EB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	7.0	A	8.0	A	10.0	-	-	-	-	-	-	A	8.0	A	9.0	B	11.0
	-	-	EB-TR	-	-	-	-	-	-	-	-	-	-	-	-	A	7.9	B	10.3	B	10.8	-	-	-	-	-	-	A	8.0	B	10.4	B	11.0
	-	-	WB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	7.9	B	11.4	B	13.7	-	-	-	-	-	-	A	8.0	B	13.0	B	17.3
	-	-	WB-TR	-	-	-	-	-	-	-	-	-	-	-	-	B	12.0	B	12.5	B	14.0	-	-	-	-	-	-	B	12.1	B	13.0	B	14.9
	-	-	NB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	7.6	A	9.6	A	9.9	-	-	-	-	-	-	A	7.7	A	10.0	B	10.3
	-	-	NB-T	-	-	-	-	-	-	-	-	-	-	-	-	B	12.2	B	14.8	B	14.4	-	-	-	-	-	-	B	12.2	B	15.5	B	14.9
	-	-	NB-R	-	-	-	-	-	-	-	-	-	-	-	-	A	3.8	A	4.8	A	4.3	-	-	-	-	-	-	A	3.7	A	4.9	A	4.4
	-	-	SB-L	-	-	-	-	-	-	-	-	-	-	-	-	A	8.0	A	9.0	A	9.0	-	-	-	-	-	-	A	8.0	A	9.0	A	9.0
	-	-	SB-TR	-	-	-	-	-	-	-	-	-	-	-	-	B	14.7	C	20.1	C	23.2	-	-	-	-	-	-	B	14.8	C	21.6	C	25.0
UNSIGNALIZED INTERSECTIONS																																	
College Rd E and Research Way	WB-L	-	-	F	176.0	F	236.2	B	10.5	F	397.8	F	608.1	B	14.7	F	302.6	F	453.1	B	12.9	-	-	-	-	-	-	F	317.7	F	512.3	B	13.5
	WB-R	-	-	D	31.9	C	15.8	A	8.8	F	53.8	C	18.8	A	9.7	E	42.8	C	17.8	A	9.3	-	-	-	-	-	-	E	44.2	C	18.3	A	9.4
	SB-L	-	-	A	9.3	C	15.6	A	7.5	B	10.0	C	19.7	A	8.1	A	9.7	C	18.3	A	7.9	-	-	-	-	-	-	A	9.7	C	18.9	A	7.9
Evergreen Dr/ Western Dr and Seminary Dr	-	EB-LT	EB-L	-	-	-	-	-	-	A	8.8	B	11.4	A	8.4	A	8.8	B	11.1	A	8.1	-	-	-	-	-	-	A	8.8	B	11.2	A	8.2
	-	WB-LT	WB-L	-	-	-	-	-	-	B	10.3	A	8.2	A	8.0	B	10.2	A	8.2	A	7.9	-	-	-	-	-	-	B	10.2	A	8.2	A	8.0
	-	NB-LTR	NB-LTR	-	-	-	-	-	-	F	50.2	F	55.0	C	21.9	E	42.7	E	40.7	C	16.9	-	-	-	-	-	-	E	43.8	E	46.0	C	18.3
	-	SB-LT	SB-LT	-	-	-	-	-	-	F	169.4	F	80.1	D	25.4	F	71.0	F	56.4	C	18.2	-	-	-	-	-	-	F	74.2	F	60.9	C	19.6
	-	SB-R	SB-R	-	-	-	-	-	-	B	12.9	C	22.2	B	10.8	B	12.6	C	20.2	B	10.3	-	-	-	-	-	-	B	12.7	C	21.1	B	10.5
Nursery Road and Road P	-	-	EB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	8.5	A	8.6	A	8.7	-	-	-	-	-	-	A	8.5	A	8.7	A	8.8
	-	-	WB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	9.3	B	10.1	B	11.1	-	-	-	-	-	-	A	9.4	B	10.7	B	12.1
	-	-	NB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	7.3	A	7.3	A	7.4	-	-	-	-	-	-	A	7.3	A	7.4	A	7.4
	-	-	SB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	7.3	A	7.4	A	7.4	-	-	-	-	-	-	A	7.3	A	7.4	A	7.5
ROUNDABOUT INTERSECTIONS																																	
Nursery Road and Road B / Road C	-	-	**Overall**	-	-	-	-	-	-	-	-	-	-	-	-	**A**	**2.7**	**A**	**2.8**	**A**	**2.9**	-	-	-	-	-	-	**A**	**2.7**	**A**	**2.9**	**A**	**3.0**
	-	-	EB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.8	A	2.8	-	-	-	-	-	-	A	2.8	A	2.8	A	2.9
	-	-	WB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.8	A	2.9	-	-	-	-	-	-	A	2.7	A	2.8	A	2.9
	-	-	NB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.9	A	2.9	-	-	-	-	-	-	A	2.8	A	2.9	A	3.0
			SB-LTR	-	-	-	-	-	-	-	-	-	-	-	-	A	2.7	A	2.7	A	2.8	-	-	-	-	-	-	A	2.7	A	2.7	A	2.8

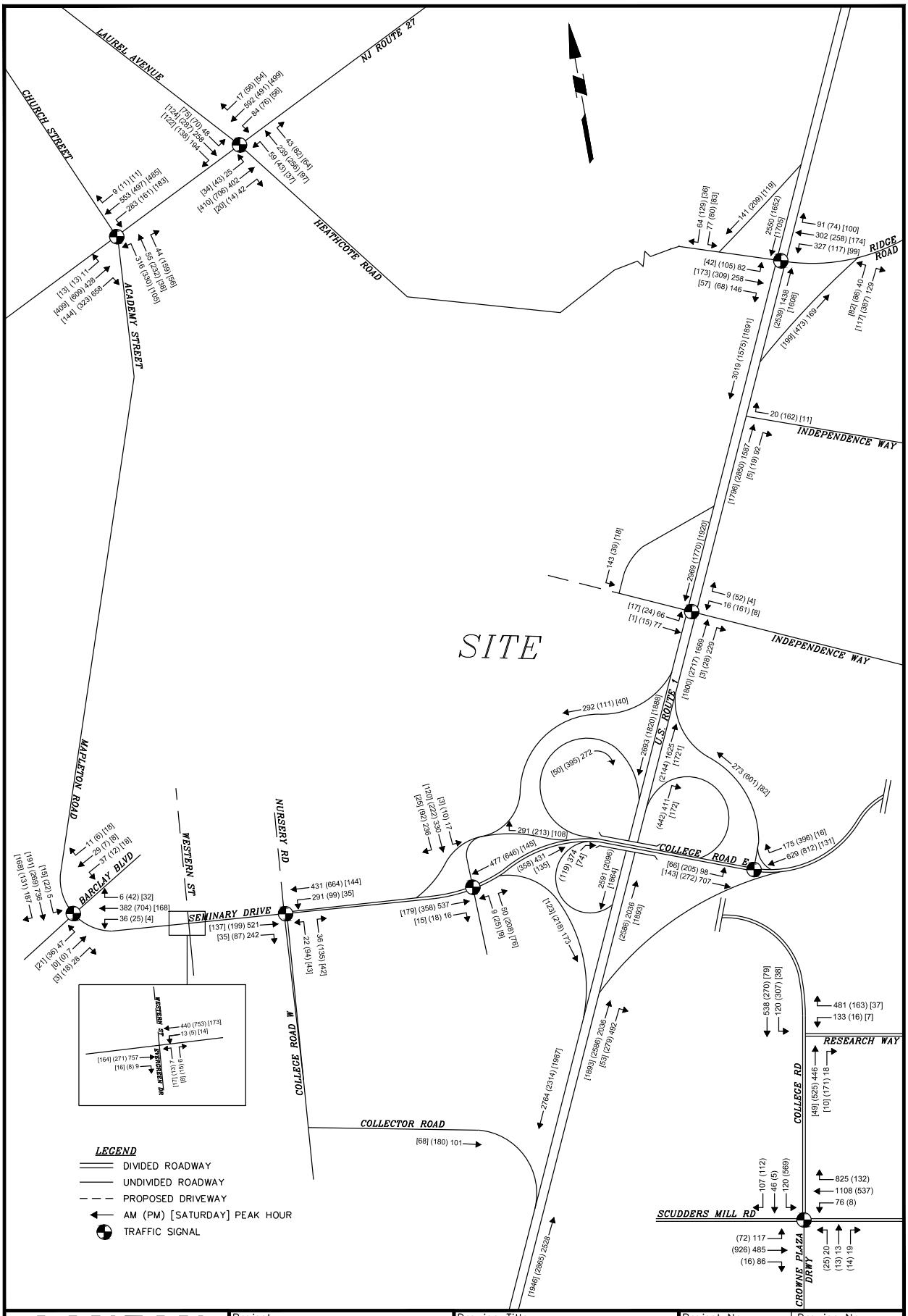
**Based on Synchro Software (Level of Service (Average vehicle delay (seconds per vehicle))

* Third thru land analyzed during the AM and PM peak hours based on NJDOT congestion relief program

Synchro Node	Location	Movement	DW	2016/2017/2018 Existing TMCs (Used in 2020 GDP TIS) AM	PM	SAT	2024 Existing TMCs (Used in Current TIS) AM	PM	SAT
5	College Rd W	EBL	DW						
5	and	EBT		521	199	137	497	257	180
5	Seminary Dr /	EBR		242	87	35	81	38	25
5	Nursery Road	WBL		291	99	35	188	72	35
5		WBT		431	664	144	433	415	202
5		WBR	DW						
5		NBL		22	94	43	14	65	26
5		NBT	DW						
5		NBR		36	135	42	12	60	32
5		SBL	DW						
5		SBT	DW						
5		SBR	DW						
4	College Rd W	EBT		537	358	179	496	318	207
4	and	EBR	DW	16	18	15	12	16	12
4	Village Blvd /	WBT		477	646	145	504	416	207
4	US 1 SB Ramp	NBL	DW	9	25	9	15	18	6
4		NBR	DW	50	208	76	70	103	28
4		SBL		17	10	3	1	5	2
4		SBT	DW	330	222	120	120	185	43
3	College Rd E	EBL		98	205	66	61	81	30
3	and	EBT		707	272	143	290	198	82
3	US 1 NB Ramps	WBT		629	812	131	318	449	92
3		WBR		175	396	16	54	93	9
3		NER		492	279	53	169	63	56
32	College Rd W	EBT		553	376	194	508	334	219
32	and	WBT		486	671	154	519	434	213
32	US 1 SB R Ramp	SBR		236	92	25	105	57	24
31	US 1 SB Jug	WBL		347	232	123	121	190	45
31		WBT		236	92	25	105	57	24
30	WB Jug &	WBT		292	111	40	113	72	40
30	US 1 SB Off Ramp	NBL		291	213	108	113	175	29
25	US 1 SB On Ramp	EBT		431	358	135	291	228	76
25	EB and	EBR		173	218	123	276	198	161
25	College Rd West	WBT		477	646	145	504	416	207
26	College Rd W	EBT		431	358	135	291	228	76
26	and	WBT		477	646	145	504	416	207
26	WB Jug	WBR		291	213	108	113	175	29
27	College Rd W	EBT		431	358	135	291	228	76
27	WB and	WBT		768	859	253	617	591	236
27	US Rt 1 SB On Ramp	WBR		272	395	50	110	265	47
28	US 1 SB Off Ramp	EBT		431	358	135	291	228	76
28	and EB	WBT		1040	1254	303	727	856	283
28	College Rd W	NBR		374	119	74	60	51	36
29	US 1 NB Off Ramp	EBT		805	477	209	351	279	112
29	and WB	WBT		629	812	131	318	449	92
29	College Rd E	SBR		411	442	172	409	407	191
19	US 1 SB and	NBT		1898	2745	1803	1775	2291	1535
19	Off Ramp to WB Jug	SBT		2693	1820	1888	2532	1755	1393
19	College Rd W	SBR		292	111	40	113	72	40
20	US 1 NB and	WBR		273	601	82	115	174	39
20	On Ramp from	NBT		1625	2144	1721	1660	2117	1496
20	College Rd E	SBT		2693	1820	1888	2532	1755	1393

21	US 1 NB and	EBR		272	395	50	110	265	47
21	Off Ramp to WB	NBT		1625	2144	1721	1660	2117	1496
21	College Rd E	NBR		411	442	172	409	407	191
21	and SB On Ramp	SBT		2693	1820	1888	2532	1755	1393
22	US 1 SB and	NBT		2036	2586	1893	2069	2524	1687
22	Off Ramp to EB	SBT		2591	2096	1864	2582	1969	1404
22	College Rd W	SBR		374	119	74	60	51	36
23	US 1 NB and	NBT		2036	2586	1893	2069	2524	1687
23	Off Ramp to EB	NBR		492	279	53	169	63	56
23	College Rd E	SBT		2591	2096	1864	2582	1969	1404
24	US 1 SB and	EBR		173	218	123	276	198	161
24	Off Ramp from EB	NBT		2528	2865	1946	2238	2587	1743
24	College Rd W	SBT		2591	2096	1864	2582	1969	1404
2	US 1	EBL		66	24	17	10	11	14
2	and	EBT		77	15	1	50	8	0
2	Independence Way	EBR		0	0	0	0	0	0
2		WBL		16	161	8	9	77	6
2		WBT					0	0	0
2		WBR		9	52	4	3	34	1
2		NBT		1669	2717	1800	1686	2282	1530
2		NBR		229	28	3	89	9	5
2		SBT		2969	1770	1920	2636	1750	1427
1	US 1	EBL		82	105	42	60	64	43
1	and	EBT		258	309	173	207	294	195
1	Ridge Rd	EBR		146	68	57	87	50	50
1		WBL		327	117	99	182	124	67
1		WBT		302	258	174	288	306	154
1		WBR		91	74	100	49	104	90
1		NBT		1438	2539	1608	1484	1984	1482
1		SBT		2550	1652	1705	2408	1384	1373
6	NJ 27	SBL							
6	and	SBT							
6	Academy St /	SBR							
6	Church St	NBL		316	330	105	229	227	105
6		NBT		55	232	38	125	188	38
6		NBR		44	159	56	47	43	56
6		EBL		11	13	13	12	41	13
6		EBT		428	609	409	275	528	409
6		EBR		658	323	144	576	424	144
6		WBL		283	161	183	256	183	183
6		WBT		553	497	485	390	410	485
6		WBR		9	11	11	4	4	11
7	NJ 27	SBL		48	70	75	59	79	75
7	and	SBT		258	287	124	168	153	124
7	Heathcote Rd /	SBR		194	138	122	173	128	122
7	Laurel Ave	NBL		59	43	37	23	36	37
7	G	NBT		239	256	97	201	254	97
7	[2017]	NBR		43	82	64	26	42	64
7	w/ Balance Adjustments	EBL		25	43	34	19	17	34
7		EBT		402	706	410	300	552	410
7		EBR		42	14	20	5	13	20
7		WBL		84	76	56	55	47	56
7		WBT		592	491	499	467	429	499
7		WBR		17	56	54	35	80	54

11	Seminary Dr	EBL	DW						
11	and	EBT		757	271	164	572	280	197
11	Western Dr /	EBR	DW	9	8	16	9	8	16
11	Evergreen Dr	WBL	DW	13	5	14	13	5	14
11		WBT		440	753	173	434	475	214
11		WBR	DW						
11		NBL	DW	7	13	17	7	13	17
11		NBT	DW						
11		NBR	DW	6	15	8	6	15	8
11		SBL	DW						
11		SBT	DW						
11		SBR	DW						
8	Barclay Blvd	EBL		47	36	21	82	26	10
8	and	EBT	DW	7	0	0	6	1	2
8	Seminary Dr /	EBR		28	18	3	34	10	5
8	Mapleton Rd	WBL	DW	37	12	18	41	23	12
8		WBT	DW	29	7	8	20	5	7
8		WBR	DW	11	6	18	28	7	9
8		NBL		36	35	4	8	11	2
8		NBT		382	704	168	229	420	212
8		NBR	DW	6	42	32	18	27	23
8		SBL	DW	5	22	15	10	15	11
8		SBT		736	269	191	559	254	201
8		SBR		187	131	168	181	136	127
10	Research Way	WBL		133	16	7	44	19	11
10	and	WBR		481	163	37	176	63	42
10	College Rd E	NBU					0	0	0
10		NBT		446	525	49	204	223	49
10		NBR		18	171	10	12	46	3
10		SBL		120	307	38	47	129	29
10		SBT		538	270	79	270	201	66
9	Scudders Mill Rd	EBL		117	72		31	62	1
9	and	EBT		485	926		437	913	534
9	College Rd E	EBR	DW	86	16		6	5	14
9		WBL	DW	76	8		1	13	10
9		WBT		1108	537		994	580	522
9		WBR		825	132		279	97	43
9		NBL	DW	20	25		9	5	23
9		NBT	DW	13	13		2	2	5
9		NBR	DW	19	14		3	9	12
9		SBL		120	569		101	288	61
9		SBT	DW	46	5		0	3	2
9		SBR		107	112		84	51	11



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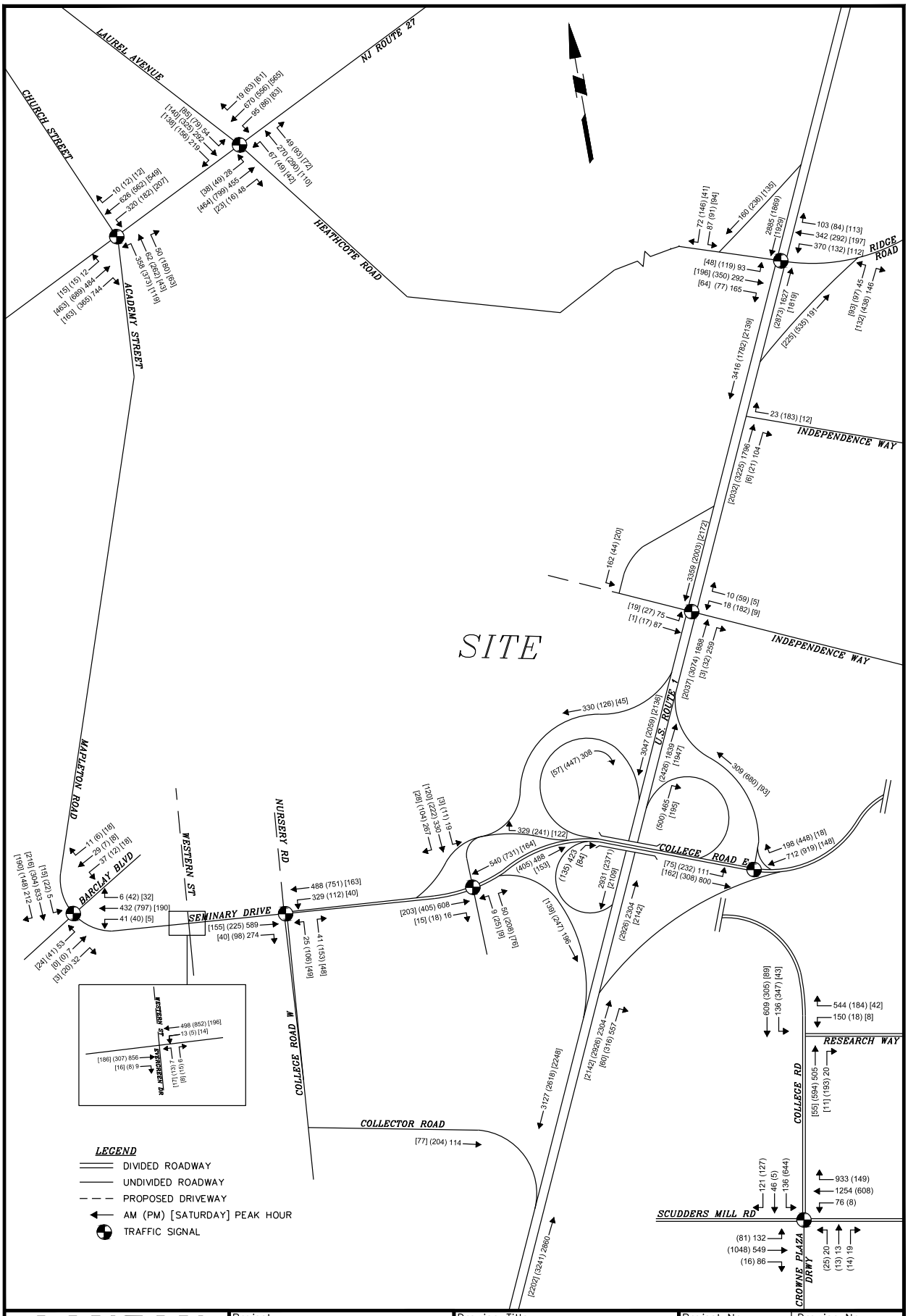
Project
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PLAINSBORO
MIDDLESEX COUNTY NEW JERSEY

Drawing Title
2024 EXISTING TRAFFIC VOLUMES (PRE-COVID CONDITION)

Project No. 130091505	Drawing No. FIGURE 2A
Date 5/23/2025	
Scale 1" = 1'	
Drawn By KAMP / Checked By	
Submission Date MAY 2025	Sheet 16 of 23

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Style Table: Langan_OCE.stb Layout: 2A-ExPreCOVID



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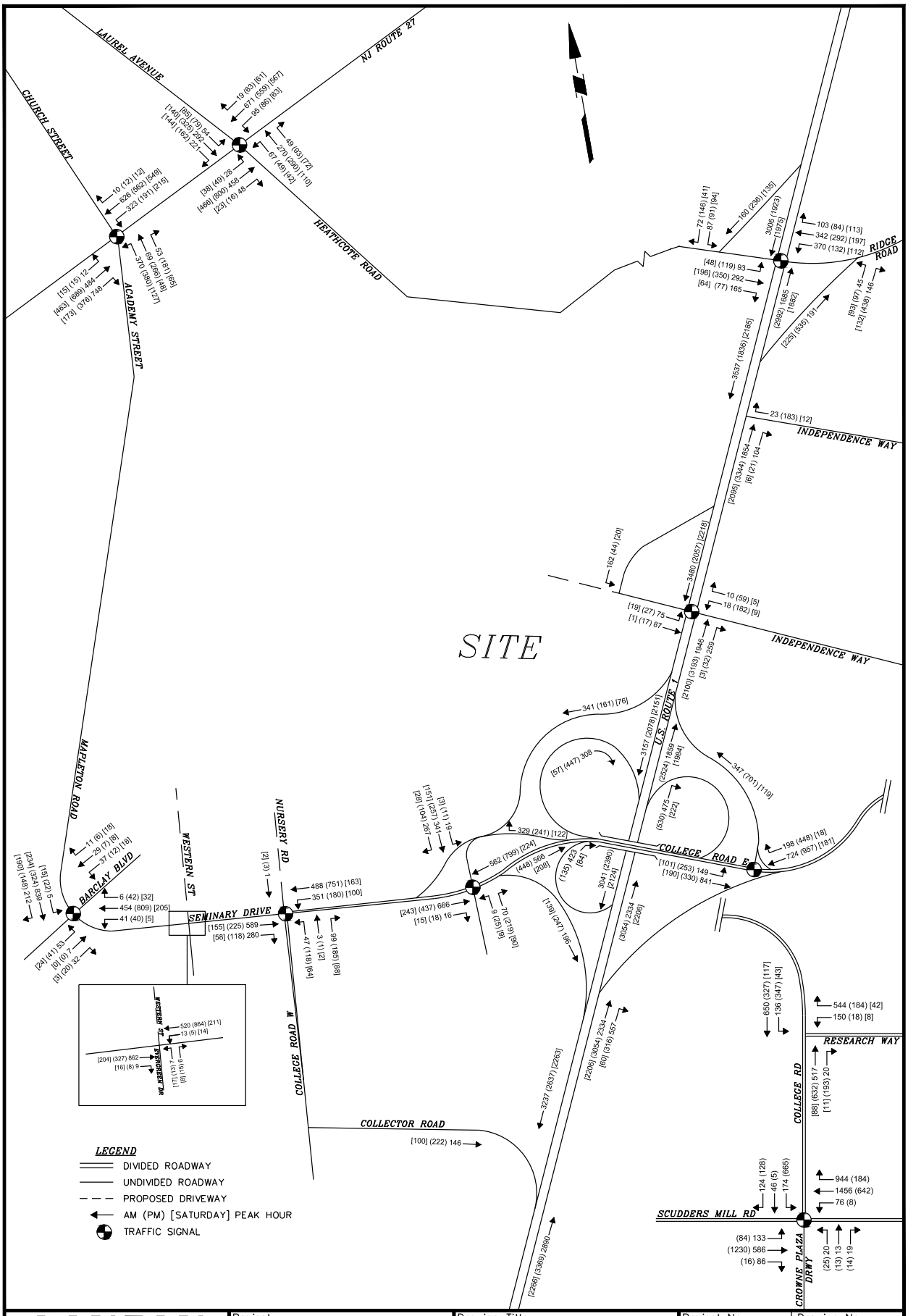
Project
PRINCETON NURSERIES
PLAINSBORO
MIDDLESEX COUNTY NEW JERSEY

Drawing Title
2029 BASE TRAFFIC VOLUMES (PRE-COVID CONDITION)

Project No. 130091505	Drawing No. FIGURE 3A
Date 5/23/2025	
Scale 1" = 1'	
Drawn By KAMP / Checked By	
Submission Date MAY 2025	Sheet 17 of 23

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Style Table: Langan_OCE.stb Layout: 3A-BasePreCOVID



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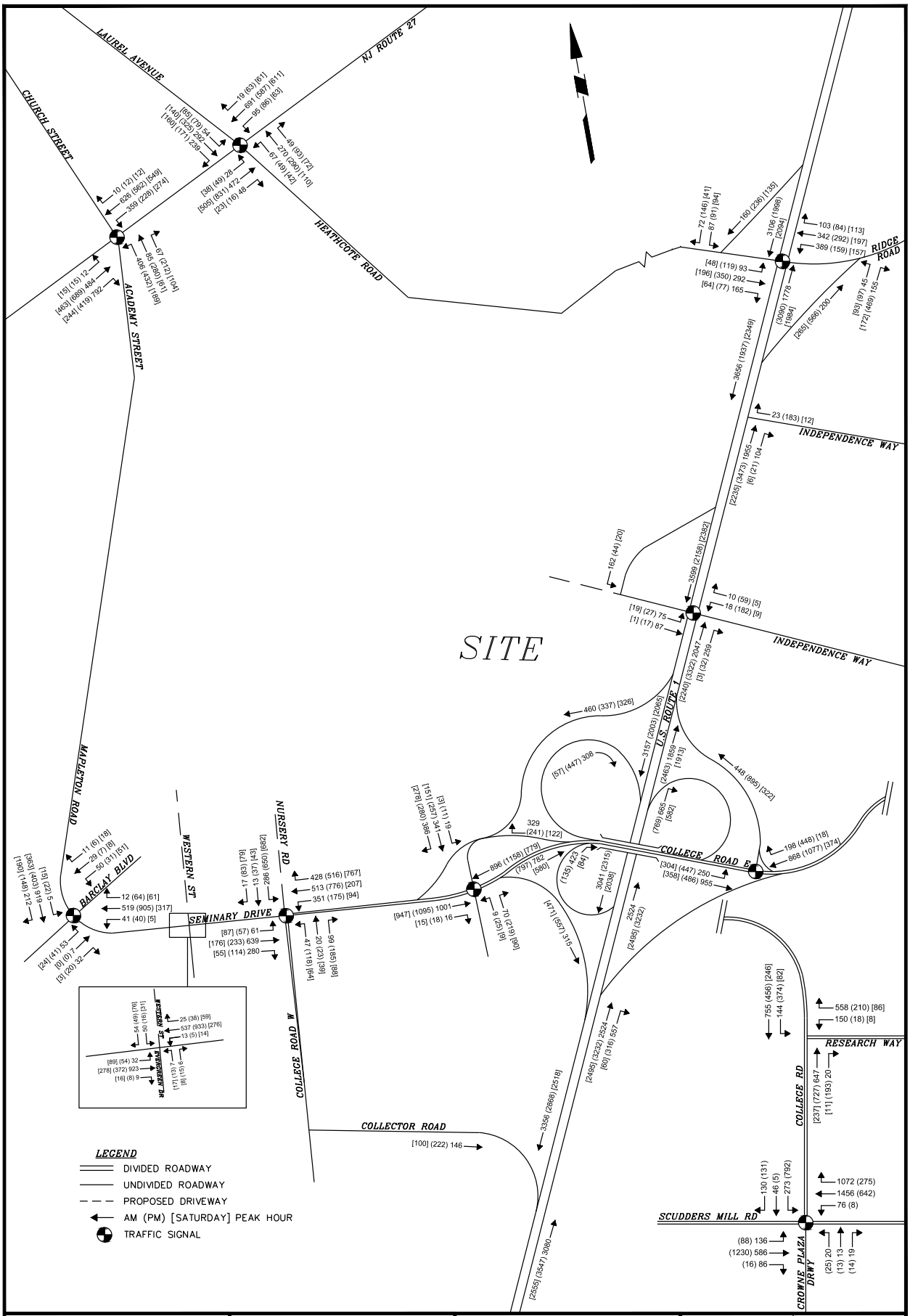
Project
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PLAINSBORO
MIDDLESEX COUNTY NEW JERSEY

Drawing Title
2029 PROJECTED TRAFFIC VOLUMES (PRE-COVID CONDITION)

Project No. 130091505	Drawing No. FIGURE 5A
Date 5/23/2025	
Scale 1" = 1'	
Drawn By KAMP / Checked By	
Submission Date MAY 2025	Sheet 18 of 23

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PLAINSBORO
MIDDLESEX COUNTY NEW JERSEY

Drawing Title
2029 PROJECTED TRAFFIC VOLUMES - GDP PLAINSBORO (PRE-COVID CONDITION)

Project No. 130091505	Drawing No. FIGURE 7A
Date 5/23/2025	
Scale 1" = 1'	
Drawn By KAMP / Checked By	
Submission Date MAY 2025	Sheet 19 of 23

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Style Table: Langan_OCE.stb Layout: 7A-ProjPlPreCOVID

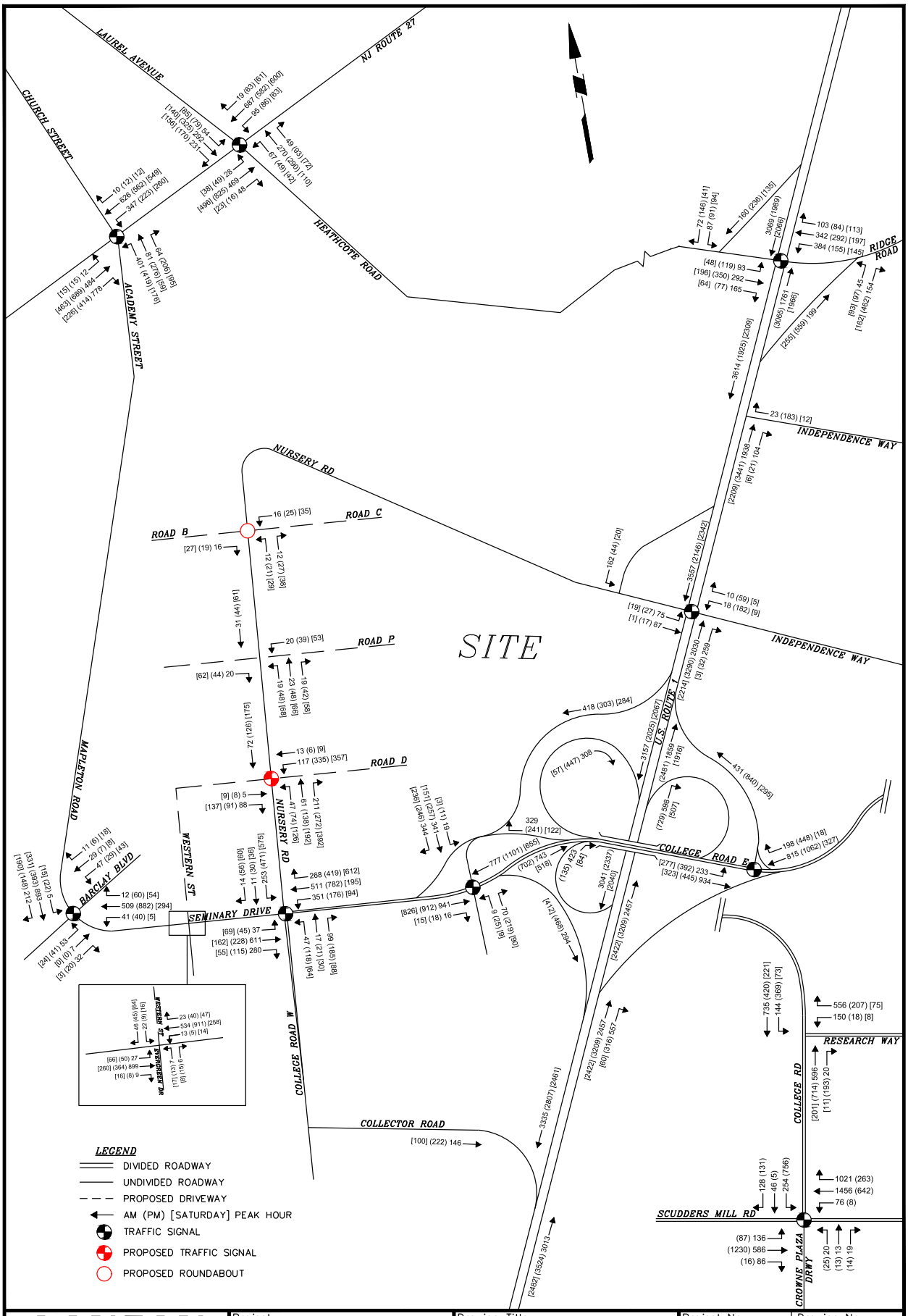


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Project	PRINCETON NURSERIES PLAINSBORO MIDDLESEX COUNTY NEW JERSEY
Drawing Title	2029 BUILD TRAFFIC VOLUMES - PROPOSED PLAINSBORO (PRE-COVID CONDITION)
Project No.	130091505
Date	5/23/2025
Scale	1" = 1'
Drawn By / Checked By	KAMP
Submission Date	MAY 2025
Drawing No.	FIGURE 14A
Sheet	20 of 23

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Project	PRINCETON NURSERIES PLAINSBORO MIDDLESEX COUNTY NEW JERSEY
Drawing Title	2029 BUILD TRAFFIC VOLUMES - PROPOSED PLAINSBORO (WITH E1 & E2) (PRE-COVID CONDITION)
Project No.	130091505
Date	5/23/2025
Scale	1" = 1'
Drawn By / Checked By	KAMP
Submission Date	MAY 2025
Drawing No.	FIGURE 15A
Sheet	21 of 23

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AM PROJECTED

PRE-COVID CONDITION

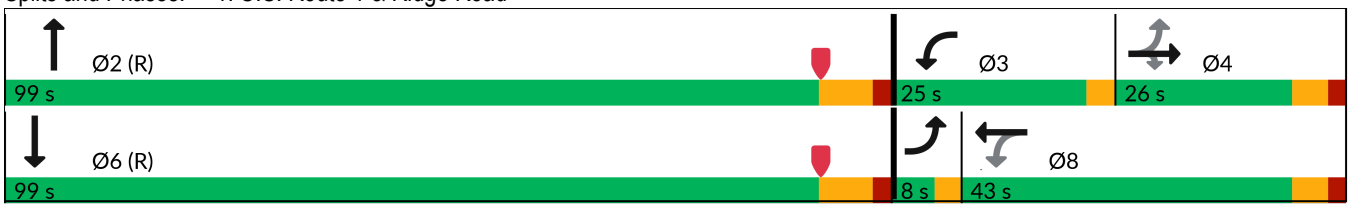
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	292	165	370	342	103	0	1685	0	0	3006	0
Future Volume (vph)	93	292	165	370	342	103	0	1685	0	0	3006	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.965							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1615	1805	1793	0	0	4975	0	0	5070	0
Flt Permitted	0.200			0.174								
Satd. Flow (perm)	373	1863	1615	331	1793	0	0	4975	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80		10							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	0%	0%	2%	3%	0%	7%	0%	0%	5%	0%
Adj. Flow (vph)	95	298	168	378	349	105	0	1719	0	0	3067	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	298	168	378	454	0	0	1719	0	0	3067	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	26.0	26.0	25.0	43.0			99.0			99.0	
Total Split (%)	5.3%	17.3%	17.3%	16.7%	28.7%			66.0%			66.0%	
Maximum Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.0	20.0	20.0	48.0	37.0			94.0			94.0	
Actuated g/C Ratio	0.19	0.13	0.13	0.32	0.25			0.63			0.63	
v/c Ratio	0.82	1.20	0.59	1.17	1.01			0.55			0.97	
Control Delay (s/veh)	89.7	175.7	40.9	144.6	99.2			15.0			36.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	89.7	175.7	40.9	144.6	99.2			15.0			36.4	
LOS	F	F	D	F	F			B			D	
Approach Delay (s/veh)		120.7			119.8			15.0			36.4	
Approach LOS		F			F			B			D	
90th %ile Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	20.0	20.0	22.0	37.0			91.0			91.0	
10th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
Stops (vph)	80	237	82	254	384			798			2615	
Fuel Used(gal)	3	13	2	15	15			24			77	
CO Emissions (g/hr)	181	914	165	1060	1072			1645			5408	
NOx Emissions (g/hr)	35	178	32	206	209			320			1052	
VOC Emissions (g/hr)	42	212	38	246	248			381			1253	
Dilemma Vehicles (#)	0	7	0	0	14			54			99	
Queue Length 50th (ft)	67	~353	81	~382	~447			290			988	
Queue Length 95th (ft)	#141	#545	164	#596	#681			322			1069	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	116	248	284	322	449			3117			3177	

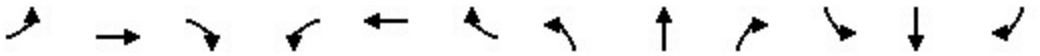
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.82	1.20	0.59	1.17	1.01			0.55			0.97	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 112 (75%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay (s/veh): 49.3		Intersection LOS: D	
Intersection Capacity Utilization 105.0%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	87	0	18	0	10	0	1946	259	0	3480	0
Future Volume (vph)	75	87	0	18	0	10	0	1946	259	0	3480	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.982				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1881	0	1805	0	1615	0	4918	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1881	0	1805	0	1615	0	4918	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						124		59				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			361	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	7%	1%	0%	4%	0%
Adj. Flow (vph)	77	90	0	19	0	10	0	2006	267	0	3588	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	90	0	19	0	10	0	2273	0	0	3588	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



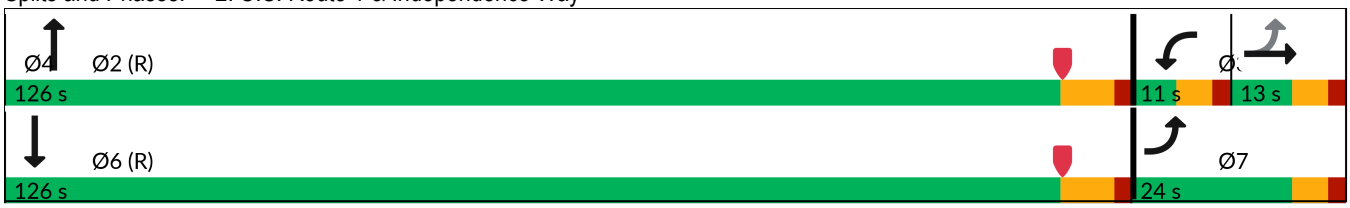
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				126.0			126.0	
Total Split (%)	16.0%	8.7%		7.3%				84.0%			84.0%	
Maximum Green (s)	18.0	7.0		5.0				118.0			118.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	16.0	9.4		5.0		150.0		123.0			123.0	
Actuated g/C Ratio	0.11	0.06		0.03		1.00		0.82			0.82	
v/c Ratio	0.21	0.77		0.32		0.01		0.56			0.85	
Control Delay (s/veh)	52.8	79.9		84.6		0.0		5.1			4.4	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	52.8	79.9		84.6		0.0		5.1			4.4	
LOS	D	E		F		A		A			A	
Approach Delay (s/veh)		67.4			55.4			5.1			4.4	
Approach LOS		E			E			A			A	
90th %ile Green (s)	18.0	7.0		5.0				118.0			118.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				118.0			118.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	18.0	7.0		5.0				118.0			118.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	13.3	13.3		0.0				122.7			122.7	
30th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
10th %ile Green (s)	12.6	12.6		0.0				123.4			123.4	
10th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
Stops (vph)	70	67		20		0		657			606	
Fuel Used(gal)	2	2		1		0		29			27	
CO Emissions (g/hr)	108	152		39		4		2044			1867	
NOx Emissions (g/hr)	21	30		8		1		398			363	
VOC Emissions (g/hr)	25	35		9		1		474			433	
Dilemma Vehicles (#)	0	2		0		0		74			102	
Queue Length 50th (ft)	38	~95		19		0		239			171	
Queue Length 95th (ft)	m41	m#111		49		0		264			m178	
Internal Link Dist (ft)		319			684			451			281	
Turn Bay Length (ft)						300						
Base Capacity (vph)	420	117		60		1615		4043			4198	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.18	0.77		0.32		0.01		0.56			0.85	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 6.6		Intersection LOS: A	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	149	841	0	0	724	198	0	0	557	0	0	0
Future Volume (vph)	149	841	0	0	724	198	0	0	557	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3400	3574	0	0	3574	1615	0	0	1627	0	0	0
Flt Permitted	0.276											
Satd. Flow (perm)	988	3574	0	0	3574	1615	0	0	1627	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						211			482			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	159	895	0	0	770	211	0	0	593	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	159	895	0	0	770	211	0	0	593	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

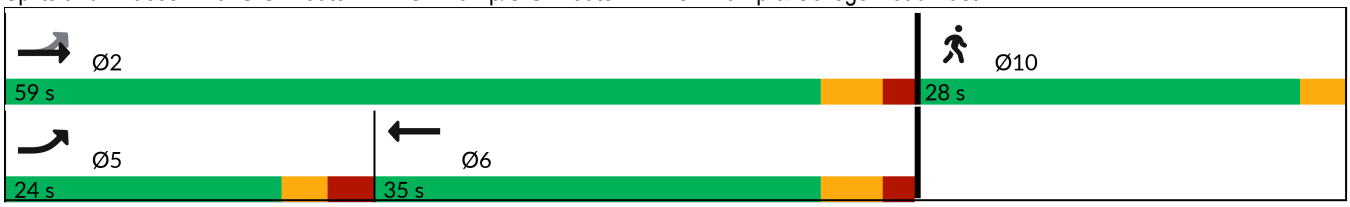
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.4	36.4			21.0	36.4			36.4			
Actuated g/C Ratio	0.84	1.00			0.58	1.00			1.00			
v/c Ratio	0.12	0.25			0.37	0.13			0.36			
Control Delay (s/veh)	0.7	0.2			6.5	0.2			0.6			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.7	0.2			6.5	0.2			0.6			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.3			5.1			0.6				
Approach LOS		A			A			A				
90th %ile Green (s)	7.1	30.1			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	0.0	32.0			32.0							
10th %ile Term Code	Skip	Dwell			Dwell							
Stops (vph)	14	0			385	0			0			
Fuel Used(gal)	1	2			24	5			5			
CO Emissions (g/hr)	37	146			1704	376			359			
NOx Emissions (g/hr)	7	28			331	73			70			
VOC Emissions (g/hr)	9	34			395	87			83			
Dilemma Vehicles (#)	0	0			68	0			0			
Queue Length 50th (ft)	0	0			46	0			0			
Queue Length 95th (ft)	0	0			74	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2017	3574			3016	1615			1627			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.08	0.25			0.26	0.13			0.36			

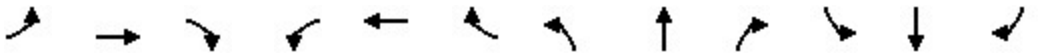
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 43.3%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.1			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 38			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

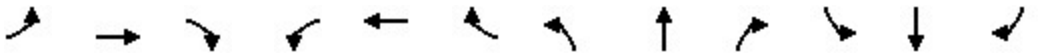


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	666	16	0	562	0	9	0	70	19	341	0
Future Volume (vph)	0	666	16	0	562	0	9	0	70	19	341	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.997	
Satd. Flow (prot)	0	3564	0	0	3574	0	1626	0	1615	0	3565	0
Flt Permitted							0.523				0.997	
Satd. Flow (perm)	0	3564	0	0	3574	0	895	0	1615	0	3565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4							75			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		350			259			325			205	
Travel Time (s)		6.0			4.4			7.4			4.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	11%	0%	0%	0%	1%	0%
Adj. Flow (vph)	0	716	17	0	604	0	10	0	75	20	367	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	733	0	0	604	0	10	0	75	0	387	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

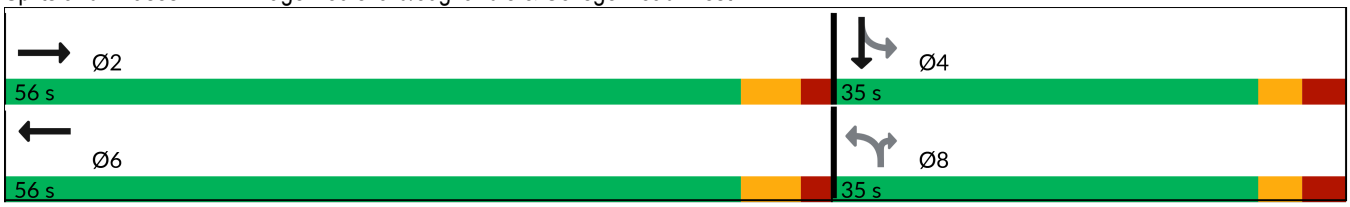


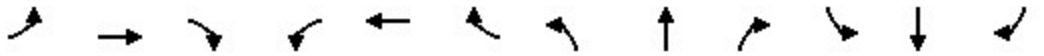
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		15.5			15.5		8.5		8.5		8.5	
Actuated g/C Ratio		0.43			0.43		0.24		0.24		0.24	
v/c Ratio		0.48			0.39		0.05		0.17		0.46	
Control Delay (s/veh)		8.9			8.2		11.3		4.9		13.8	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		8.9			8.2		11.3		4.9		13.8	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		8.9			8.2			5.7			13.8	
Approach LOS		A			A			A			B	
90th %ile Green (s)		17.5			17.5		11.1		11.1	11.1	11.1	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		15.0			15.0		9.2		9.2	9.2	9.2	
70th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
50th %ile Green (s)		15.0			15.0		8.2		8.2	8.2	8.2	
50th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
30th %ile Green (s)		15.0			15.0		7.4		7.4	7.4	7.4	
30th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		434			342		11		20		285	
Fuel Used(gal)		7			5		0		0		3	
CO Emissions (g/hr)		497			370		8		31		221	
NOx Emissions (g/hr)		97			72		2		6		43	
VOC Emissions (g/hr)		115			86		2		7		51	
Dilemma Vehicles (#)		71			58		0		0		0	
Queue Length 50th (ft)		47			37		1		0		34	
Queue Length 95th (ft)		91			73		9		20		67	
Internal Link Dist (ft)		270			179			245			125	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3564			3574		722		1317		2877	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.21			0.17		0.01		0.06		0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 36.1			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 9.6		Intersection LOS: A	
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 40.6			
70th %ile Actuated Cycle: 36.2			
50th %ile Actuated Cycle: 35.2			
30th %ile Actuated Cycle: 34.4			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





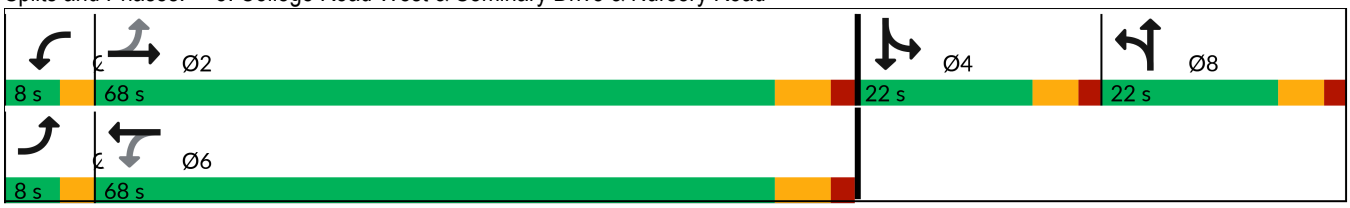
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	589	280	351	488	1	47	3	99	1	1	0
Future Volume (vph)	1	589	280	351	488	1	47	3	99	1	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	0		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.952				0.850		0.854				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3437	0	1787	1881	1615	1805	1466	0	1643	3458	0
Flt Permitted	0.476			0.246			0.950			0.950		
Satd. Flow (perm)	904	3437	0	463	1881	1615	1805	1466	0	1643	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96				173		103				
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		1646			423			875			735	
Travel Time (s)		28.1			7.2			14.9			14.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	11%	0%	0%	0%
Adj. Flow (vph)	1	614	292	366	508	1	49	3	103	1	1	0
Shared Lane Traffic (%)										35%		
Lane Group Flow (vph)	1	906	0	366	508	1	49	106	0	1	1	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	40.0	30.8		42.6	39.5	57.8	6.3	6.3		7.2	7.2	
Actuated g/C Ratio	0.69	0.53		0.74	0.68	1.00	0.11	0.11		0.12	0.12	
v/c Ratio	0.00	0.48		0.80	0.40	0.00	0.25	0.42		0.00	0.00	
Control Delay (s/veh)	5.0	10.3		23.9	9.3	0.0	29.4	13.0		27.0	27.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.0	10.3		23.9	9.3	0.0	29.4	13.0		27.0	27.0	
LOS	A	B		C	A	A	C	B		C	C	
Approach Delay (s/veh)		10.3			15.4			18.2			27.0	
Approach LOS		B			B			B			C	
90th %ile Green (s)	5.0	30.3		5.0	30.3		8.8	8.8		7.0	7.0	
90th %ile Term Code	Max	Hold		Max	Gap		Gap	Gap		Min	Min	
70th %ile Green (s)	0.0	30.0		5.0	38.0		6.6	6.6		0.0	0.0	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
50th %ile Green (s)	0.0	30.0		5.0	38.0		5.9	5.9		0.0	0.0	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
30th %ile Green (s)	0.0	30.0		5.0	38.0		5.3	5.3		0.0	0.0	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
10th %ile Green (s)	0.0	30.0		5.0	38.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Min		Max	Hold		Skip	Skip		Skip	Skip	
Stops (vph)	1	466		97	232	0	44	26		3	3	
Fuel Used(gal)	0	19		4	5	0	1	1		0	0	
CO Emissions (g/hr)	2	1298		274	346	0	69	79		2	2	
NOx Emissions (g/hr)	0	253		53	67	0	14	15		0	0	
VOC Emissions (g/hr)	0	301		63	80	0	16	18		1	1	
Dilemma Vehicles (#)	0	57		0	27	0	0	6		0	0	
Queue Length 50th (ft)	0	81		28	62	0	16	1		0	0	
Queue Length 95th (ft)	2	203		#229	272	0	51	43		5	2	
Internal Link Dist (ft)		1566			343			795			655	
Turn Bay Length (ft)	150									400		
Base Capacity (vph)	705	3326		458	1819	1615	511	489		465	980	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.00	0.27		0.80	0.28	0.00	0.10	0.22		0.00	0.00	

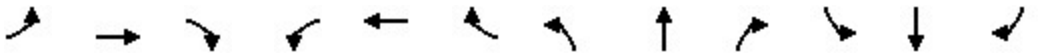
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 57.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 13.3		Intersection LOS: B	
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 73.1			
70th %ile Actuated Cycle: 57.6			
50th %ile Actuated Cycle: 56.9			
30th %ile Actuated Cycle: 56.3			
10th %ile Actuated Cycle: 45			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	484	748	323	626	10	370	69	53	0	0	0
Future Volume (vph)	12	484	748	323	626	10	370	69	53	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.985				
Flt Protected		0.999		0.950				0.964				
Satd. Flow (prot)	0	1893	1658	1852	1927	0	0	1798	0	0	0	0
Flt Permitted		0.981		0.355				0.964				
Satd. Flow (perm)	0	1859	1658	692	1927	0	0	1798	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			813		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		509			588			1050			585	
Travel Time (s)		9.9			16.0			23.9			13.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	13	526	813	351	680	11	402	75	58	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	539	813	351	691	0	0	535	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



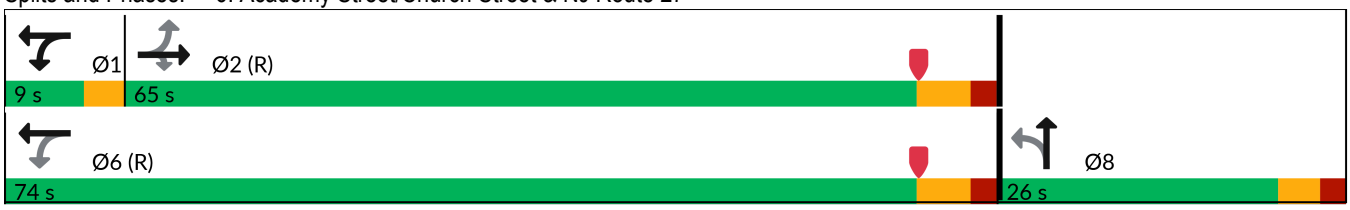
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.49	0.62	0.63	0.51			1.42				
Control Delay (s/veh)		13.8	3.0	5.9	4.7			235.7				
Queue Delay		0.0	0.0	0.0	0.4			0.0				
Total Delay (s/veh)		13.8	3.0	5.9	5.1			235.7				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		7.3			5.4			235.7				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		274	40	73	182			376				
Fuel Used(gal)		5	4	2	4			47				
CO Emissions (g/hr)		369	245	160	314			3290				
NOx Emissions (g/hr)		72	48	31	61			640				
VOC Emissions (g/hr)		85	57	37	73			763				
Dilemma Vehicles (#)		25	0	0	0			0				
Queue Length 50th (ft)		185	0	42	104			~462				
Queue Length 95th (ft)		268	47	m57	m133			#665				
Internal Link Dist (ft)		429			508			970			505	
Turn Bay Length (ft)												
Base Capacity (vph)		1096	1311	560	1368			377				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	277			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.49	0.62	0.63	0.63			1.42				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.42			
Intersection Signal Delay (s/veh): 48.3		Intersection LOS: D	
Intersection Capacity Utilization 121.7%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	458	48	95	671	19	67	270	49	54	292	221
Future Volume (vph)	28	458	48	95	671	19	67	270	49	54	292	221
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.997			0.983			0.947	
Flt Protected		0.997			0.994			0.991			0.995	
Satd. Flow (prot)	0	2122	0	0	2145	0	0	1790	0	0	1755	0
Flt Permitted		0.937			0.871			0.596			0.867	
Satd. Flow (perm)	0	1995	0	0	1880	0	0	1076	0	0	1530	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		588			1371			1875			956	
Travel Time (s)		16.0			26.7			51.1			18.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	2%	2%	6%	5%	2%	9%	6%	2%	1%
Adj. Flow (vph)	29	477	50	99	699	20	70	281	51	56	304	230
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	556	0	0	818	0	0	402	0	0	590	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.46			0.73			1.29			1.33	
Control Delay (s/veh)		7.3			18.9			184.0			195.5	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		7.4			18.9			184.0			195.5	
LOS		A			B			F			F	
Approach Delay (s/veh)		7.4			18.9			184.0			195.5	
Approach LOS		A			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		129			541			299			440	
Fuel Used(gal)		4			15			35			30	
CO Emissions (g/hr)		277			1039			2471			2079	
NOx Emissions (g/hr)		54			202			481			405	
VOC Emissions (g/hr)		64			241			573			482	
Dilemma Vehicles (#)		0			39			0			21	
Queue Length 50th (ft)		89			342			~328			~491	
Queue Length 95th (ft)		m113			494			#512			#701	
Internal Link Dist (ft)		508			1291			1795			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1197			1128			312			443	
Starvation Cap Reductn		71			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.49			0.73			1.29			1.33	

Intersection Summary

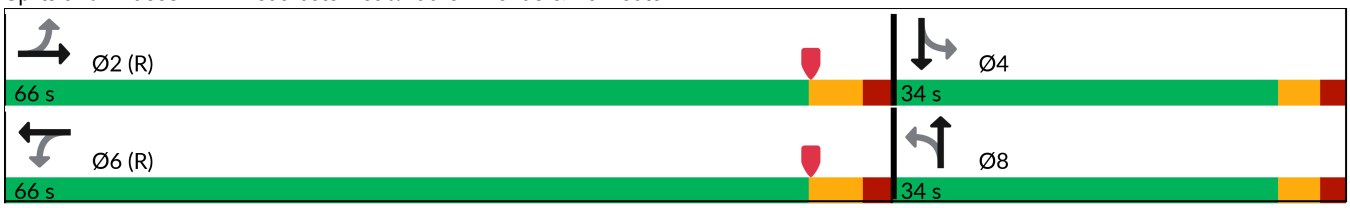
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay (s/veh): 88.3		Intersection LOS: F	
Intersection Capacity Utilization 114.4%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

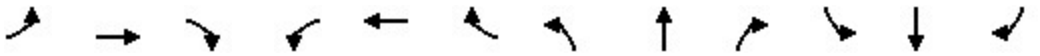
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	7	32	37	29	11	41	454	6	5	839	212
Future Volume (vph)	53	7	32	37	29	11	41	454	6	5	839	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.980			0.998			0.970	
Flt Protected		0.972			0.976		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1794	0	1805	1878	0	1805	1843	0
Flt Permitted		0.776			0.797		0.082			0.475		
Satd. Flow (perm)	0	1391	0	0	1465	0	156	1878	0	902	1843	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			9			1			23	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		876			237			415			370	
Travel Time (s)		13.3			6.5			7.1			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	0%	0%	0%	0%	9%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	57	8	34	40	31	12	44	488	6	5	902	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	83	0	44	494	0	5	1130	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

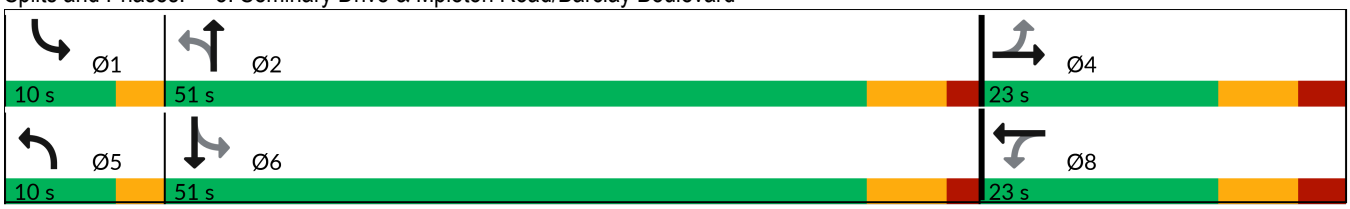


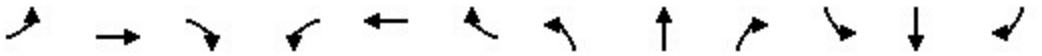
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		9.2			9.2		53.7	50.5		52.1	47.2	
Actuated g/C Ratio		0.13			0.13		0.76	0.72		0.74	0.67	
v/c Ratio		0.48			0.42		0.18	0.37		0.01	0.91	
Control Delay (s/veh)		32.3			34.7		4.9	7.6		3.4	29.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		32.3			34.7		4.9	7.6		3.4	29.2	
LOS		C			C		A	A		A	C	
Approach Delay (s/veh)		32.3			34.7			7.4			29.1	
Approach LOS		C			C			A			C	
90th %ile Green (s)	13.6	13.6		13.6	13.6		6.0	45.0		5.0	44.0	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Hold		Min	Max	
70th %ile Green (s)	10.3	10.3		10.3	10.3		5.6	52.6		0.0	44.0	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Hold		Skip	Max	
50th %ile Green (s)	8.3	8.3		8.3	8.3		5.1	52.1		0.0	44.0	
50th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Hold		Skip	Max	
30th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		64			61		11	187		2	651	
Fuel Used(gal)		2			1		1	9		0	53	
CO Emissions (g/hr)		134			65		50	627		15	3689	
NOx Emissions (g/hr)		26			13		10	122		3	718	
VOC Emissions (g/hr)		31			15		12	145		3	855	
Dilemma Vehicles (#)		5			0		0	22		0	52	
Queue Length 50th (ft)		32			33		4	80		1	~579	
Queue Length 95th (ft)		78			75		14	218		3	#914	
Internal Link Dist (ft)		796			157			335			290	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		326			328		288	1346		773	1244	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.30			0.25		0.15	0.37		0.01	0.91	

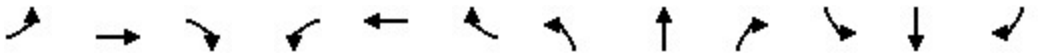
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 70.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 76.7%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 81.6			
70th %ile Actuated Cycle: 77.9			
50th %ile Actuated Cycle: 75.4			
30th %ile Actuated Cycle: 66			
10th %ile Actuated Cycle: 51			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	586	86	76	1456	944	20	13	19	174	46	124
Future Volume (vph)	133	586	86	76	1456	944	20	13	19	174	46	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.951				0.850
Flt Protected	0.950			0.950				0.981		0.950	0.972	
Satd. Flow (prot)	1787	3438	1509	1805	3438	1583	0	1715	0	1618	1695	1583
Flt Permitted	0.950			0.950				0.981		0.950	0.972	
Satd. Flow (perm)	1787	3438	1509	1805	3438	1583	0	1715	0	1618	1695	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			646		21				139
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		612			1998			444			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	5%	7%	0%	5%	2%	0%	13%	0%	6%	0%	2%
Adj. Flow (vph)	149	658	97	85	1636	1061	22	15	21	196	52	139
Shared Lane Traffic (%)										37%		
Lane Group Flow (vph)	149	658	97	85	1636	1061	0	58	0	123	125	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

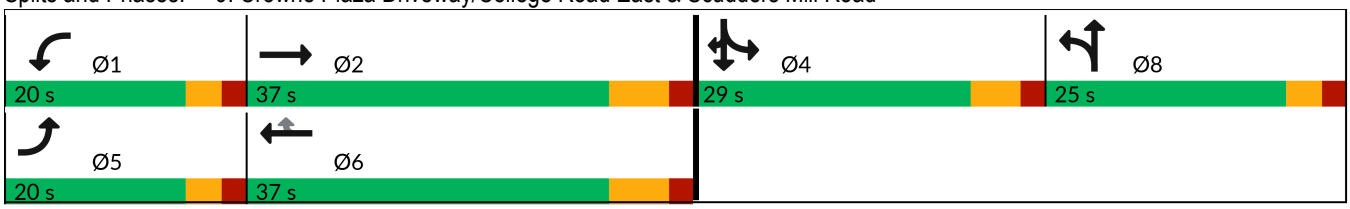


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	10.8	35.9	79.8	8.5	30.7	30.7		7.1		10.6	10.6	10.6
Actuated g/C Ratio	0.14	0.45	1.00	0.11	0.38	0.38		0.09		0.13	0.13	0.13
v/c Ratio	0.62	0.43	0.06	0.44	1.24	1.05		0.34		0.57	0.56	0.42
Control Delay (s/veh)	45.9	19.4	0.1	43.6	140.4	57.3		32.4		45.4	44.2	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	45.9	19.4	0.1	43.6	140.4	57.3		32.4		45.4	44.2	10.7
LOS	D	B	A	D	F	E		C		D	D	B
Approach Delay (s/veh)		21.7			105.7			32.4			32.6	
Approach LOS		C			F			C			C	
90th %ile Green (s)	15.0	32.8		12.2	30.0	30.0	9.6	9.6		16.0	16.0	16.0
90th %ile Term Code	Max	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	13.4	33.5		9.9	30.0	30.0	7.6	7.6		12.8	12.8	12.8
70th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	11.2	32.9		8.3	30.0	30.0	6.3	6.3		10.7	10.7	10.7
50th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
30th %ile Green (s)	9.3	32.4		6.9	30.0	30.0	6.0	6.0		8.7	8.7	8.7
30th %ile Term Code	Gap	Hold		Gap	Max	Max	Min	Min		Gap	Gap	Gap
10th %ile Green (s)	6.4	41.4		0.0	30.0	30.0	0.0	0.0		6.0	6.0	6.0
10th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Min	Min	Min
Stops (vph)	119	392	0	66	1078	344		35		96	97	21
Fuel Used(gal)	5	15	1	3	77	28		1		6	6	5
CO Emissions (g/hr)	319	1045	68	185	5356	1975		54		430	435	367
NOx Emissions (g/hr)	62	203	13	36	1042	384		11		84	85	71
VOC Emissions (g/hr)	74	242	16	43	1241	458		13		100	101	85
Dilemma Vehicles (#)	0	30	0	0	71	0		2		0	5	0
Queue Length 50th (ft)	72	125	0	41	~565	~378		18		63	63	0
Queue Length 95th (ft)	143	215	0	91	#834	#678		58		126	127	49
Internal Link Dist (ft)		532			1918			364			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	343	1545	1509	346	1321	1006		455		476	499	564
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.43	0.43	0.06	0.25	1.24	1.05		0.13		0.26	0.25	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 79.8			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay (s/veh): 79.5		Intersection LOS: E	
Intersection Capacity Utilization 85.0%		ICU Level of Service E	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 93.6			
70th %ile Actuated Cycle: 86.8			
50th %ile Actuated Cycle: 81.2			
30th %ile Actuated Cycle: 77			
10th %ile Actuated Cycle: 60.4			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	22.3

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	150	544	0	517	20	136	650
Future Vol, veh/h	150	544	0	517	20	136	650
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91	91
Heavy Vehicles, %	0	1	0	2	11	1	1
Mvmt Flow	165	598	0	568	22	149	714

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1235	295	714	0	0	590	0
Stage 1	579	-	-	-	-	-	-
Stage 2	656	-	-	-	-	-	-
Critical Hdwy	6.8	6.92	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.31	2.5	-	-	2.21	-
Pot Cap-1 Maneuver	171	704	513	-	-	988	-
Stage 1	529	-	-	-	-	-	-
Stage 2	483	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 145	704	513	-	-	988	-
Mov Cap-2 Maneuver	~ 145	-	-	-	-	-	-
Stage 1	529	-	-	-	-	-	-
Stage 2	410	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	63.01	0	1.61
HCM LOS	F		

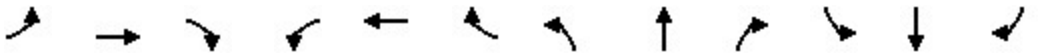
Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	513	-	-	145	704	988	-
HCM Lane V/C Ratio	-	-	-	1.133	0.849	0.151	-
HCM Ctrl Dly (s/v)	0	-	-	176	31.9	9.3	-
HCM Lane LOS	A	-	-	F	D	A	-
HCM 95th %tile Q(veh)	0	-	-	9.2	9.7	0.5	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

PM PROJECTED

PRE-COVID CONDITION

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	350	77	132	292	84	0	2992	0	0	1923	0
Future Volume (vph)	119	350	77	132	292	84	0	2992	0	0	1923	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.966							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1787	1881	1615	1805	1795	0	0	5219	0	0	5119	0
Flt Permitted	0.133			0.125								
Satd. Flow (perm)	250	1881	1615	238	1795	0	0	5219	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60		6							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	2%	3%	0%	2%	0%	0%	4%	0%
Adj. Flow (vph)	124	365	80	138	304	88	0	3117	0	0	2003	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	365	80	138	392	0	0	3117	0	0	2003	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

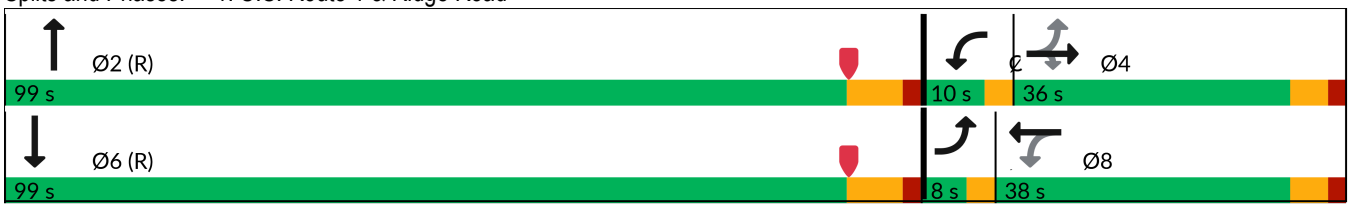


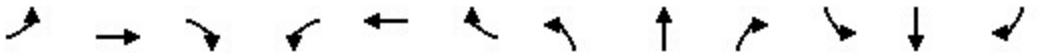
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	10.0	38.0			99.0			99.0	
Total Split (%)	5.5%	24.8%	24.8%	6.9%	26.2%			68.3%			68.3%	
Maximum Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	38.0	30.0	30.0	42.0	32.0			94.0			94.0	
Actuated g/C Ratio	0.26	0.21	0.21	0.29	0.22			0.65			0.65	
v/c Ratio	1.05	0.94	0.21	0.96	0.98			0.92			0.60	
Control Delay (s/veh)	140.3	88.8	17.3	107.6	95.0			15.7			15.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	140.3	88.8	17.3	107.6	95.0			15.7			15.7	
LOS	F	F	B	F	F			B			B	
Approach Delay (s/veh)		90.0			98.3			15.7			15.7	
Approach LOS		F			F			B			B	
90th %ile Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	30.0	30.0	7.0	32.0			91.0			91.0	
10th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
Stops (vph)	83	315	20	89	328			2448			1059	
Fuel Used(gal)	4	10	1	4	13			61			30	
CO Emissions (g/hr)	303	685	38	307	887			4287			2098	
NOx Emissions (g/hr)	59	133	7	60	173			834			408	
VOC Emissions (g/hr)	70	159	9	71	206			994			486	
Dilemma Vehicles (#)	0	11	0	0	12			76			66	
Queue Length 50th (ft)	~94	345	14	100	366			700			376	
Queue Length 95th (ft)	#206	#551	57	#214	#575			584			418	
Internal Link Dist (ft)		77			79			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	118	389	381	144	400			3383			3318	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	1.05	0.94	0.21	0.96	0.98			0.92			0.60	

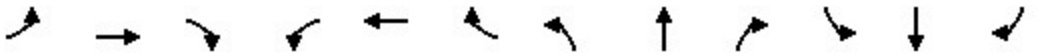
Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 21 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 29.5		Intersection LOS: C	
Intersection Capacity Utilization 95.9%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	17	0	182	0	59	0	3193	32	0	2057	0
Future Volume (vph)	27	17	0	182	0	59	0	3193	32	0	2057	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5209	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5209	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		3				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			532			361	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	11%	0%	4%	0%
Adj. Flow (vph)	29	18	0	196	0	63	0	3433	34	0	2212	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	18	0	196	0	63	0	3467	0	0	2212	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



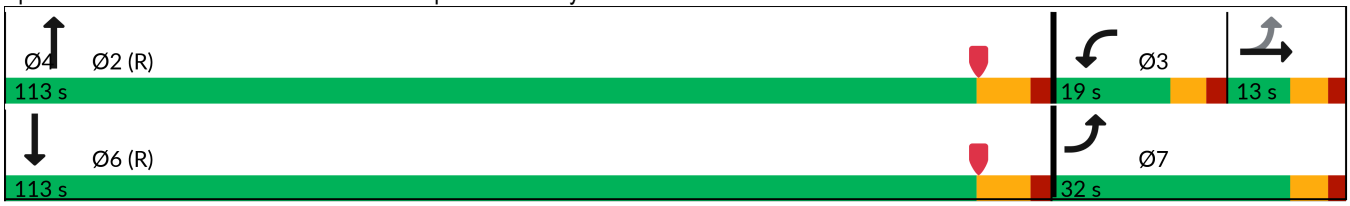
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	32.0	13.0		19.0				113.0			113.0	
Total Split (%)	22.1%	9.0%		13.1%				77.9%			77.9%	
Maximum Green (s)	26.0	7.0		13.0				105.0			105.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	17.6	7.0		18.0		145.0		108.2			108.2	
Actuated g/C Ratio	0.12	0.05		0.12		1.00		0.75			0.75	
v/c Ratio	0.07	0.20		0.88		0.04		0.89			0.58	
Control Delay (s/veh)	43.0	61.0		96.5		0.1		18.0			8.6	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	43.0	61.0		96.5		0.1		18.0			8.6	
LOS	D	E		F		A		B			A	
Approach Delay (s/veh)		49.9			73.1			18.0			8.6	
Approach LOS		D			E			B			A	
90th %ile Green (s)	26.0	7.0		13.0				105.0			105.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	26.0	7.0		13.0				105.0			105.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	26.0	7.0		13.0				105.0			105.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	0.0	0.0		27.4				103.6			103.6	
30th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
10th %ile Green (s)	0.0	0.0		23.4				107.6			107.6	
10th %ile Term Code	Skip	Skip		Max				Coord			Coord	
Stops (vph)	23	18		135		0		2337			750	
Fuel Used(gal)	0	0		6		0		77			25	
CO Emissions (g/hr)	34	28		391		23		5367			1736	
NOx Emissions (g/hr)	7	5		76		4		1044			338	
VOC Emissions (g/hr)	8	6		91		5		1244			402	
Dilemma Vehicles (#)	0	1		0		0		111			85	
Queue Length 50th (ft)	11	16		~226		0		818			267	
Queue Length 95th (ft)	m18	m30		#390		0		883			m280	
Internal Link Dist (ft)		319			684			452			281	
Turn Bay Length (ft)						300						
Base Capacity (vph)	627	91		223		1615		3899			3830	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.05	0.20		0.88		0.04		0.89			0.58	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 17.2		Intersection LOS: B	
Intersection Capacity Utilization 85.1%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	253	330	0	0	957	448	0	0	316	0	0	0
Future Volume (vph)	253	330	0	0	957	448	0	0	316	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3467	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.169											
Satd. Flow (perm)	617	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						405			704			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			521			621	
Travel Time (s)		6.2			9.5			11.8			14.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	284	371	0	0	1075	503	0	0	355	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	284	371	0	0	1075	503	0	0	355	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

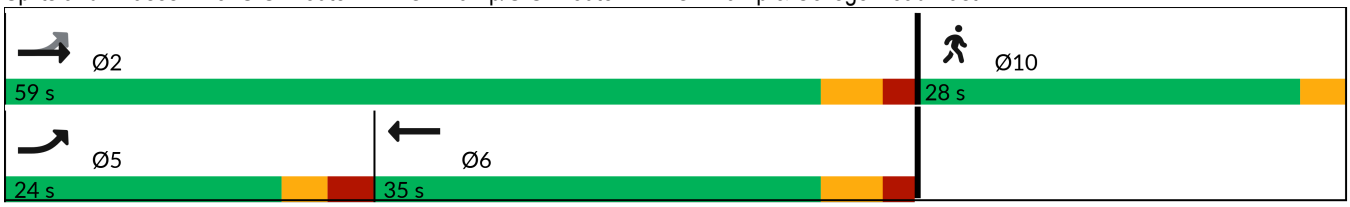
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	32.4	38.4			18.7	38.4			38.4			
Actuated g/C Ratio	0.84	1.00			0.49	1.00			1.00			
v/c Ratio	0.26	0.10			0.61	0.31			0.22			
Control Delay (s/veh)	1.1	0.1			9.1	0.5			0.3			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	1.1	0.1			9.1	0.5			0.3			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.5			6.3			0.3				
Approach LOS		A			A			A				
90th %ile Green (s)	9.1	37.7			22.6							
90th %ile Term Code	Gap	Hold			Gap							
70th %ile Green (s)	8.0	33.8			19.8							
70th %ile Term Code	Gap	Hold			Gap							
50th %ile Green (s)	7.3	30.5			17.2							
50th %ile Term Code	Gap	Hold			Gap							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	23	0			612	0			0			
Fuel Used(gal)	1	1			34	12			3			
CO Emissions (g/hr)	63	57			2358	853			202			
NOx Emissions (g/hr)	12	11			459	166			39			
VOC Emissions (g/hr)	15	13			547	198			47			
Dilemma Vehicles (#)	0	0			94	0			0			
Queue Length 50th (ft)	0	0			74	0			0			
Queue Length 95th (ft)	0	0			125	0			0			
Internal Link Dist (ft)		282			478			441			541	
Turn Bay Length (ft)												
Base Capacity (vph)	1863	3574			2742	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.15	0.10			0.39	0.31			0.22			

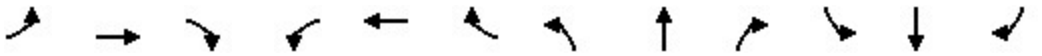
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 38.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 4.0		Intersection LOS: A	
Intersection Capacity Utilization 51.7%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 43.7			
70th %ile Actuated Cycle: 39.8			
50th %ile Actuated Cycle: 36.5			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

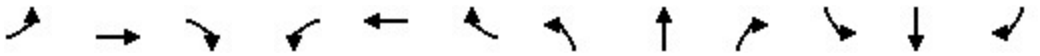


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	437	18	0	799	0	25	0	219	11	257	0
Future Volume (vph)	0	437	18	0	799	0	25	0	219	11	257	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.994							0.850			
Flt Protected							0.950				0.998	
Satd. Flow (prot)	0	3554	0	0	3610	0	1805	0	1599	0	3569	0
Flt Permitted							0.566				0.998	
Satd. Flow (perm)	0	3554	0	0	3610	0	1075	0	1599	0	3569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							249			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		350			259			324			205	
Travel Time (s)		6.0			4.4			7.4			4.7	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Adj. Flow (vph)	0	497	20	0	908	0	28	0	249	13	292	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	517	0	0	908	0	28	0	249	0	305	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

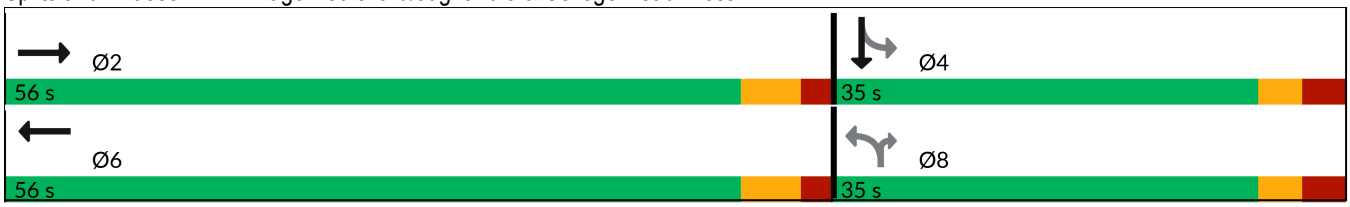


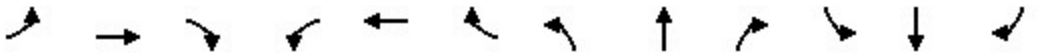
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		16.4			16.4		8.1		8.1		8.1	
Actuated g/C Ratio		0.45			0.45		0.22		0.22		0.22	
v/c Ratio		0.32			0.56		0.12		0.45		0.39	
Control Delay (s/veh)		7.2			9.2		13.4		5.6		14.0	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		7.2			9.2		13.4		5.6		14.0	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		7.2			9.2			6.4			14.0	
Approach LOS		A			A			A			B	
90th %ile Green (s)		20.6			20.6		10.5		10.5	10.5	10.5	
90th %ile Term Code		Hold			Gap		Hold		Hold	Gap	Gap	
70th %ile Green (s)		16.6			16.6		8.7		8.7	8.7	8.7	
70th %ile Term Code		Hold			Gap		Hold		Hold	Gap	Gap	
50th %ile Green (s)		15.0			15.0		7.7		7.7	7.7	7.7	
50th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Min		Min	Min	Min	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Min		Min	Min	Min	
Stops (vph)		252			518		23		39		208	
Fuel Used(gal)		4			8		0		1		2	
CO Emissions (g/hr)		295			558		20		91		164	
NOx Emissions (g/hr)		57			109		4		18		32	
VOC Emissions (g/hr)		68			129		5		21		38	
Dilemma Vehicles (#)		46			82		0		0		0	
Queue Length 50th (ft)		30			61		4		0		25	
Queue Length 95th (ft)		57			108		19		37		56	
Internal Link Dist (ft)		270			179			244			125	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3554			3610		858		1326		2849	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.15			0.25		0.03		0.19		0.11	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 36.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 9.0		Intersection LOS: A	
Intersection Capacity Utilization 48.6%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 43.1			
70th %ile Actuated Cycle: 37.3			
50th %ile Actuated Cycle: 34.7			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





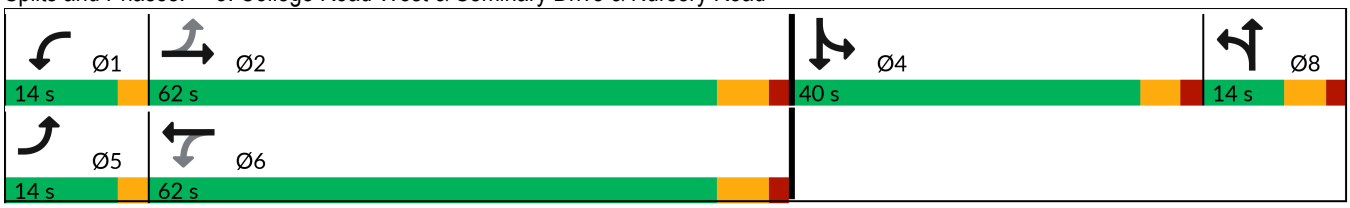
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	225	118	180	751	1	118	1	185	1	3	0
Future Volume (vph)	1	225	118	180	751	1	118	1	185	1	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	0		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.949				0.850		0.851				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3404	0	1805	1900	1615	1805	1601	0	1643	3458	0
Flt Permitted	0.231			0.490			0.950			0.950		
Satd. Flow (perm)	439	3404	0	931	1900	1615	1805	1601	0	1643	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		90				159		201				
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		1645			423			875			733	
Travel Time (s)		28.0			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	245	128	196	816	1	128	1	201	1	3	0
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	1	373	0	196	816	1	128	202	0	1	3	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	14.0	62.0		14.0	62.0		14.0	14.0		40.0	40.0	
Total Split (%)	10.8%	47.7%		10.8%	47.7%		10.8%	10.8%		30.8%	30.8%	
Maximum Green (s)	11.0	55.0		11.0	55.0		8.0	8.0		34.0	34.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	43.7	34.4		48.7	43.4	68.1	8.3	8.3		7.2	7.2	
Actuated g/C Ratio	0.64	0.51		0.72	0.64	1.00	0.12	0.12		0.11	0.11	
v/c Ratio	0.00	0.21		0.26	0.67	0.00	0.58	0.54		0.01	0.01	
Control Delay (s/veh)	4.0	7.7		4.4	12.8	0.0	44.3	12.2		35.0	34.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	4.0	7.7		4.4	12.8	0.0	44.3	12.2		35.0	34.0	
LOS	A	A		A	B	A	D	B		C	C	
Approach Delay (s/veh)		7.7			11.2			24.6			34.3	
Approach LOS		A			B			C			C	
90th %ile Green (s)	5.0	49.8		10.2	55.0		8.0	8.0		7.0	7.0	
90th %ile Term Code	Min	Hold		Gap	Max		Max	Max		Min	Min	
70th %ile Green (s)	0.0	30.0		7.0	40.0		8.0	8.0		0.0	0.0	
70th %ile Term Code	Skip	Min		Gap	Hold		Max	Max		Skip	Skip	
50th %ile Green (s)	0.0	30.0		6.5	39.5		8.0	8.0		0.0	0.0	
50th %ile Term Code	Skip	Min		Gap	Hold		Max	Max		Skip	Skip	
30th %ile Green (s)	0.0	30.0		6.1	39.1		8.0	8.0		0.0	0.0	
30th %ile Term Code	Skip	Min		Gap	Hold		Max	Max		Skip	Skip	
10th %ile Green (s)	0.0	32.4		5.5	40.9		8.0	8.0		0.0	0.0	
10th %ile Term Code	Skip	Hold		Gap	Gap		Max	Max		Skip	Skip	
Stops (vph)	1	129		51	453	0	94	31		3	6	
Fuel Used(gal)	0	7		1	9	0	3	2		0	0	
CO Emissions (g/hr)	2	461		91	636	0	188	131		2	6	
NOx Emissions (g/hr)	0	90		18	124	0	37	25		0	1	
VOC Emissions (g/hr)	0	107		21	147	0	44	30		1	1	
Dilemma Vehicles (#)	0	19		0	45	0	0	13		0	0	
Queue Length 50th (ft)	0	27		17	150	0	45	0		0	0	
Queue Length 95th (ft)	2	72		61	519	0	#184	68		6	6	
Internal Link Dist (ft)		1565			343			795			653	
Turn Bay Length (ft)	150									400		
Base Capacity (vph)	540	2861		811	1589	1615	219	371		849	1787	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.00	0.13		0.24	0.51	0.00	0.58	0.54		0.00	0.00	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 68.1			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 71.1%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 97			
70th %ile Actuated Cycle: 61			
50th %ile Actuated Cycle: 60.5			
30th %ile Actuated Cycle: 60.1			
10th %ile Actuated Cycle: 61.9			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	689	376	191	562	12	380	266	181	0	0	0
Future Volume (vph)	15	689	376	191	562	12	380	266	181	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.970				
Flt Protected		0.999		0.950				0.978				
Satd. Flow (prot)	0	1929	1658	1834	1940	0	0	1795	0	0	0	0
Flt Permitted		0.983		0.175				0.978				
Satd. Flow (perm)	0	1898	1658	338	1940	0	0	1795	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			392		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	1%	0%	9%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	16	718	392	199	585	13	396	277	189	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	734	392	199	598	0	0	862	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

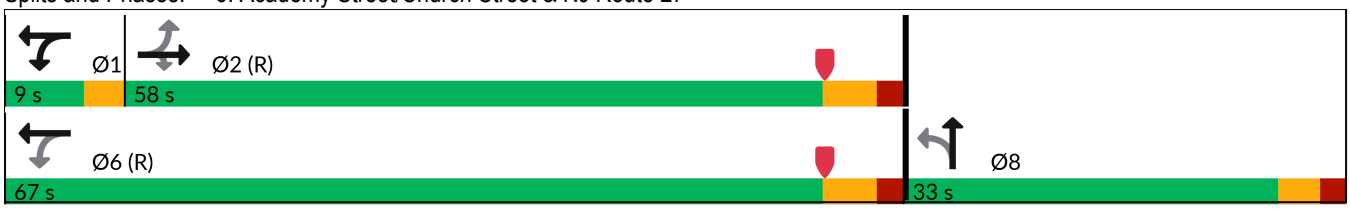
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.74	0.37	0.65	0.48			1.72				
Control Delay (s/veh)		24.6	2.4	12.4	6.4			357.9				
Queue Delay		0.0	0.0	0.0	0.4			0.0				
Total Delay (s/veh)		24.6	2.4	12.4	6.7			357.9				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		16.9			8.1			357.9				
Approach LOS		B			A			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		542	23	68	190			589				
Fuel Used(gal)		10	2	2	4			100				
CO Emissions (g/hr)		713	121	119	304			6959				
NOx Emissions (g/hr)		139	24	23	59			1354				
VOC Emissions (g/hr)		165	28	28	70			1613				
Dilemma Vehicles (#)		35	0	0	0			0				
Queue Length 50th (ft)		349	0	31	117			~815				
Queue Length 95th (ft)		500	43	m40	m137			#1048				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		986	1050	306	1242			502				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	238			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.74	0.37	0.65	0.60			1.72				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.72			
Intersection Signal Delay (s/veh): 119.9		Intersection LOS: F	
Intersection Capacity Utilization 131.4%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	800	16	86	559	63	49	290	93	79	325	162
Future Volume (vph)	49	800	16	86	559	63	49	290	93	79	325	162
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.988			0.971			0.961	
Flt Protected		0.997			0.994			0.994			0.993	
Satd. Flow (prot)	0	2170	0	0	2163	0	0	1834	0	0	1780	0
Flt Permitted		0.928			0.802			0.762			0.730	
Satd. Flow (perm)	0	2020	0	0	1745	0	0	1406	0	0	1309	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1875			956	
Travel Time (s)		16.1			26.7			51.1			18.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	1%	0%	0%	0%	4%	0%	0%	0%	3%	2%	1%
Adj. Flow (vph)	50	816	16	88	570	64	50	296	95	81	332	165
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	882	0	0	722	0	0	441	0	0	578	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.73			0.69			1.08			1.53	
Control Delay (s/veh)		10.1			18.0			104.4			278.1	
Queue Delay		0.3			0.0			0.0			0.0	
Total Delay (s/veh)		10.4			18.0			104.4			278.1	
LOS		B			B			F			F	
Approach Delay (s/veh)		10.4			18.0			104.4			278.1	
Approach LOS		B			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		309			469			358			421	
Fuel Used(gal)		7			13			33			39	
CO Emissions (g/hr)		510			918			2286			2735	
NOx Emissions (g/hr)		99			179			445			532	
VOC Emissions (g/hr)		118			213			530			634	
Dilemma Vehicles (#)		0			35			0			19	
Queue Length 50th (ft)		196			291			~316			~518	
Queue Length 95th (ft)		m280			427			#506			#726	
Internal Link Dist (ft)		509			1291			1795			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1212			1047			407			379	
Starvation Cap Reductn		55			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.76			0.69			1.08			1.53	

Intersection Summary

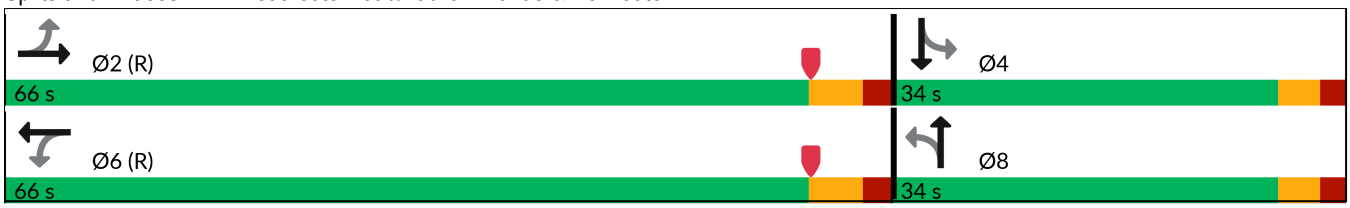
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.53		
Intersection Signal Delay (s/veh): 87.3	Intersection LOS: F	
Intersection Capacity Utilization 114.5%	ICU Level of Service H	
Analysis Period (min) 15		

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

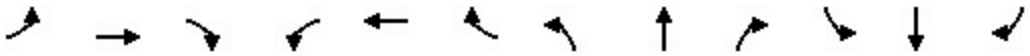
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	0	20	12	7	6	40	809	42	22	324	148
Future Volume (vph)	41	0	20	12	7	6	40	809	42	22	324	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.968			0.993			0.953	
Flt Protected		0.968			0.977		0.950			0.950		
Satd. Flow (prot)	0	1756	0	0	1730	0	1805	1869	0	1805	1787	0
Flt Permitted		0.877			0.816		0.455			0.232		
Satd. Flow (perm)	0	1591	0	0	1445	0	864	1869	0	441	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			6			5			41	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		876			238			415			371	
Travel Time (s)		13.3			6.5			7.1			6.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	8%	0%	0%	0%	1%	0%	0%	1%	2%
Adj. Flow (vph)	42	0	21	12	7	6	41	834	43	23	334	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	25	0	41	877	0	23	487	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

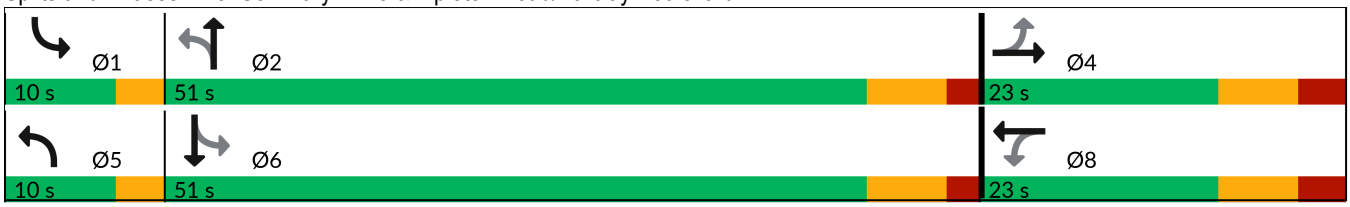


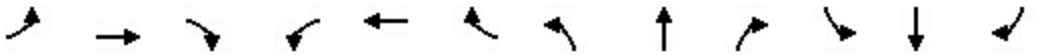
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.3			7.3		53.0	50.6		52.3	49.1	
Actuated g/C Ratio		0.11			0.11		0.82	0.78		0.80	0.76	
v/c Ratio		0.24			0.15		0.05	0.60		0.05	0.36	
Control Delay (s/veh)		6.5			28.6		2.4	10.4		2.5	7.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		6.5			28.6		2.4	10.4		2.5	7.0	
LOS		A			C		A	B		A	A	
Approach Delay (s/veh)		6.5			28.6			10.0			6.8	
Approach LOS		A			C			B			A	
90th %ile Green (s)	7.5	7.5		7.5	7.5		5.5	44.4		5.1	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Gap	Max	
70th %ile Green (s)	7.0	7.0		7.0	7.0		5.1	44.1		5.0	44.0	
70th %ile Term Code	Min	Min		Min	Min		Gap	Hold		Min	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		5.1	52.1		0.0	44.0	
50th %ile Term Code	Min	Min		Hold	Hold		Gap	Hold		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		8			20		9	424		6	173	
Fuel Used(gal)		1			0		1	18		1	20	
CO Emissions (g/hr)		37			19		47	1248		64	1426	
NOx Emissions (g/hr)		7			4		9	243		12	277	
VOC Emissions (g/hr)		9			4		11	289		15	330	
Dilemma Vehicles (#)		3			0		0	30		0	23	
Queue Length 50th (ft)		0			8		4	183		2	101	
Queue Length 95th (ft)		21			31		10	449		6	170	
Internal Link Dist (ft)		796			158			335			291	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		449			349		817	1455		513	1359	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.14			0.07		0.05	0.60		0.04	0.36	

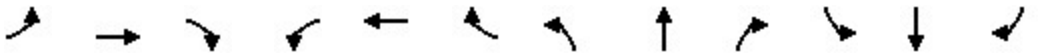
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 65			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 9.1		Intersection LOS: A	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 75			
70th %ile Actuated Cycle: 74.1			
50th %ile Actuated Cycle: 74.1			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	1230	16	8	642	184	25	13	14	665	5	128
Future Volume (vph)	84	1230	16	8	642	184	25	13	14	665	5	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.964				0.850
Flt Protected	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (prot)	1805	3574	1553	1805	3505	1583	0	1737	0	1715	1720	1583
Flt Permitted	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (perm)	1805	3574	1553	1805	3505	1583	0	1737	0	1715	1720	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			200		14				139
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		612			1998			444			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	4%	0%	3%	2%	6%	0%	0%	0%	0%	2%
Adj. Flow (vph)	91	1337	17	9	698	200	27	14	15	723	5	139
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	91	1337	17	9	698	200	0	56	0	361	367	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

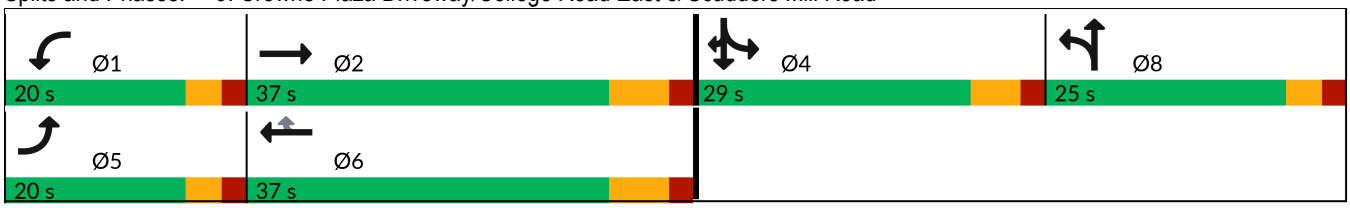


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	9.1	40.0	88.2	6.1	30.6	30.6		7.3		23.5	23.5	23.5
Actuated g/C Ratio	0.10	0.45	1.00	0.07	0.35	0.35		0.08		0.27	0.27	0.27
v/c Ratio	0.49	0.83	0.01	0.07	0.57	0.29		0.36		0.79	0.80	0.27
Control Delay (s/veh)	48.9	28.0	0.0	44.0	27.9	5.1		39.5		47.2	48.1	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	48.9	28.0	0.0	44.0	27.9	5.1		39.5		47.2	48.1	7.0
LOS	D	C	A	D	C	A		D		D	D	A
Approach Delay (s/veh)		29.0			23.0			39.5			41.1	
Approach LOS		C			C			D			D	
90th %ile Green (s)	13.1	37.0		6.1	30.0	30.0	10.0	10.0		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Max	Max	Max
70th %ile Green (s)	10.6	45.6		0.0	30.0	30.0	7.9	7.9		23.0	23.0	23.0
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Gap	Gap		Max	Max	Max
50th %ile Green (s)	9.0	44.0		0.0	30.0	30.0	6.7	6.7		23.0	23.0	23.0
50th %ile Term Code	Gap	Hold		Skip	Max	Max	Gap	Gap		Max	Max	Max
30th %ile Green (s)	7.5	42.5		0.0	30.0	30.0	6.0	6.0		23.0	23.0	23.0
30th %ile Term Code	Gap	Hold		Skip	Max	Max	Min	Min		Max	Max	Max
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		23.0	23.0	23.0
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Max	Max	Max
Stops (vph)	74	943	0	10	507	21		39		277	280	19
Fuel Used(gal)	3	35	0	0	20	3		1		19	19	5
CO Emissions (g/hr)	204	2472	13	23	1367	199		61		1307	1333	370
NOx Emissions (g/hr)	40	481	2	4	266	39		12		254	259	72
VOC Emissions (g/hr)	47	573	3	5	317	46		14		303	309	86
Dilemma Vehicles (#)	0	57	0	0	36	0		2		0	17	0
Queue Length 50th (ft)	51	326	0	5	177	0		24		209	213	0
Queue Length 95th (ft)	102	#600	0	22	264	50		63		#410	#418	47
Internal Link Dist (ft)		532			1918			364			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	313	1619	1553	313	1217	680		413		456	458	523
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.29	0.83	0.01	0.03	0.57	0.29		0.14		0.79	0.80	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 88.2			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 30.7		Intersection LOS: C	
Intersection Capacity Utilization 79.2%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99.1			
70th %ile Actuated Cycle: 94.5			
50th %ile Actuated Cycle: 91.7			
30th %ile Actuated Cycle: 89.5			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	7.4

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	18	184	0	632	193	347	327
Future Vol, veh/h	18	184	0	632	193	347	327
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	1	0	0
Mvmt Flow	21	211	0	726	222	399	376

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1823	474	376	0	0	948	0
Stage 1	837	-	-	-	-	-	-
Stage 2	986	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	70	542	839	-	-	732	-
Stage 1	390	-	-	-	-	-	-
Stage 2	327	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	32	542	839	-	-	732	-
Mov Cap-2 Maneuver	32	-	-	-	-	-	-
Stage 1	390	-	-	-	-	-	-
Stage 2	149	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	35.46	0	8.05
HCM LOS	E		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	839	-	-	32	542	732	-
HCM Lane V/C Ratio	-	-	-	0.648	0.39	0.545	-
HCM Ctrl Dly (s/v)	0	-	-	236.2	15.8	15.6	-
HCM Lane LOS	A	-	-	F	C	C	-
HCM 95th %tile Q(veh)	0	-	-	2.2	1.8	3.3	-

SATURDAY PROJECTED

PRE-COVID CONDITION

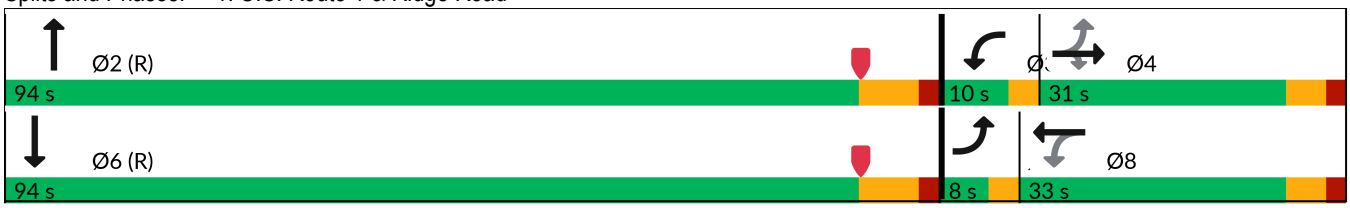
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	196	64	112	197	113	0	1882	0	0	1975	0
Future Volume (vph)	48	196	64	112	197	113	0	1882	0	0	1975	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1881	1615	1805	1784	0	0	3632	0	0	3597	0
Flt Permitted	0.196			0.349								
Satd. Flow (perm)	365	1881	1615	663	1784	0	0	3632	0	0	3597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			65		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	0%	0%	1%	0%	0%	2%	0%	0%	3%	0%
Adj. Flow (vph)	50	204	67	117	205	118	0	1960	0	0	2057	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	204	67	117	323	0	0	1960	0	0	2057	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	31.0	31.0	10.0	33.0			94.0			94.0	
Total Split (%)	5.9%	23.0%	23.0%	7.4%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	25.0	25.0	7.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	30.2	21.9	21.9	34.8	25.7			91.6			91.6	
Actuated g/C Ratio	0.22	0.16	0.16	0.26	0.19			0.68			0.68	
v/c Ratio	0.37	0.67	0.21	0.50	0.91			0.80			0.84	
Control Delay (s/veh)	44.4	63.6	12.4	46.8	79.8			16.5			21.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	44.4	63.6	12.4	46.8	79.8			16.5			21.3	
LOS	D	E	B	D	E			B			C	
Approach Delay (s/veh)		49.9			71.0			16.5			21.3	
Approach LOS		D			E			B			C	
90th %ile Green (s)	5.0	25.0	25.0	7.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	25.0	25.0	7.0	27.0			86.0			86.0	
70th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	25.0	25.0	7.0	27.0			86.0			86.0	
50th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
30th %ile Green (s)	6.3	22.4	22.4	9.4	25.5			86.2			86.2	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	12.2	12.2	6.9	22.1			98.9			98.9	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	36	179	12	87	269			1220			1459	
Fuel Used(gal)	1	5	0	3	9			33			40	
CO Emissions (g/hr)	59	315	24	176	663			2304			2795	
NOx Emissions (g/hr)	11	61	5	34	129			448			544	
VOC Emissions (g/hr)	14	73	6	41	154			534			648	
Dilemma Vehicles (#)	0	6	0	0	10			70			73	
Queue Length 50th (ft)	33	164	1	79	262			623			703	
Queue Length 95th (ft)	69	245	40	133	#428			337			826	
Internal Link Dist (ft)		77			79			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	136	348	352	233	372			2464			2441	

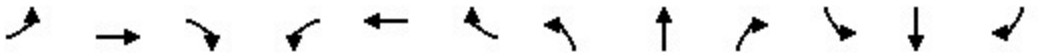
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.37	0.59	0.19	0.50	0.87			0.80			0.84	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 87.1%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1	0	9	0	5	0	2100	3	0	2218	0
Future Volume (vph)	19	1	0	9	0	5	0	2100	3	0	2218	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137						
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			532			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	20	1	0	9	0	5	0	2188	3	0	2310	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1	0	9	0	5	0	2191	0	0	2310	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



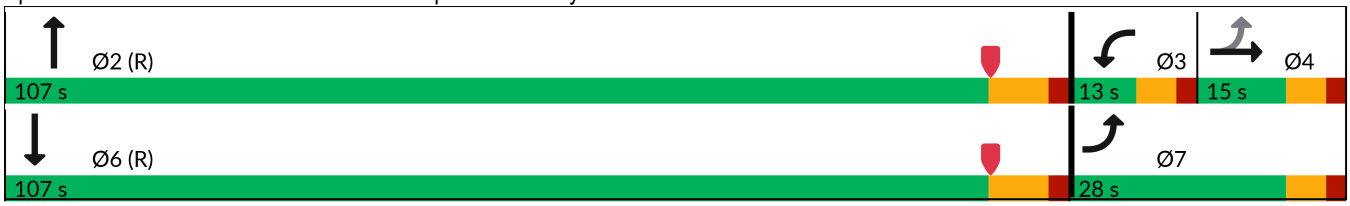
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	8.7	7.0		5.5		135.0		121.7			121.7	
Actuated g/C Ratio	0.06	0.05		0.04		1.00		0.90			0.90	
v/c Ratio	0.09	0.01		0.12		0.00		0.47			0.49	
Control Delay (s/veh)	49.1	63.0		65.8		0.0		2.7			3.2	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	49.1	63.0		65.8		0.0		2.7			3.2	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		49.8			42.3			2.7			3.2	
Approach LOS		D			D			A			A	
90th %ile Green (s)	19.6	7.0		6.6				101.4			101.4	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
50th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	18	2		10		0		359			408	
Fuel Used(gal)	0	0		0		0		22			17	
CO Emissions (g/hr)	27	2		17		2		1528			1182	
NOx Emissions (g/hr)	5	0		3		0		297			230	
VOC Emissions (g/hr)	6	0		4		0		354			274	
Dilemma Vehicles (#)	0	0		0		0		50			78	
Queue Length 50th (ft)	8	1		8		0		115			240	
Queue Length 95th (ft)	m9	m2		27		0		263			189	
Internal Link Dist (ft)		319			684			452			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	570	126		93		1615		4704			4704	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.04	0.01		0.10		0.00		0.47			0.49	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 3.3		Intersection LOS: A	
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	101	190	0	0	181	18	0	0	60	0	0	0
Future Volume (vph)	101	190	0	0	181	18	0	0	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3539	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.492											
Satd. Flow (perm)	1814	3539	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			840			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			522			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	110	207	0	0	197	20	0	0	65	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	110	207	0	0	197	20	0	0	65	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

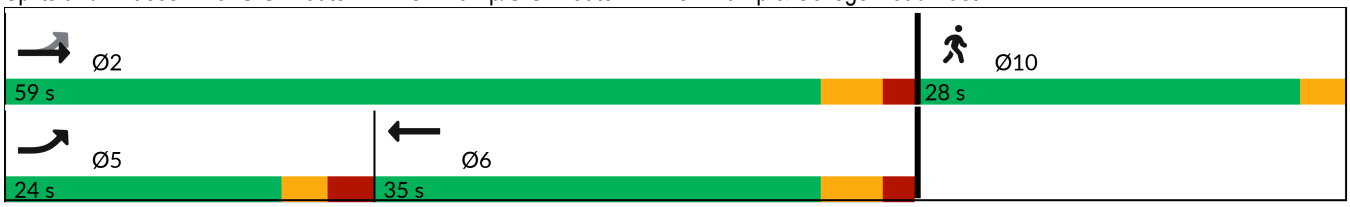
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	32.3	38.4			23.1	38.4			38.4			
Actuated g/C Ratio	0.84	1.00			0.60	1.00			1.00			
v/c Ratio	0.06	0.06			0.09	0.01			0.04			
Control Delay (s/veh)	0.6	0.0			5.2	0.0			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.6	0.0			5.2	0.0			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.2			4.7			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	7.0	30.0			17.0							
90th %ile Term Code	Min	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	39.8			26.8							
30th %ile Term Code	Min	Dwell			Dwell							
10th %ile Green (s)	0.0	32.0			32.0							
10th %ile Term Code	Skip	Dwell			Dwell							
Stops (vph)	10	0			85	0			0			
Fuel Used(gal)	0	0			6	0			1			
CO Emissions (g/hr)	25	33			415	34			38			
NOx Emissions (g/hr)	5	6			81	7			7			
VOC Emissions (g/hr)	6	8			96	8			9			
Dilemma Vehicles (#)	0	0			19	0			0			
Queue Length 50th (ft)	0	0			10	0			0			
Queue Length 95th (ft)	0	0			20	0			0			
Internal Link Dist (ft)		282			478			442			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2326	3539			2924	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.05	0.06			0.07	0.01			0.04			

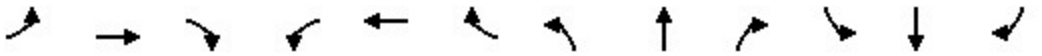
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 38.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.09			
Intersection Signal Delay (s/veh): 1.8		Intersection LOS: A	
Intersection Capacity Utilization 30.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 45.8			
10th %ile Actuated Cycle: 38			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

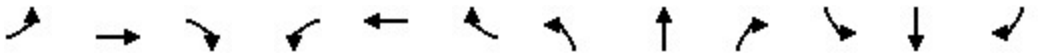


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	243	15	0	224	0	9	0	90	3	151	0
Future Volume (vph)	0	243	15	0	224	0	9	0	90	3	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.991							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3511	0	0	3539	0	1805	0	1615	0	3606	0
Flt Permitted							0.714				0.999	
Satd. Flow (perm)	0	3511	0	0	3539	0	1357	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11							100			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			205	
Travel Time (s)		5.9			4.4			7.4			4.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	270	17	0	249	0	10	0	100	3	168	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	287	0	0	249	0	10	0	100	0	171	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

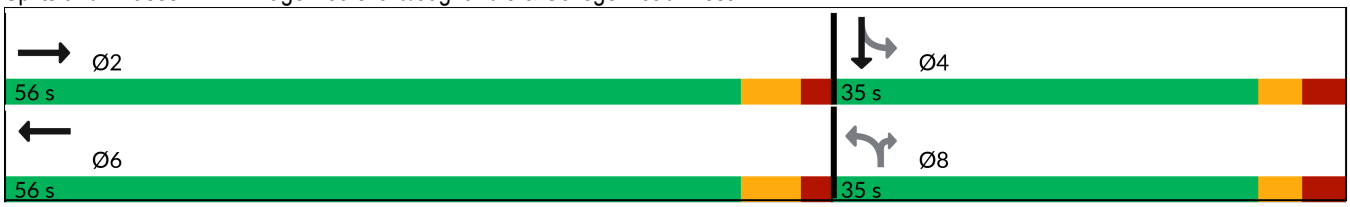


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		18.7			18.7		7.0		7.0		7.0	
Actuated g/C Ratio		0.55			0.55		0.21		0.21		0.21	
v/c Ratio		0.15			0.13		0.04		0.24		0.23	
Control Delay (s/veh)		5.6			5.7		11.2		5.2		12.2	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		5.6			5.7		11.2		5.2		12.2	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		5.6			5.7			5.7			12.2	
Approach LOS		A			A			A			B	
90th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
90th %ile Term Code		Min			Min		Min		Min	Min	Min	
70th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
70th %ile Term Code		Min			Min		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		27.3			27.3		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		124			112		11		23		119	
Fuel Used(gal)		2			2		0		1		1	
CO Emissions (g/hr)		148			123		8		40		90	
NOx Emissions (g/hr)		29			24		2		8		17	
VOC Emissions (g/hr)		34			28		2		9		21	
Dilemma Vehicles (#)		27			24		0		0		0	
Queue Length 50th (ft)		14			12		2		0		13	
Queue Length 95th (ft)		26			24		8		21		28	
Internal Link Dist (ft)		269			180			244			125	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3511			3539		1162		1397		3088	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.08			0.07		0.01		0.07		0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 33.9			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 34			
70th %ile Actuated Cycle: 34			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 33.3			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



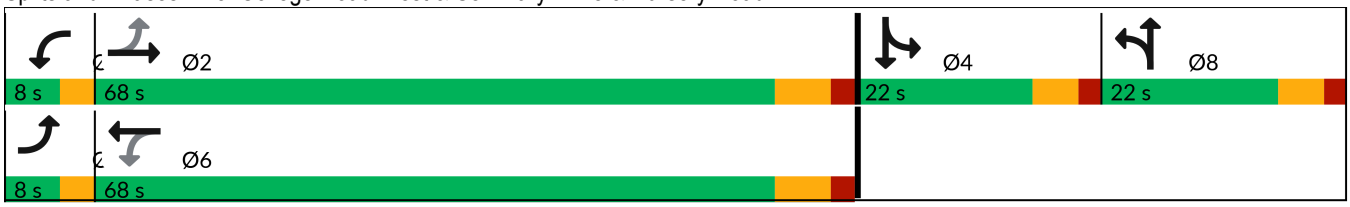
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	155	58	100	163	1	64	2	88	1	2	0
Future Volume (vph)	1	155	58	100	163	1	64	2	88	1	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	0		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.959				0.850		0.853				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3364	0	1752	1881	1615	1805	1621	0	1643	3458	0
Flt Permitted	0.633			0.541			0.950			0.950		
Satd. Flow (perm)	1203	3364	0	998	1881	1615	1805	1621	0	1643	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		66				173		107				
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		1646			424			877			732	
Travel Time (s)		28.1			7.2			14.9			14.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	4%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	189	71	122	199	1	78	2	107	1	2	0
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	1	260	0	122	199	1	78	109	0	1	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	38.5	30.6		40.3	35.5	59.1	7.1	7.1		7.1	7.1	
Actuated g/C Ratio	0.65	0.52		0.68	0.60	1.00	0.12	0.12		0.12	0.12	
v/c Ratio	0.00	0.15		0.16	0.18	0.00	0.36	0.38		0.01	0.00	
Control Delay (s/veh)	5.0	7.4		5.0	8.2	0.0	30.9	11.1		28.0	27.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.0	7.4		5.0	8.2	0.0	30.9	11.1		28.0	27.5	
LOS	A	A		A	A	A	C	B		C	C	
Approach Delay (s/veh)		7.4			7.0			19.4			27.7	
Approach LOS		A			A			B			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		10.0	10.0		7.0	7.0	
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Min	Min	
70th %ile Green (s)	0.0	30.0		5.0	38.0		7.7	7.7		0.0	0.0	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
50th %ile Green (s)	0.0	30.0		5.0	38.0		6.9	6.9		0.0	0.0	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
30th %ile Green (s)	0.0	30.0		5.0	38.0		6.1	6.1		0.0	0.0	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Skip	Skip	
10th %ile Green (s)	0.0	30.0		0.0	30.0		5.0	5.0		0.0	0.0	
10th %ile Term Code	Skip	Min		Skip	Min		Min	Min		Skip	Skip	
Stops (vph)	1	79		31	70	0	57	20		3	4	
Fuel Used(gal)	0	4		1	2	0	1	1		0	0	
CO Emissions (g/hr)	2	285		53	108	0	94	65		2	4	
NOx Emissions (g/hr)	0	55		10	21	0	18	13		0	1	
VOC Emissions (g/hr)	0	66		12	25	0	22	15		1	1	
Dilemma Vehicles (#)	0	13		0	10	0	0	5		0	0	
Queue Length 50th (ft)	0	16		9	21	0	26	1		0	0	
Queue Length 95th (ft)	2	45		41	92	0	65	34		4	3	
Internal Link Dist (ft)		1566			344			797			652	
Turn Bay Length (ft)	150									400		
Base Capacity (vph)	835	3248		746	1815	1615	497	524		453	953	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.00	0.08		0.16	0.11	0.00	0.16	0.21		0.00	0.00	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 59.1			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 10.2		Intersection LOS: B	
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 74			
70th %ile Actuated Cycle: 58.7			
50th %ile Actuated Cycle: 57.9			
30th %ile Actuated Cycle: 57.1			
10th %ile Actuated Cycle: 48			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	173	215	549	12	127	48	65	0	0	0
Future Volume (vph)	15	463	173	215	549	12	127	48	65	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.964				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1909	1658	1834	1925	0	0	1784	0	0	0	0
Flt Permitted		0.977		0.384				0.974				
Satd. Flow (perm)	0	1869	1658	741	1925	0	0	1784	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			182		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1051			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	182	226	578	13	134	51	68	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	182	226	591	0	0	253	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

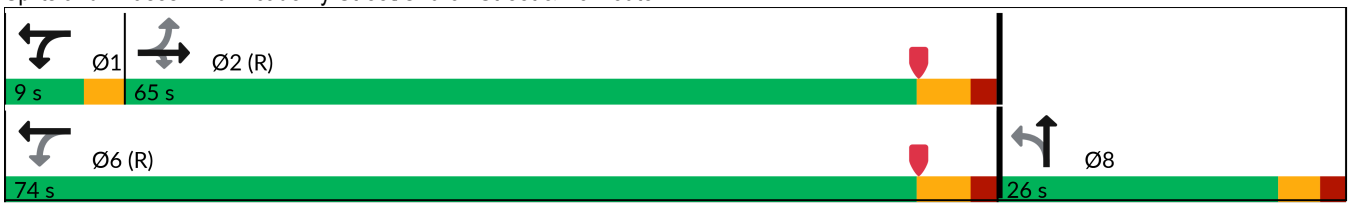
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		60.1	60.1	74.4	74.4			17.6				
Actuated g/C Ratio		0.60	0.60	0.74	0.74			0.18				
v/c Ratio		0.45	0.17	0.35	0.41			0.81				
Control Delay (s/veh)		12.8	1.8	3.8	3.7			59.0				
Queue Delay		0.0	0.0	0.0	0.2			0.0				
Total Delay (s/veh)		12.8	1.8	3.8	3.9			59.0				
LOS		B	A	A	A			E				
Approach Delay (s/veh)		9.8			3.9			59.0				
Approach LOS		A			A			E				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	8.6			18.4	18.4				
50th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
30th %ile Green (s)	59.0	59.0	59.0	11.3			15.7	15.7				
30th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
10th %ile Green (s)	64.7	64.7	64.7	9.6			11.7	11.7				
10th %ile Term Code	Coord	Coord	Coord	Gap			Gap	Gap				
Stops (vph)		252	11	37	122			225				
Fuel Used(gal)		5	1	1	4			15				
CO Emissions (g/hr)		342	55	97	259			1019				
NOx Emissions (g/hr)		67	11	19	50			198				
VOC Emissions (g/hr)		79	13	22	60			236				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		167	0	21	70			155				
Queue Length 95th (ft)		243	26	m36	m104			236				
Internal Link Dist (ft)		428			509			971			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1123	1069	642	1433			374				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	70.6
50th %ile Term Code	Coord
30th %ile Green (s)	73.3
30th %ile Term Code	Coord
10th %ile Green (s)	77.3
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	259			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.45	0.17	0.35	0.50			0.68				

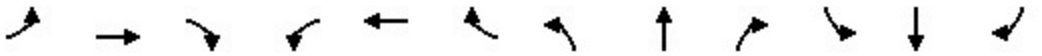
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 104.1%		ICU Level of Service G	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	466	23	63	567	61	42	110	72	85	140	144
Future Volume (vph)	38	466	23	63	567	61	42	110	72	85	140	144
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.988			0.957			0.947	
Flt Protected		0.996			0.995			0.991			0.989	
Satd. Flow (prot)	0	2150	0	0	2144	0	0	1793	0	0	1773	0
Flt Permitted		0.917			0.907			0.819			0.805	
Satd. Flow (perm)	0	1979	0	0	1954	0	0	1482	0	0	1443	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1876			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	491	24	66	597	64	44	116	76	89	147	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	555	0	0	727	0	0	236	0	0	388	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

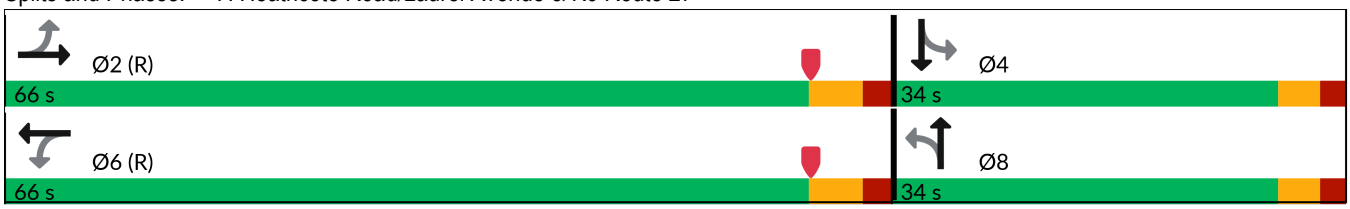
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.7			60.7			28.3			28.3	
Actuated g/C Ratio		0.61			0.61			0.28			0.28	
v/c Ratio		0.46			0.61			0.56			0.95	
Control Delay (s/veh)		7.8			15.3			36.5			70.6	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		7.9			15.3			36.5			70.6	
LOS		A			B			D			E	
Approach Delay (s/veh)		7.9			15.3			36.5			70.6	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	63.7	63.7		63.7	63.7		25.3	25.3		25.3	25.3	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		139			419			187			320	
Fuel Used(gal)		4			12			14			10	
CO Emissions (g/hr)		281			849			970			717	
NOx Emissions (g/hr)		55			165			189			139	
VOC Emissions (g/hr)		65			197			225			166	
Dilemma Vehicles (#)		0			35			0			16	
Queue Length 50th (ft)		102			274			127			240	
Queue Length 95th (ft)		130			390			206			#420	
Internal Link Dist (ft)		509			1291			1796			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1202			1186			429			418	
Starvation Cap Reductn		79			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.49			0.61			0.55			0.93	

Intersection Summary

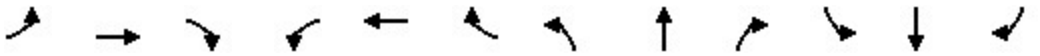
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 27.0		Intersection LOS: C	
Intersection Capacity Utilization 89.4%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	3	18	8	18	5	205	32	15	234	190
Future Volume (vph)	24	0	3	18	8	18	5	205	32	15	234	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.945			0.980			0.933	
Flt Protected		0.957			0.980		0.950			0.950		
Satd. Flow (prot)	0	1793	0	0	1718	0	1805	1862	0	1687	1765	0
Flt Permitted		0.925			0.855		0.495			0.603		
Satd. Flow (perm)	0	1733	0	0	1499	0	940	1862	0	1071	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			19			14			73	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		876			237			414			370	
Travel Time (s)		13.3			6.5			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	6%	0%	0%	0%	0%	0%	7%	0%	1%
Adj. Flow (vph)	26	0	3	19	9	19	5	218	34	16	249	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	47	0	5	252	0	16	451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

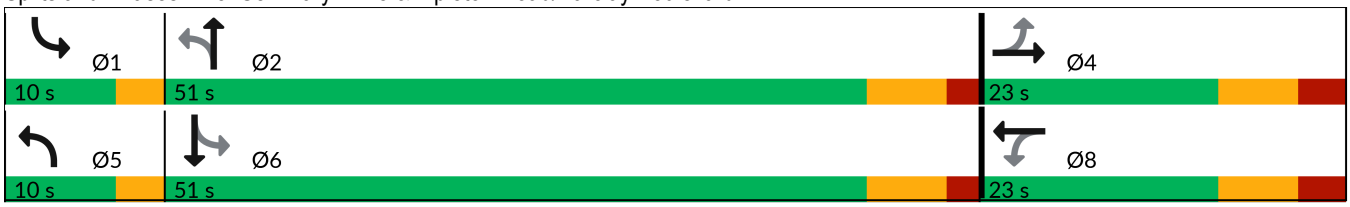


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.5			7.5		50.0	48.5		50.1	48.5	
Actuated g/C Ratio		0.12			0.12		0.81	0.78		0.81	0.78	
v/c Ratio		0.10			0.24		0.01	0.17		0.02	0.32	
Control Delay (s/veh)		0.7			23.5		2.6	4.7		2.6	5.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		0.7			23.5		2.6	4.7		2.6	5.0	
LOS		A			C		A	A		A	A	
Approach Delay (s/veh)		0.7			23.5			4.7			4.9	
Approach LOS		A			C			A			A	
90th %ile Green (s)	8.7	8.7		8.7	8.7		5.0	44.0		5.1	44.1	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Gap	Hold	
70th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
70th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
Stops (vph)		0			29		2	69		4	125	
Fuel Used(gal)		0			0		0	4		1	18	
CO Emissions (g/hr)		11			29		6	295		43	1248	
NOx Emissions (g/hr)		2			6		1	57		8	243	
VOC Emissions (g/hr)		3			7		1	68		10	289	
Dilemma Vehicles (#)		2			0		0	13		0	20	
Queue Length 50th (ft)		0			11		1	30		1	54	
Queue Length 95th (ft)		0			43		3	84		5	147	
Internal Link Dist (ft)		796			157			334			290	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		498			386		863	1460		941	1398	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.06			0.12		0.01	0.17		0.02	0.32	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay (s/veh): 5.8		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 75.8			
70th %ile Actuated Cycle: 66			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	8	42	0	88	11	43	117
Future Vol, veh/h	8	42	0	88	11	43	117
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	1
Mvmt Flow	10	51	0	106	13	52	141

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	287	60	141	0	0	119	0
Stage 1	113	-	-	-	-	-	-
Stage 2	174	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	686	1000	1177	-	-	1481	-
Stage 1	906	-	-	-	-	-	-
Stage 2	845	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	662	1000	1177	-	-	1481	-
Mov Cap-2 Maneuver	662	-	-	-	-	-	-
Stage 1	906	-	-	-	-	-	-
Stage 2	815	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.07	0	2.02
HCM LOS	A		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1177	-	-	662	1000	1481	-
HCM Lane V/C Ratio	-	-	-	0.015	0.051	0.035	-
HCM Ctrl Dly (s/v)	0	-	-	10.5	8.8	7.5	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-

AM PROJECTED WITH GDP

PRE-COVID CONDITION

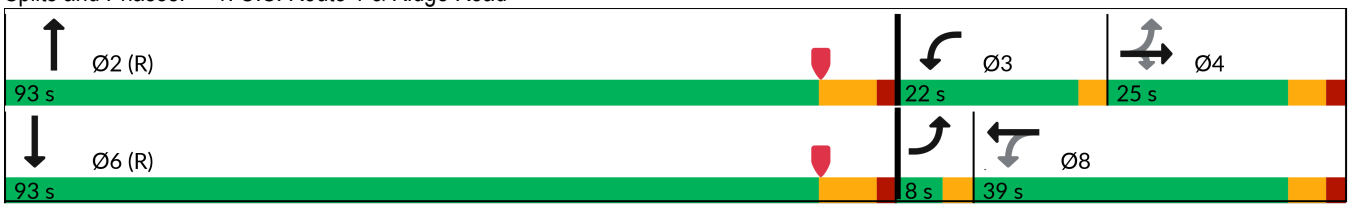
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	292	165	389	342	103	0	1778	0	0	3106	0
Future Volume (vph)	93	292	165	389	342	103	0	1778	0	0	3106	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.965							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1615	1805	1793	0	0	4975	0	0	5070	0
Flt Permitted	0.211			0.182								
Satd. Flow (perm)	393	1863	1615	346	1793	0	0	4975	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		10							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	0%	0%	2%	3%	0%	7%	0%	0%	5%	0%
Adj. Flow (vph)	95	298	168	397	349	105	0	1814	0	0	3169	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	298	168	397	454	0	0	1814	0	0	3169	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	25.0	25.0	22.0	39.0			93.0			93.0	
Total Split (%)	5.7%	17.9%	17.9%	15.7%	27.9%			66.4%			66.4%	
Maximum Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	27.0	19.0	19.0	44.0	33.0			88.0			88.0	
Actuated g/C Ratio	0.19	0.14	0.14	0.31	0.24			0.63			0.63	
v/c Ratio	0.77	1.18	0.57	1.30	1.06			0.58			0.99	
Control Delay (s/veh)	77.0	165.9	35.8	190.3	108.4			14.4			40.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	77.0	165.9	35.8	190.3	108.4			14.4			40.5	
LOS	E	F	D	F	F			B			D	
Approach Delay (s/veh)		111.9			146.6			14.4			40.5	
Approach LOS		F			F			B			D	
90th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
10th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
Stops (vph)	80	237	77	252	376			826			2719	
Fuel Used(gal)	2	13	2	19	16			24			83	
CO Emissions (g/hr)	164	874	149	1351	1122			1699			5795	
NOx Emissions (g/hr)	32	170	29	263	218			331			1128	
VOC Emissions (g/hr)	38	203	35	313	260			394			1343	
Dilemma Vehicles (#)	0	8	0	0	14			62			108	
Queue Length 50th (ft)	63	~324	69	~401	~447			297			989	
Queue Length 95th (ft)	#121	#513	149	#610	#673			320			#1164	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	124	252	293	306	430			3127			3186	

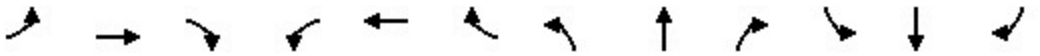
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.77	1.18	0.57	1.30	1.06			0.58			0.99	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 108 (77%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay (s/veh): 53.5		Intersection LOS: D	
Intersection Capacity Utilization 107.9%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	87	0	18	0	10	0	2047	259	0	3599	0
Future Volume (vph)	75	87	0	18	0	10	0	2047	259	0	3599	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.983				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1881	0	1805	0	1615	0	4922	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1881	0	1805	0	1615	0	4922	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						132		55				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	7%	1%	0%	4%	0%
Adj. Flow (vph)	77	90	0	19	0	10	0	2110	267	0	3710	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	90	0	19	0	10	0	2377	0	0	3710	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



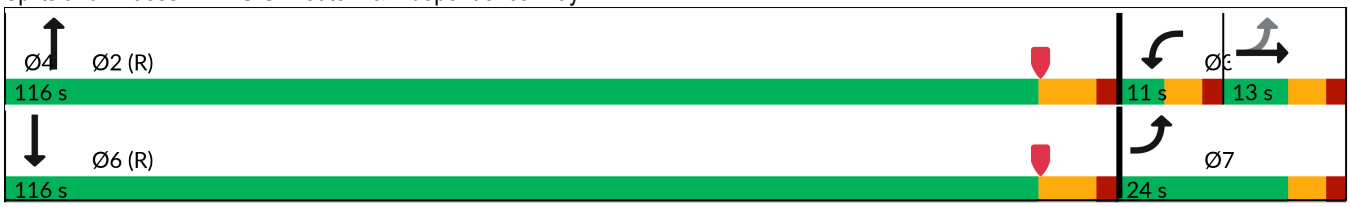
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				116.0			116.0	
Total Split (%)	17.1%	9.3%		7.9%				82.9%			82.9%	
Maximum Green (s)	18.0	7.0		5.0				108.0			108.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	15.2	8.6		5.0		140.0		113.8			113.8	
Actuated g/C Ratio	0.11	0.06		0.04		1.00		0.81			0.81	
v/c Ratio	0.20	0.78		0.30		0.01		0.59			0.89	
Control Delay (s/veh)	47.1	74.5		77.8		0.0		5.6			5.0	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	47.1	74.5		77.8		0.0		5.6			5.0	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		61.9			51.0			5.6			5.0	
Approach LOS		E			D			A			A	
90th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	12.0	12.0		0.0				114.0			114.0	
30th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
10th %ile Green (s)	9.9	9.9		0.0				116.1			116.1	
10th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
Stops (vph)	68	72		19		0		750			659	
Fuel Used(gal)	1	2		1		0		32			29	
CO Emissions (g/hr)	101	148		37		4		2231			2006	
NOx Emissions (g/hr)	20	29		7		1		434			390	
VOC Emissions (g/hr)	23	34		9		1		517			465	
Dilemma Vehicles (#)	0	2		0		0		82			70	
Queue Length 50th (ft)	33	86		17		0		261			181	
Queue Length 95th (ft)	m36	m#92		46		0		291			m180	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	450	115		64		1615		4011			4161	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.17	0.78		0.30		0.01		0.59			0.89	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 6.9		Intersection LOS: A	
Intersection Capacity Utilization 85.7%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	250	955	0	0	868	198	0	0	557	0	0	0
Future Volume (vph)	250	955	0	0	868	198	0	0	557	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3400	3574	0	0	3574	1615	0	0	1627	0	0	0
Flt Permitted	0.214											
Satd. Flow (perm)	766	3574	0	0	3574	1615	0	0	1627	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						198			457			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	266	1016	0	0	923	211	0	0	593	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	266	1016	0	0	923	211	0	0	593	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

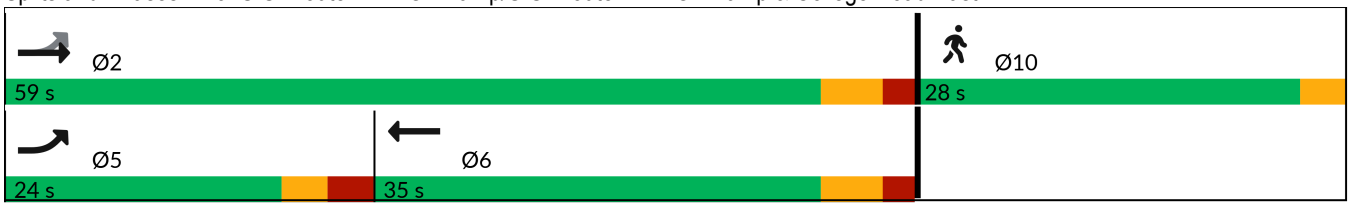
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.9	36.9			17.4	36.9			36.9			
Actuated g/C Ratio	0.84	1.00			0.47	1.00			1.00			
v/c Ratio	0.23	0.28			0.55	0.13			0.36			
Control Delay (s/veh)	1.0	0.2			8.6	0.2			0.6			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	1.0	0.2			8.6	0.2			0.6			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			7.0			0.6				
Approach LOS		A			A			A				
90th %ile Green (s)	8.9	33.8			18.9							
90th %ile Term Code	Gap	Hold			Gap							
70th %ile Green (s)	7.8	30.8			17.0							
70th %ile Term Code	Gap	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	24	0			547	0			0			
Fuel Used(gal)	1	2			30	5			5			
CO Emissions (g/hr)	63	167			2128	376			359			
NOx Emissions (g/hr)	12	32			414	73			70			
VOC Emissions (g/hr)	15	39			493	87			83			
Dilemma Vehicles (#)	0	0			88	0			0			
Queue Length 50th (ft)	0	0			59	0			0			
Queue Length 95th (ft)	0	0			105	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	1927	3574			2811	1615			1627			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.14	0.28			0.33	0.13			0.36			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.9			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 2.9		Intersection LOS: A	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 39.8			
70th %ile Actuated Cycle: 36.8			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

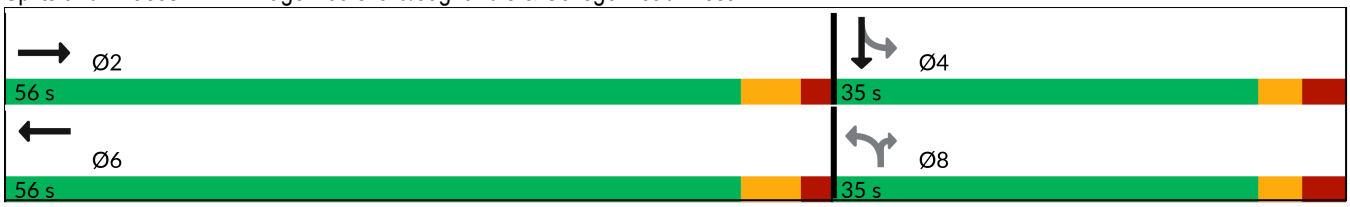
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1001	16	0	896	0	9	0	70	19	341	0
Future Volume (vph)	0	1001	16	0	896	0	9	0	70	19	341	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.997	
Satd. Flow (prot)	0	3568	0	0	3574	0	1626	0	1615	0	3565	0
Flt Permitted							0.523				0.997	
Satd. Flow (perm)	0	3568	0	0	3574	0	895	0	1615	0	3565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							75			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	11%	0%	0%	0%	1%	0%
Adj. Flow (vph)	0	1076	17	0	963	0	10	0	75	20	367	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1093	0	0	963	0	10	0	75	0	387	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		19.5			19.5		9.6		9.6		9.6	
Actuated g/C Ratio		0.47			0.47		0.23		0.23		0.23	
v/c Ratio		0.65			0.57		0.05		0.17		0.47	
Control Delay (s/veh)		10.6			9.6		14.7		5.9		16.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		10.6			9.6		14.7		5.9		16.5	
LOS		B			A		B		A		B	
Approach Delay (s/veh)		10.6			9.6			6.9			16.5	
Approach LOS		B			A			A			B	
90th %ile Green (s)		27.3			27.3		13.4		13.4	13.4	13.4	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		21.8			21.8		10.8		10.8	10.8	10.8	
70th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
50th %ile Green (s)		18.3			18.3		9.3		9.3	9.3	9.3	
50th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
30th %ile Green (s)		16.1			16.1		8.2		8.2	8.2	8.2	
30th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		674			563		10		19		288	
Fuel Used(gal)		11			9		0		0		3	
CO Emissions (g/hr)		784			619		8		32		236	
NOx Emissions (g/hr)		152			121		2		6		46	
VOC Emissions (g/hr)		182			144		2		7		55	
Dilemma Vehicles (#)		92			81		0		0		0	
Queue Length 50th (ft)		87			73		2		0		39	
Queue Length 95th (ft)		161			136		12		24		91	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3531			3537		641		1179		2555	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

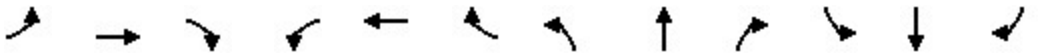
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31			0.27		0.02		0.06		0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 41.4			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 11.0		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 52.7			
70th %ile Actuated Cycle: 44.6			
50th %ile Actuated Cycle: 39.6			
30th %ile Actuated Cycle: 36.3			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	639	280	351	513	428	47	20	99	286	13	17
Future Volume (vph)	61	639	280	351	513	428	47	20	99	286	13	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.954				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3444	0	1787	3574	1615	3502	1900	1455	3502	1900	1615
Flt Permitted	0.453			0.163			0.950			0.950		
Satd. Flow (perm)	861	3444	0	307	3574	1615	3502	1900	1455	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		76				446			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	11%	0%	0%	0%
Adj. Flow (vph)	64	666	292	366	534	446	49	21	103	298	14	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	958	0	366	534	446	49	21	103	298	14	18
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

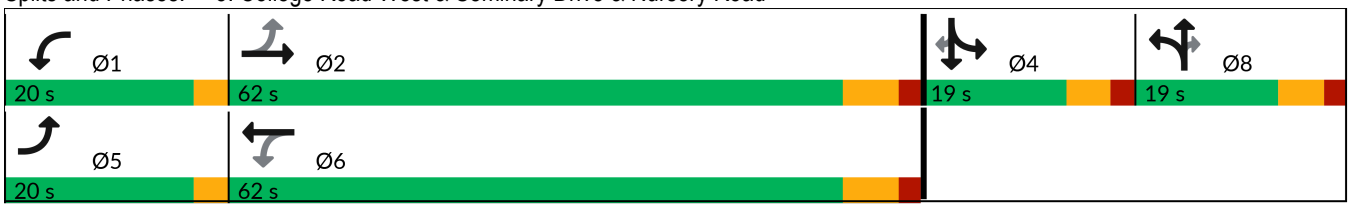


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	42.3	32.2		53.6	42.6	83.6	6.1	6.1	6.1	11.4	11.4	11.4
Actuated g/C Ratio	0.51	0.39		0.64	0.51	1.00	0.07	0.07	0.07	0.14	0.14	0.14
v/c Ratio	0.13	0.70		0.82	0.29	0.28	0.19	0.15	0.48	0.62	0.05	0.06
Control Delay (s/veh)	8.4	24.3		30.1	14.0	0.4	41.6	42.6	14.5	42.0	35.7	0.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.4	24.3		30.1	14.0	0.4	41.6	42.6	14.5	42.0	35.7	0.4
LOS	A	C		C	B	A	D	D	B	D	D	A
Approach Delay (s/veh)		23.3			13.9			25.6			39.5	
Approach LOS		C			B			C			D	
90th %ile Green (s)	7.2	38.3		17.0	48.1		8.6	8.6	8.6	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Max	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	6.3	31.2		17.0	41.9		6.2	6.2	6.2	13.0	13.0	13.0
70th %ile Term Code	Gap	Gap		Max	Hold		Gap	Gap	Gap	Max	Max	Max
50th %ile Green (s)	5.8	30.0		14.5	38.7		5.7	5.7	5.7	12.1	12.1	12.1
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.3	30.0		12.8	37.5		5.1	5.1	5.1	10.5	10.5	10.5
30th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		10.2	43.2		0.0	0.0	0.0	8.6	8.6	8.6
10th %ile Term Code	Skip	Min		Gap	Hold		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	29	688		177	281	0	43	21	14	257	12	0
Fuel Used(gal)	1	16		5	6	2	1	0	1	6	0	0
CO Emissions (g/hr)	49	1122		360	424	110	77	35	71	412	18	6
NOx Emissions (g/hr)	10	218		70	83	21	15	7	14	80	3	1
VOC Emissions (g/hr)	11	260		83	98	25	18	8	17	95	4	1
Dilemma Vehicles (#)	0	41		0	23	0	0	1	0	0	1	0
Queue Length 50th (ft)	12	213		103	90	0	12	11	0	77	7	0
Queue Length 95th (ft)	30	314		#258	136	0	32	36	40	137	26	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	735	2337		503	2399	1615	555	301	330	555	301	355
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.09	0.41		0.73	0.22	0.28	0.09	0.07	0.31	0.54	0.05	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 83.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 20.9		Intersection LOS: C	
Intersection Capacity Utilization 75.1%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 98.9			
70th %ile Actuated Cycle: 89.4			
50th %ile Actuated Cycle: 84.3			
30th %ile Actuated Cycle: 80.4			
10th %ile Actuated Cycle: 64.8			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	484	792	359	626	10	406	85	67	0	0	0
Future Volume (vph)	12	484	792	359	626	10	406	85	67	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.984				
Flt Protected		0.999		0.950				0.965				
Satd. Flow (prot)	0	1893	1658	1852	1927	0	0	1798	0	0	0	0
Flt Permitted		0.981		0.355				0.965				
Satd. Flow (perm)	0	1859	1658	692	1927	0	0	1798	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			861		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	13	526	861	390	680	11	441	92	73	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	539	861	390	691	0	0	606	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.49	0.65	0.70	0.51			1.61				
Control Delay (s/veh)		13.8	3.3	6.8	4.8			314.8				
Queue Delay		0.0	0.0	0.0	0.5			0.0				
Total Delay (s/veh)		13.8	3.3	6.8	5.2			314.8				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		7.3			5.8			314.8				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		274	44	87	189			408				
Fuel Used(gal)		5	4	3	5			63				
CO Emissions (g/hr)		368	263	184	317			4369				
NOx Emissions (g/hr)		72	51	36	62			850				
VOC Emissions (g/hr)		85	61	43	73			1013				
Dilemma Vehicles (#)		25	0	0	0			0				
Queue Length 50th (ft)		185	0	48	105			~557				
Queue Length 95th (ft)		268	48	m69	m144			#767				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1096	1331	560	1368			377				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	288			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.49	0.65	0.70	0.64			1.61				

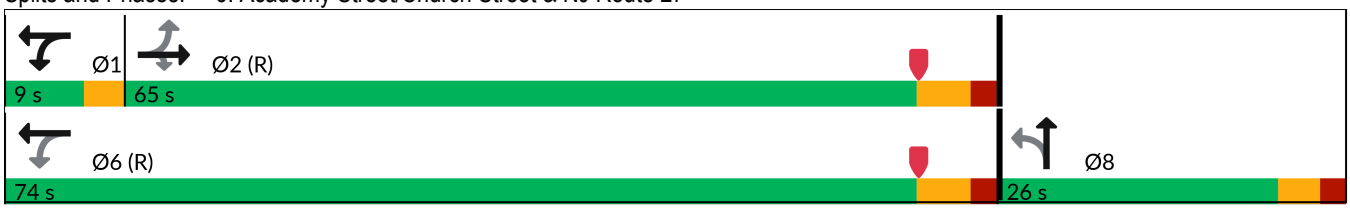
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.61			
Intersection Signal Delay (s/veh): 67.1		Intersection LOS: E	
Intersection Capacity Utilization 125.4%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	472	48	95	691	19	67	270	49	54	292	239
Future Volume (vph)	28	472	48	95	691	19	67	270	49	54	292	239
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.997			0.983			0.945	
Flt Protected		0.997			0.994			0.991			0.995	
Satd. Flow (prot)	0	2122	0	0	2145	0	0	1790	0	0	1752	0
Flt Permitted		0.937			0.871			0.581			0.870	
Satd. Flow (perm)	0	1994	0	0	1880	0	0	1049	0	0	1532	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	2%	2%	6%	5%	2%	9%	6%	2%	1%
Adj. Flow (vph)	29	492	50	99	720	20	70	281	51	56	304	249
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	571	0	0	839	0	0	402	0	0	609	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.48			0.74			1.32			1.37	
Control Delay (s/veh)		7.5			19.6			197.9			211.8	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		7.6			19.6			197.9			211.8	
LOS		A			B			F			F	
Approach Delay (s/veh)		7.6			19.6			197.9			211.8	
Approach LOS		A			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		144			567			296			452	
Fuel Used(gal)		4			15			36			33	
CO Emissions (g/hr)		290			1080			2547			2283	
NOx Emissions (g/hr)		56			210			495			444	
VOC Emissions (g/hr)		67			250			590			529	
Dilemma Vehicles (#)		0			40			0			21	
Queue Length 50th (ft)		100			358			~333			~516	
Queue Length 95th (ft)		m125			520			#517			#728	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1196			1128			304			444	
Starvation Cap Reductn		71			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.51			0.74			1.32			1.37	

Intersection Summary

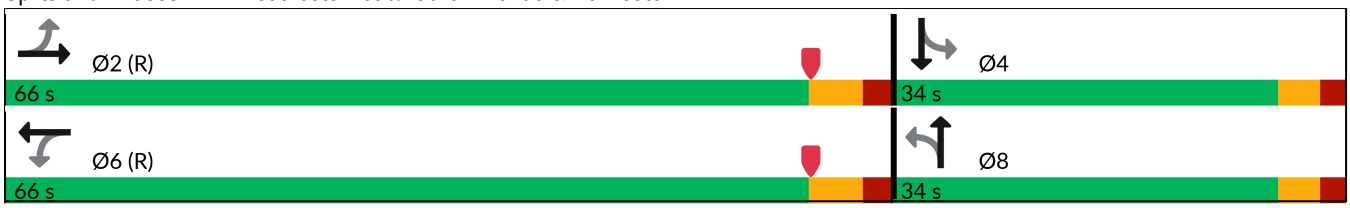
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.37			
Intersection Signal Delay (s/veh): 94.7		Intersection LOS: F	
Intersection Capacity Utilization 117.0%		ICU Level of Service H	
Analysis Period (min) 15			

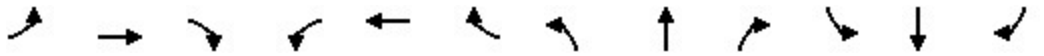
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

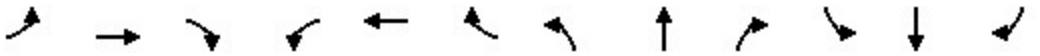
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	7	32	50	29	11	41	519	12	5	919	212
Future Volume (vph)	53	7	32	50	29	11	41	519	12	5	919	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.983			0.997			0.972	
Flt Protected		0.972			0.973		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1797	0	1805	1876	0	1805	1847	0
Flt Permitted		0.768			0.773		0.082			0.418		
Satd. Flow (perm)	0	1376	0	0	1428	0	156	1876	0	794	1847	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			7			2			21	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	0%	0%	0%	0%	9%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	57	8	34	54	31	12	44	558	13	5	988	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	97	0	44	571	0	5	1216	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

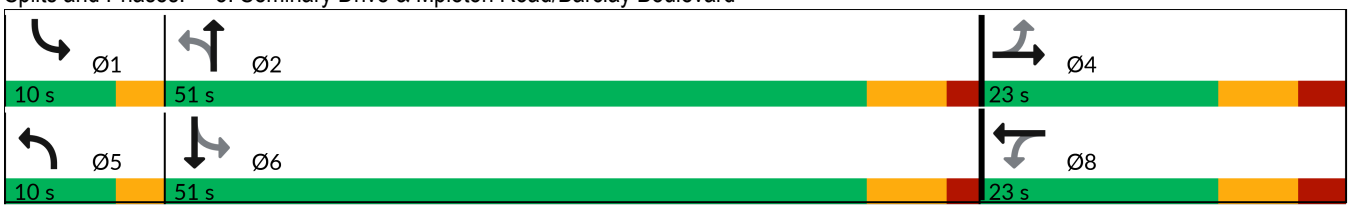


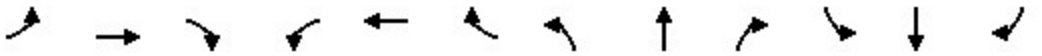
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		9.6			9.6		53.8	50.6		52.2	47.3	
Actuated g/C Ratio		0.14			0.14		0.76	0.71		0.74	0.67	
v/c Ratio		0.47			0.49		0.18	0.43		0.01	0.98	
Control Delay (s/veh)		31.5			37.7		5.1	8.5		3.6	41.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		31.5			37.7		5.1	8.5		3.6	41.5	
LOS		C			D		A	A		A	D	
Approach Delay (s/veh)		31.5			37.7			8.2			41.3	
Approach LOS		C			D			A			D	
90th %ile Green (s)	14.2	14.2		14.2	14.2		6.0	45.0		5.0	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Min	Max	
70th %ile Green (s)	11.1	11.1		11.1	11.1		5.6	52.6		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Skip	Max	
50th %ile Green (s)	9.2	9.2		9.2	9.2		5.2	52.2		0.0	44.0	
50th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Skip	Max	
30th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		61			74		11	234		2	678	
Fuel Used(gal)		2			1		1	8		0	59	
CO Emissions (g/hr)		131			81		36	552		15	4153	
NOx Emissions (g/hr)		25			16		7	107		3	808	
VOC Emissions (g/hr)		30			19		8	128		3	962	
Dilemma Vehicles (#)		5			0		0	25		0	53	
Queue Length 50th (ft)		32			41		5	103		1	~683	
Queue Length 95th (ft)		78			87		15	269		4	#1025	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		321			316		286	1338		699	1239	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31			0.31		0.15	0.43		0.01	0.98	

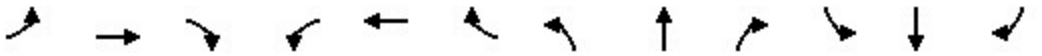
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 70.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 30.7		Intersection LOS: C	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 82.2			
70th %ile Actuated Cycle: 78.7			
50th %ile Actuated Cycle: 76.4			
30th %ile Actuated Cycle: 66			
10th %ile Actuated Cycle: 51			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	586	86	76	1456	1072	20	13	19	273	46	130
Future Volume (vph)	136	586	86	76	1456	1072	20	13	19	273	46	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.951				0.850
Flt Protected	0.950			0.950				0.981		0.950	0.966	
Satd. Flow (prot)	1787	3438	1509	1805	3438	1583	0	1715	0	1618	1672	1583
Flt Permitted	0.950			0.950				0.981		0.950	0.966	
Satd. Flow (perm)	1787	3438	1509	1805	3438	1583	0	1715	0	1618	1672	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			733		21				146
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	5%	7%	0%	5%	2%	0%	13%	0%	6%	0%	2%
Adj. Flow (vph)	153	658	97	85	1636	1204	22	15	21	307	52	146
Shared Lane Traffic (%)										42%		
Lane Group Flow (vph)	153	658	97	85	1636	1204	0	58	0	178	181	146
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

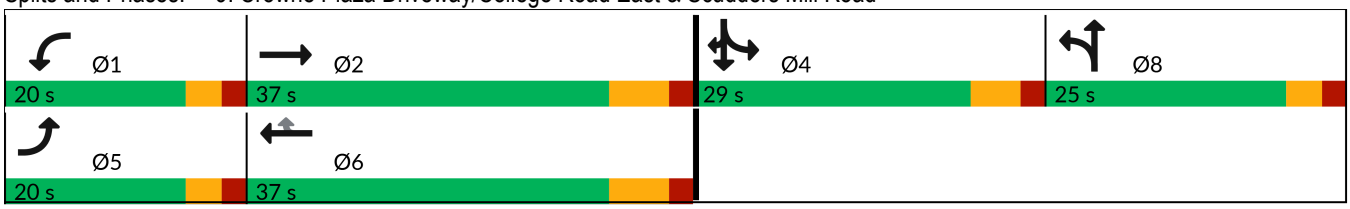


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	11.3	36.3	83.7	8.8	30.8	30.8		7.2		13.8	13.8	13.8
Actuated g/C Ratio	0.14	0.43	1.00	0.11	0.37	0.37		0.09		0.16	0.16	0.16
v/c Ratio	0.64	0.44	0.06	0.45	1.29	1.15		0.35		0.67	0.66	0.38
Control Delay (s/veh)	49.2	21.7	0.1	46.3	165.3	93.4		34.5		46.9	45.9	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	49.2	21.7	0.1	46.3	165.3	93.4		34.5		46.9	45.9	9.0
LOS	D	C	A	D	F	F		C		D	D	A
Approach Delay (s/veh)		24.0			132.2			34.5			35.6	
Approach LOS		C			F			C			D	
90th %ile Green (s)	15.0	32.3		12.7	30.0	30.0	9.9	9.9		21.9	21.9	21.9
90th %ile Term Code	Max	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	14.2	34.0		10.2	30.0	30.0	7.7	7.7		16.7	16.7	16.7
70th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	11.8	33.3		8.5	30.0	30.0	6.3	6.3		13.8	13.8	13.8
50th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
30th %ile Green (s)	9.6	32.6		7.0	30.0	30.0	6.0	6.0		11.2	11.2	11.2
30th %ile Term Code	Gap	Hold		Gap	Max	Max	Min	Min		Gap	Gap	Gap
10th %ile Green (s)	6.7	41.7		0.0	30.0	30.0	0.0	0.0		7.5	7.5	7.5
10th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
Stops (vph)	122	405	0	66	1064	378		34		138	142	20
Fuel Used(gal)	5	15	1	3	84	40		1		9	9	5
CO Emissions (g/hr)	333	1078	68	188	5857	2780		55		625	636	380
NOx Emissions (g/hr)	65	210	13	37	1139	541		11		122	124	74
VOC Emissions (g/hr)	77	250	16	44	1357	644		13		145	147	88
Dilemma Vehicles (#)	0	28	0	0	66	0		2		0	7	0
Queue Length 50th (ft)	78	135	0	44	~608	~498		19		94	96	0
Queue Length 95th (ft)	155	238	0	97	#907	#831		60		174	175	48
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	328	1489	1509	332	1264	1045		436		456	471	551
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.47	0.44	0.06	0.26	1.29	1.15		0.13		0.39	0.38	0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 83.7			
Natural Cycle: 110			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.29			
Intersection Signal Delay (s/veh): 97.5		Intersection LOS: F	
Intersection Capacity Utilization 93.1%		ICU Level of Service F	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99.8			
70th %ile Actuated Cycle: 91.6			
50th %ile Actuated Cycle: 84.9			
30th %ile Actuated Cycle: 79.8			
10th %ile Actuated Cycle: 62.2			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	40.1

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	150	558	0	647	20	144	755
Future Vol, veh/h	150	558	0	647	20	144	755
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91	91
Heavy Vehicles, %	0	1	0	2	11	1	1
Mvmt Flow	165	613	0	711	22	158	830

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1453	366	830	0	0	733	0
Stage 1	722	-	-	-	-	-	-
Stage 2	731	-	-	-	-	-	-
Critical Hdwy	6.8	6.92	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.31	2.5	-	-	2.21	-
Pot Cap-1 Maneuver	~ 123	633	433	-	-	874	-
Stage 1	447	-	-	-	-	-	-
Stage 2	442	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 101	633	433	-	-	874	-
Mov Cap-2 Maneuver	~ 101	-	-	-	-	-	-
Stage 1	447	-	-	-	-	-	-
Stage 2	362	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	126.67	0	1.61
HCM LOS	F		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	433	-	-	101	633	874	-
HCM Lane V/C Ratio	-	-	-	1.631	0.968	0.181	-
HCM Ctrl Dly (s/v)	0	-	-	$ 397.8	53.8	10	-
HCM Lane LOS	A	-	-	F	F	B	-
HCM 95th %tile Q(veh)	0	-	-	12.8	14	0.7	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	923	9	13	537	25	7	0	6	50	0	54
Future Vol, veh/h	32	923	9	13	537	25	7	0	6	50	0	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	35	1003	10	14	584	27	8	0	7	54	0	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	611	0	0	1013	0	0	1690	1717	1008	1685	1695	584
Stage 1	-	-	-	-	-	-	1078	1078	-	612	612	-
Stage 2	-	-	-	-	-	-	612	639	-	1073	1083	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	978	-	-	692	-	-	75	91	294	75	94	516
Stage 1	-	-	-	-	-	-	267	298	-	484	487	-
Stage 2	-	-	-	-	-	-	484	473	-	269	296	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	978	-	-	692	-	-	59	81	294	66	83	516
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	81	-	66	83	-
Stage 1	-	-	-	-	-	-	245	273	-	469	472	-
Stage 2	-	-	-	-	-	-	415	459	-	242	272	-

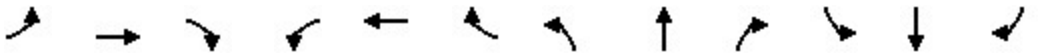
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.29	0.23	50.24	88.12
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	94	60	-	-	43	-	-	66	516
HCM Lane V/C Ratio	0.151	0.036	-	-	0.02	-	-	0.828	0.114
HCM Ctrl Dly (s/v)	50.2	8.8	0	-	10.3	0	-	169.4	12.9
HCM Lane LOS	F	A	A	-	B	A	-	F	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	3.9	0.4

PM PROJECTED WITH GDP

PRE-COVID CONDITION

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	350	77	159	292	84	0	3090	0	0	1998	0
Future Volume (vph)	119	350	77	159	292	84	0	3090	0	0	1998	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.966							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1787	1881	1615	1805	1795	0	0	5219	0	0	5119	0
Flt Permitted	0.150			0.123								
Satd. Flow (perm)	282	1881	1615	234	1795	0	0	5219	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83		6							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	2%	3%	0%	2%	0%	0%	4%	0%
Adj. Flow (vph)	124	365	80	166	304	88	0	3219	0	0	2081	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	365	80	166	392	0	0	3219	0	0	2081	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

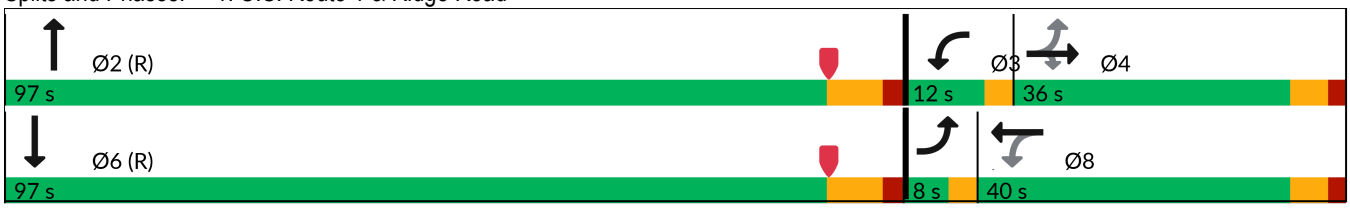


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	12.0	40.0			97.0			97.0	
Total Split (%)	5.5%	24.8%	24.8%	8.3%	27.6%			66.9%			66.9%	
Maximum Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	37.4	29.4	29.4	44.4	33.4			92.6			92.6	
Actuated g/C Ratio	0.26	0.20	0.20	0.31	0.23			0.64			0.64	
v/c Ratio	1.00	0.96	0.20	0.98	0.94			0.97			0.64	
Control Delay (s/veh)	125.7	93.5	9.3	106.4	84.8			19.8			17.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	125.7	93.5	9.3	106.4	84.8			19.8			17.2	
LOS	F	F	A	F	F			B			B	
Approach Delay (s/veh)		88.7			91.2			19.8			17.2	
Approach LOS		F			F			B			B	
90th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	26.9	26.9	9.0	30.9			92.1			92.1	
10th %ile Term Code	Max	Gap	Gap	Max	Hold			Coord			Coord	
Stops (vph)	90	316	11	103	335			2437			1165	
Fuel Used(gal)	4	10	0	5	12			64			33	
CO Emissions (g/hr)	284	709	24	362	840			4492			2304	
NOx Emissions (g/hr)	55	138	5	71	163			874			448	
VOC Emissions (g/hr)	66	164	5	84	195			1041			534	
Dilemma Vehicles (#)	0	11	0	0	12			102			69	
Queue Length 50th (ft)	87	345	0	119	359			600			419	
Queue Length 95th (ft)	#215	#551	38	#257	#550			#816			465	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	124	389	399	169	425			3333			3269	

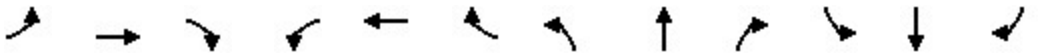
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	1.00	0.94	0.20	0.98	0.92			0.97			0.64	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 16 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 31.3		Intersection LOS: C	
Intersection Capacity Utilization 97.9%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	17	0	182	0	59	0	3322	32	0	2158	0
Future Volume (vph)	27	17	0	182	0	59	0	3322	32	0	2158	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5210	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5210	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		2				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	11%	0%	4%	0%
Adj. Flow (vph)	29	18	0	196	0	63	0	3572	34	0	2320	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	18	0	196	0	63	0	3606	0	0	2320	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



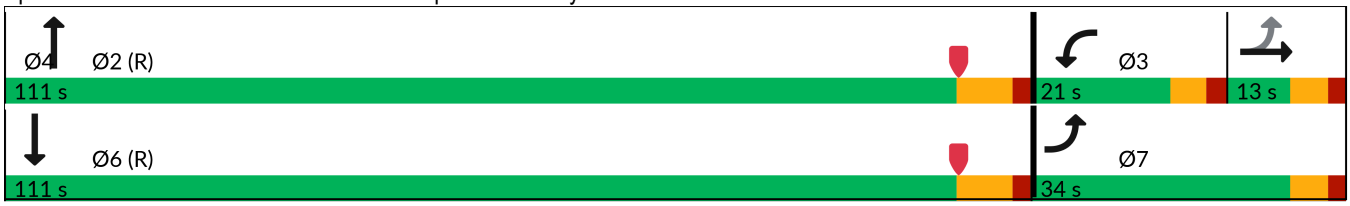
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	34.0	13.0		21.0				111.0			111.0	
Total Split (%)	23.4%	9.0%		14.5%				76.6%			76.6%	
Maximum Green (s)	28.0	7.0		15.0				103.0			103.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	18.8	7.0		17.8		145.0		108.4			108.4	
Actuated g/C Ratio	0.13	0.05		0.12		1.00		0.75			0.75	
v/c Ratio	0.06	0.20		0.89		0.04		0.93			0.61	
Control Delay (s/veh)	39.0	60.6		99.1		0.1		20.9			7.9	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	39.0	60.6		99.1		0.1		20.9			7.9	
LOS	D	E		F		A		C			A	
Approach Delay (s/veh)		47.3			75.0			20.9			7.9	
Approach LOS		D			E			C			A	
90th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	0.0	0.0		20.2				110.8			110.8	
30th %ile Term Code	Skip	Skip		Max				Coord			Coord	
10th %ile Green (s)	0.0	0.0		23.7				107.3			107.3	
10th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
Stops (vph)	22	18		147		0		2545			724	
Fuel Used(gal)	0	0		6		0		84			25	
CO Emissions (g/hr)	32	28		404		23		5866			1718	
NOx Emissions (g/hr)	6	5		79		4		1141			334	
VOC Emissions (g/hr)	7	6		94		5		1360			398	
Dilemma Vehicles (#)	0	1		0		0		114			73	
Queue Length 50th (ft)	11	17		~201		0		983			274	
Queue Length 95th (ft)	m17	m29		#366		0		1060			m289	
Internal Link Dist (ft)		319			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	676	91		221		1615		3896			3827	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.04	0.20		0.89		0.04		0.93			0.61	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 18.5		Intersection LOS: B	
Intersection Capacity Utilization 87.5%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	447	486	0	0	1077	448	0	0	316	0	0	0
Future Volume (vph)	447	486	0	0	1077	448	0	0	316	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3467	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.141											
Satd. Flow (perm)	515	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						359			602			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	502	546	0	0	1210	503	0	0	355	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	502	546	0	0	1210	503	0	0	355	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

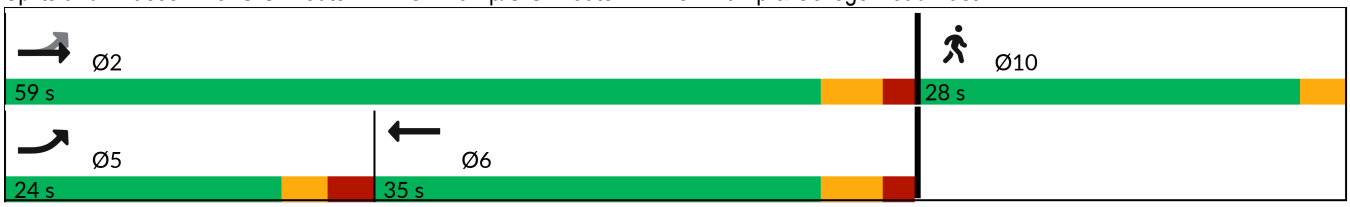
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	42.7	48.8			25.9	48.8			48.8			
Actuated g/C Ratio	0.88	1.00			0.53	1.00			1.00			
v/c Ratio	0.46	0.15			0.63	0.31			0.22			
Control Delay (s/veh)	3.8	0.1			10.3	0.5			0.3			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	3.8	0.1			10.3	0.5			0.3			
LOS	A	A			B	A			A			
Approach Delay (s/veh)		1.9			7.4			0.3				
Approach LOS		A			A			A				
90th %ile Green (s)	14.8	49.8			29.0							
90th %ile Term Code	Gap	Hold			Max							
70th %ile Green (s)	12.3	45.8			27.5							
70th %ile Term Code	Gap	Hold			Gap							
50th %ile Green (s)	10.7	42.2			25.5							
50th %ile Term Code	Gap	Hold			Gap							
30th %ile Green (s)	9.1	39.2			24.1							
30th %ile Term Code	Gap	Hold			Gap							
10th %ile Green (s)	7.7	37.0			23.3							
10th %ile Term Code	Gap	Hold			Gap							
Stops (vph)	77	0			684	0			0			
Fuel Used(gal)	2	1			38	12			3			
CO Emissions (g/hr)	154	84			2669	853			202			
NOx Emissions (g/hr)	30	16			519	166			39			
VOC Emissions (g/hr)	36	19			619	198			47			
Dilemma Vehicles (#)	0	0			89	0			0			
Queue Length 50th (ft)	0	0			111	0			0			
Queue Length 95th (ft)	30	0			192	0			0			
Internal Link Dist (ft)		282			478			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	1549	3538			2164	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.32	0.15			0.56	0.31			0.22			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 48.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 4.7		Intersection LOS: A	
Intersection Capacity Utilization 63.3%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 55.8			
70th %ile Actuated Cycle: 51.8			
50th %ile Actuated Cycle: 48.2			
30th %ile Actuated Cycle: 45.2			
10th %ile Actuated Cycle: 43			

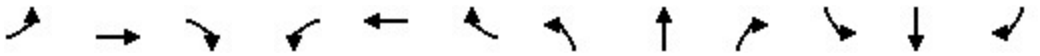
Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1095	18	0	1158	0	25	0	219	11	257	0
Future Volume (vph)	0	1095	18	0	1158	0	25	0	219	11	257	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.998	
Satd. Flow (prot)	0	3568	0	0	3610	0	1805	0	1599	0	3569	0
Flt Permitted							0.566				0.998	
Satd. Flow (perm)	0	3568	0	0	3610	0	1075	0	1599	0	3569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							52			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Adj. Flow (vph)	0	1244	20	0	1316	0	28	0	249	13	292	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1264	0	0	1316	0	28	0	249	0	305	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

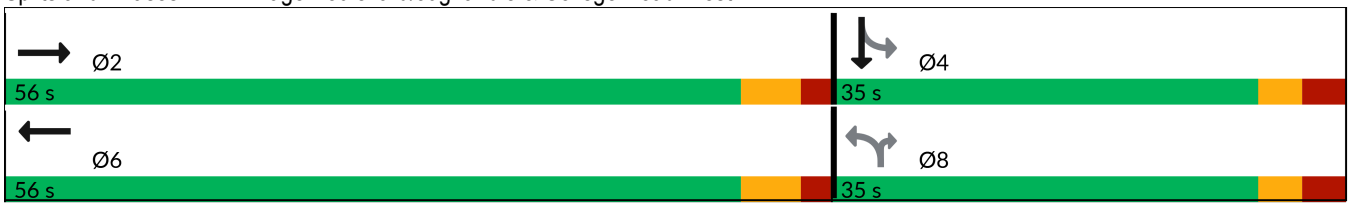


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		24.9			24.9		12.0		12.0		12.0	
Actuated g/C Ratio		0.50			0.50		0.24		0.24		0.24	
v/c Ratio		0.71			0.73		0.11		0.59		0.35	
Control Delay (s/veh)		12.2			12.6		18.0		20.5		18.0	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		12.2			12.6		18.0		20.5		18.0	
LOS		B			B		B		C		B	
Approach Delay (s/veh)		12.2			12.6			20.3			18.0	
Approach LOS		B			B			C			B	
90th %ile Green (s)		38.4			38.4		20.1		20.1	20.1	20.1	
90th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
70th %ile Green (s)		29.1			29.1		14.4		14.4	14.4	14.4	
70th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
50th %ile Green (s)		23.7			23.7		11.3		11.3	11.3	11.3	
50th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
30th %ile Green (s)		20.1			20.1		8.9		8.9	8.9	8.9	
30th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
10th %ile Green (s)		15.2			15.2		7.0		7.0	7.0	7.0	
10th %ile Term Code		Hold			Gap		Min		Min	Min	Min	
Stops (vph)		744			790		20		139		202	
Fuel Used(gal)		13			13		0		3		3	
CO Emissions (g/hr)		888			893		21		176		176	
NOx Emissions (g/hr)		173			174		4		34		34	
VOC Emissions (g/hr)		206			207		5		41		41	
Dilemma Vehicles (#)		86			89		0		0		0	
Queue Length 50th (ft)		123			131		6		46		37	
Queue Length 95th (ft)		241			254		26		131		87	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3290			3328		667		1013		2217	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

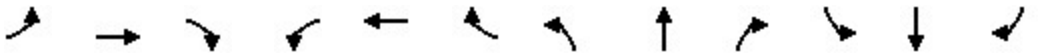
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.38			0.40		0.04		0.25		0.14	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 49.6			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 13.6		Intersection LOS: B	
Intersection Capacity Utilization 66.8%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 70.5			
70th %ile Actuated Cycle: 55.5			
50th %ile Actuated Cycle: 47			
30th %ile Actuated Cycle: 41			
10th %ile Actuated Cycle: 34.2			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	233	114	175	776	516	118	23	185	650	37	83
Future Volume (vph)	57	233	114	175	776	516	118	23	185	650	37	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.951				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3410	0	1805	3610	1615	3502	1900	1599	3502	1900	1615
Flt Permitted	0.223			0.507			0.950			0.950		
Satd. Flow (perm)	424	3410	0	963	3610	1615	3502	1900	1599	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		86				385			201			109
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	62	253	124	190	843	561	128	25	201	707	40	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	377	0	190	843	561	128	25	201	707	40	90
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

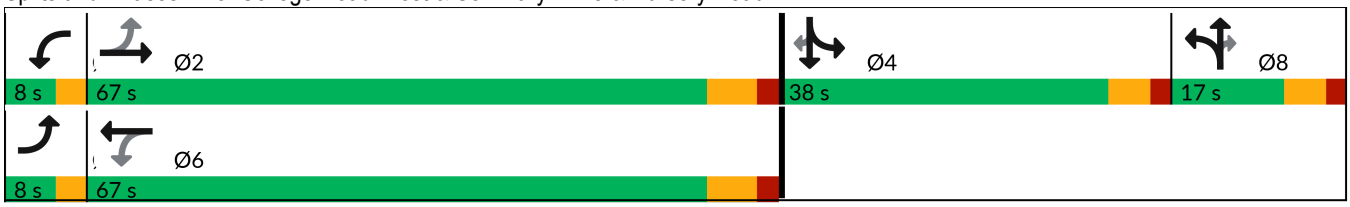


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	40.4	31.3		41.0	33.1	90.0	8.0	8.0	8.0	23.5	23.5	23.5
Actuated g/C Ratio	0.45	0.35		0.46	0.37	1.00	0.09	0.09	0.09	0.26	0.26	0.26
v/c Ratio	0.23	0.30		0.39	0.64	0.35	0.41	0.15	0.62	0.77	0.08	0.18
Control Delay (s/veh)	16.8	18.0		18.7	27.8	0.6	44.5	42.4	15.4	37.3	25.7	4.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.8	18.0		18.7	27.8	0.6	44.5	42.4	15.4	37.3	25.7	4.6
LOS	B	B		B	C	A	D	D	B	D	C	A
Approach Delay (s/veh)		17.8			17.1			27.8			33.2	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	35.7		5.0	35.7		11.0	11.0	11.0	32.0	32.0	32.0
90th %ile Term Code	Max	Hold		Max	Gap		Max	Max	Max	Max	Max	Max
70th %ile Green (s)	5.0	30.1		5.0	30.1		8.8	8.8	8.8	26.8	26.8	26.8
70th %ile Term Code	Max	Hold		Max	Gap		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		7.9	7.9	7.9	23.1	23.1	23.1
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		6.9	6.9	6.9	20.6	20.6	20.6
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.7	5.7	5.7	16.4	16.4	16.4
10th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
Stops (vph)	30	186		108	618	0	104	21	29	572	28	8
Fuel Used(gal)	1	5		2	13	2	3	1	2	13	1	1
CO Emissions (g/hr)	55	341		165	926	134	195	38	137	887	42	40
NOx Emissions (g/hr)	11	66		32	180	26	38	7	27	172	8	8
VOC Emissions (g/hr)	13	79		38	215	31	45	9	32	205	10	9
Dilemma Vehicles (#)	0	14		0	32	0	0	1	0	0	2	0
Queue Length 50th (ft)	18	60		59	207	0	35	13	0	187	17	0
Queue Length 95th (ft)	48	113		124	323	0	72	42	67	279	45	26
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	267	2323		486	2429	1615	432	234	373	1257	681	649
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.23	0.16		0.39	0.35	0.35	0.30	0.11	0.54	0.56	0.06	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 90			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 22.6		Intersection LOS: C	
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 105.7			
70th %ile Actuated Cycle: 92.7			
50th %ile Actuated Cycle: 88			
30th %ile Actuated Cycle: 84.5			
10th %ile Actuated Cycle: 79.1			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	689	419	228	562	12	432	280	212	0	0	0
Future Volume (vph)	15	689	419	228	562	12	432	280	212	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.969				
Flt Protected		0.999		0.950				0.977				
Satd. Flow (prot)	0	1929	1658	1834	1940	0	0	1791	0	0	0	0
Flt Permitted		0.983		0.175				0.977				
Satd. Flow (perm)	0	1898	1658	338	1940	0	0	1791	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			436		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	1%	0%	9%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	16	718	436	238	585	13	450	292	221	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	734	436	238	598	0	0	963	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

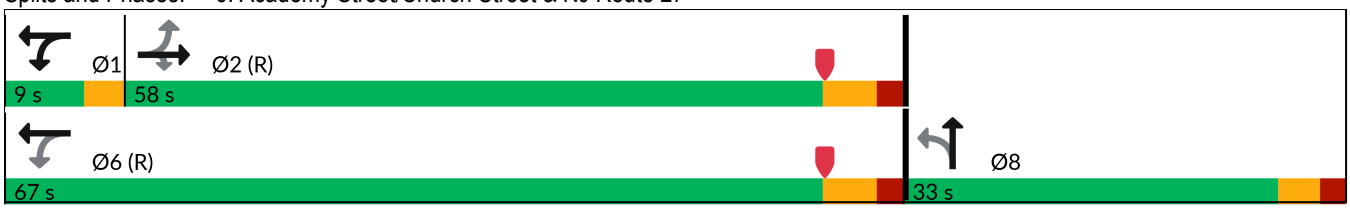
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.74	0.41	0.78	0.48			1.92				
Control Delay (s/veh)		24.6	2.5	18.8	6.5			447.0				
Queue Delay		0.0	0.0	0.0	0.4			0.0				
Total Delay (s/veh)		24.6	2.5	18.8	6.9			447.0				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		16.4			10.3			447.0				
Approach LOS		B			B			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		542	25	82	191			641				
Fuel Used(gal)		10	2	2	4			128				
CO Emissions (g/hr)		713	135	163	305			8960				
NOx Emissions (g/hr)		139	26	32	59			1743				
VOC Emissions (g/hr)		165	31	38	71			2077				
Dilemma Vehicles (#)		35	0	0	0			0				
Queue Length 50th (ft)		349	0	37	116			~950				
Queue Length 95th (ft)		500	45	m65	m147			#1189				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		986	1071	306	1242			501				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	249			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.74	0.41	0.78	0.60			1.92				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.92			
Intersection Signal Delay (s/veh): 154.3		Intersection LOS: F	
Intersection Capacity Utilization 136.9%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	831	16	86	587	63	49	290	93	79	325	171
Future Volume (vph)	49	831	16	86	587	63	49	290	93	79	325	171
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.988			0.971			0.960	
Flt Protected		0.997			0.994			0.994			0.993	
Satd. Flow (prot)	0	2171	0	0	2163	0	0	1834	0	0	1778	0
Flt Permitted		0.928			0.799			0.757			0.733	
Satd. Flow (perm)	0	2020	0	0	1739	0	0	1397	0	0	1313	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1372			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	1%	0%	0%	0%	4%	0%	0%	0%	3%	2%	1%
Adj. Flow (vph)	50	848	16	88	599	64	50	296	95	81	332	174
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	914	0	0	751	0	0	441	0	0	587	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.75			0.72			1.09			1.54	
Control Delay (s/veh)		9.6			19.1			106.2			286.5	
Queue Delay		0.4			0.0			0.0			0.0	
Total Delay (s/veh)		10.0			19.1			106.2			286.5	
LOS		A			B			F			F	
Approach Delay (s/veh)		10.0			19.1			106.2			286.5	
Approach LOS		A			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		367			507			358			425	
Fuel Used(gal)		8			14			33			41	
CO Emissions (g/hr)		535			976			2297			2845	
NOx Emissions (g/hr)		104			190			447			554	
VOC Emissions (g/hr)		124			226			532			659	
Dilemma Vehicles (#)		0			37			0			19	
Queue Length 50th (ft)		228			313			~318			~529	
Queue Length 95th (ft)		m293			460			#508			#737	
Internal Link Dist (ft)		509			1292			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1212			1043			405			380	
Starvation Cap Reductn		55			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.79			0.72			1.09			1.54	

Intersection Summary

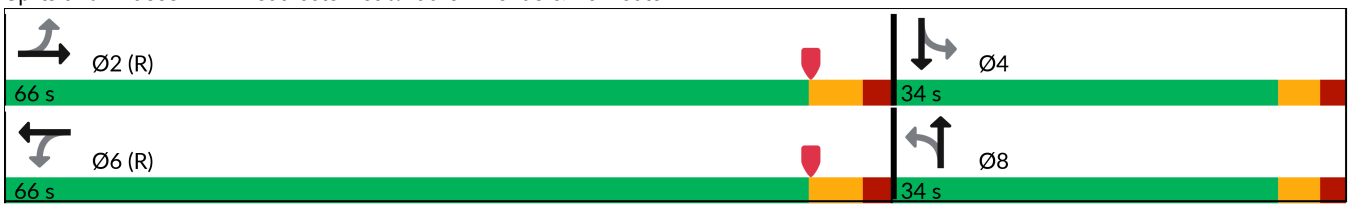
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.54			
Intersection Signal Delay (s/veh): 88.5		Intersection LOS: F	
Intersection Capacity Utilization 117.0%		ICU Level of Service H	
Analysis Period (min) 15			

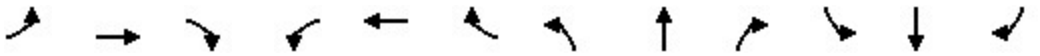
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

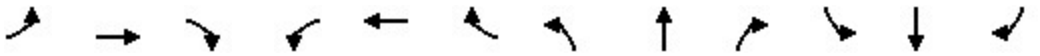
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	0	20	31	7	6	40	905	64	22	403	148
Future Volume (vph)	41	0	20	31	7	6	40	905	64	22	403	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.982			0.990			0.960	
Flt Protected		0.968			0.966		0.950			0.950		
Satd. Flow (prot)	0	1756	0	0	1705	0	1805	1864	0	1805	1801	0
Flt Permitted		0.775			0.796		0.398			0.158		
Satd. Flow (perm)	0	1406	0	0	1405	0	756	1864	0	300	1801	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			6			6			33	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			416			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	8%	0%	0%	0%	1%	0%	0%	1%	2%
Adj. Flow (vph)	42	0	21	32	7	6	41	933	66	23	415	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	45	0	41	999	0	23	568	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

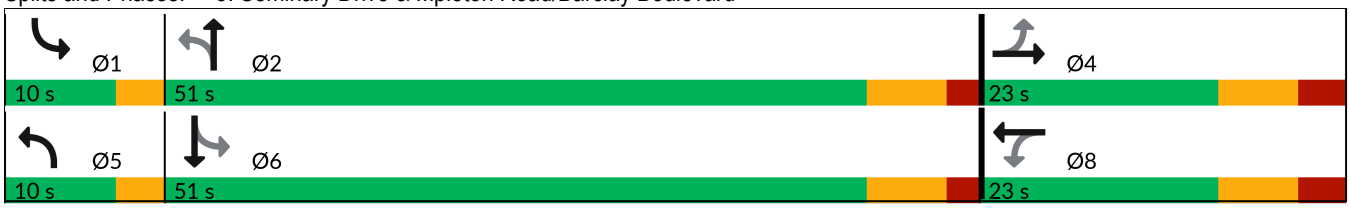


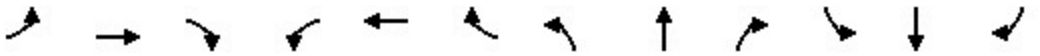
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.9			7.9		53.3	50.9		52.5	49.3	
Actuated g/C Ratio		0.12			0.12		0.81	0.77		0.80	0.75	
v/c Ratio		0.25			0.26		0.06	0.69		0.06	0.42	
Control Delay (s/veh)		6.5			31.4		2.7	13.9		3.0	8.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		6.5			31.4		2.7	13.9		3.0	8.2	
LOS		A			C		A	B		A	A	
Approach Delay (s/veh)		6.5			31.4			13.4			8.0	
Approach LOS		A			C			B			A	
90th %ile Green (s)	9.9	9.9		9.9	9.9		5.7	44.5		5.2	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Gap	Max	
70th %ile Green (s)	7.9	7.9		7.9	7.9		5.2	44.2		5.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Min	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		5.1	52.1		0.0	44.0	
50th %ile Term Code	Min	Min		Min	Min		Gap	Hold		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		7			36		10	490		6	226	
Fuel Used(gal)		1			1		0	16		1	24	
CO Emissions (g/hr)		36			35		33	1127		64	1691	
NOx Emissions (g/hr)		7			7		6	219		12	329	
VOC Emissions (g/hr)		8			8		8	261		15	392	
Dilemma Vehicles (#)		3			0		0	31		0	26	
Queue Length 50th (ft)		0			17		4	237		2	129	
Queue Length 95th (ft)		20			47		11	#701		7	235	
Internal Link Dist (ft)		797			156			336			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		402			337		734	1442		409	1357	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.16			0.13		0.06	0.69		0.06	0.42	

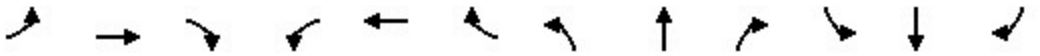
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 65.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 11.8		Intersection LOS: B	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.6			
70th %ile Actuated Cycle: 75.1			
50th %ile Actuated Cycle: 74.1			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	1230	16	8	642	275	25	13	14	792	5	131
Future Volume (vph)	88	1230	16	8	642	275	25	13	14	792	5	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.964				0.850
Flt Protected	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (prot)	1805	3574	1553	1805	3505	1583	0	1737	0	1715	1720	1583
Flt Permitted	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (perm)	1805	3574	1553	1805	3505	1583	0	1737	0	1715	1720	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			299		14				142
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		611			1998			443			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	4%	0%	3%	2%	6%	0%	0%	0%	0%	2%
Adj. Flow (vph)	96	1337	17	9	698	299	27	14	15	861	5	142
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	96	1337	17	9	698	299	0	56	0	430	436	142
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

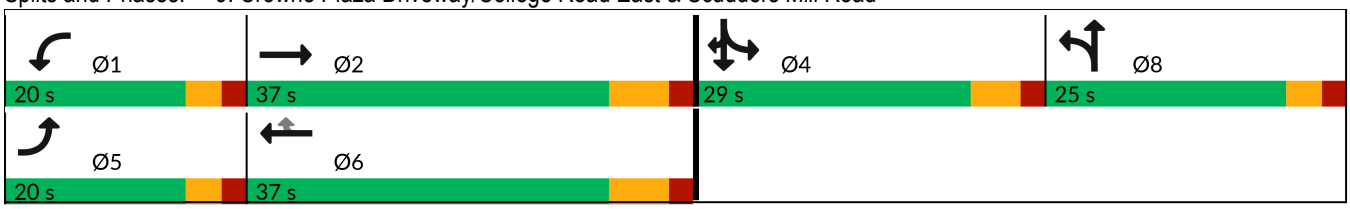


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	9.3	40.2	88.4	6.1	30.6	30.6		7.3		23.5	23.5	23.5
Actuated g/C Ratio	0.11	0.45	1.00	0.07	0.35	0.35		0.08		0.27	0.27	0.27
v/c Ratio	0.51	0.82	0.01	0.07	0.57	0.40		0.36		0.95	0.95	0.27
Control Delay (s/veh)	49.3	27.8	0.0	44.3	28.0	5.0		39.7		66.5	68.5	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	49.3	27.8	0.0	44.3	28.0	5.0		39.7		66.5	68.5	7.0
LOS	D	C	A	D	C	A		D		E	E	A
Approach Delay (s/veh)		28.9			21.3			39.7			59.0	
Approach LOS		C			C			D			E	
90th %ile Green (s)	13.5	37.4		6.1	30.0	30.0	10.0	10.0		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Max	Max	Max
70th %ile Green (s)	10.9	45.9		0.0	30.0	30.0	7.9	7.9		23.0	23.0	23.0
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Gap	Gap		Max	Max	Max
50th %ile Green (s)	9.2	44.2		0.0	30.0	30.0	6.7	6.7		23.0	23.0	23.0
50th %ile Term Code	Gap	Hold		Skip	Max	Max	Gap	Gap		Max	Max	Max
30th %ile Green (s)	7.7	42.7		0.0	30.0	30.0	6.0	6.0		23.0	23.0	23.0
30th %ile Term Code	Gap	Hold		Skip	Max	Max	Min	Min		Max	Max	Max
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		23.0	23.0	23.0
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Max	Max	Max
Stops (vph)	80	942	0	10	507	28		39		317	318	19
Fuel Used(gal)	3	35	0	0	20	4		1		24	24	5
CO Emissions (g/hr)	217	2468	13	23	1369	293		61		1658	1689	379
NOx Emissions (g/hr)	42	480	2	4	266	57		12		323	329	74
VOC Emissions (g/hr)	50	572	3	5	317	68		14		384	391	88
Dilemma Vehicles (#)	0	57	0	0	36	0		2		0	19	0
Queue Length 50th (ft)	54	326	0	5	177	0		24		~264	~273	0
Queue Length 95th (ft)	107	#598	0	22	266	59		63		#522	#531	48
Internal Link Dist (ft)		531			1918			363			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	312	1623	1553	312	1215	744		412		455	457	525
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.31	0.82	0.01	0.03	0.57	0.40		0.14		0.95	0.95	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 88.4			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 35.5		Intersection LOS: D	
Intersection Capacity Utilization 82.7%		ICU Level of Service E	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99.5			
70th %ile Actuated Cycle: 94.8			
50th %ile Actuated Cycle: 91.9			
30th %ile Actuated Cycle: 89.7			
10th %ile Actuated Cycle: 66			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



Intersection	
Int Delay, s/veh	11.2

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	18	210	0	727	193	374	456
Future Vol, veh/h	18	210	0	727	193	374	456
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	1	0	0
Mvmt Flow	21	241	0	836	222	430	524

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	2068	529	524	0	0	1057	0
Stage 1	947	-	-	-	-	-	-
Stage 2	1122	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	48	500	677	-	-	666	-
Stage 1	342	-	-	-	-	-	-
Stage 2	277	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 17	500	677	-	-	666	-
Mov Cap-2 Maneuver	~ 17	-	-	-	-	-	-
Stage 1	342	-	-	-	-	-	-
Stage 2	98	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	65.28	0	8.87
HCM LOS	F		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	677	-	-	17	500	666	-
HCM Lane V/C Ratio	-	-	-	1.215	0.483	0.645	-
HCM Ctrl Dly (s/v)	0	-	-	-$ 608.1	18.8	19.7	-
HCM Lane LOS	A	-	-	F	C	C	-
HCM 95th %tile Q(veh)	0	-	-	3	2.6	4.7	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	372	8	5	933	38	13	0	15	16	0	49
Future Vol, veh/h	54	372	8	5	933	38	13	0	15	16	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	63	433	9	6	1085	44	15	0	17	19	0	57

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1129	0	0	442	0	0	1659	1703	437	1655	1664	1085
Stage 1	-	-	-	-	-	-	563	563	-	1097	1097	-
Stage 2	-	-	-	-	-	-	1097	1141	-	558	567	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	626	-	-	1129	-	-	79	93	624	79	98	266
Stage 1	-	-	-	-	-	-	515	512	-	261	292	-
Stage 2	-	-	-	-	-	-	261	278	-	518	510	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	626	-	-	1129	-	-	53	79	624	66	84	266
Mov Cap-2 Maneuver	-	-	-	-	-	-	53	79	-	66	84	-
Stage 1	-	-	-	-	-	-	446	444	-	257	287	-
Stage 2	-	-	-	-	-	-	202	274	-	436	442	-

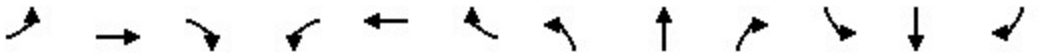
Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.42	0.04	54.98	36.44
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	104	223	-	-	10	-	-	66	266
HCM Lane V/C Ratio	0.315	0.1	-	-	0.005	-	-	0.283	0.214
HCM Ctrl Dly (s/v)	55	11.4	0	-	8.2	0	-	80.1	22.2
HCM Lane LOS	F	B	A	-	A	A	-	F	C
HCM 95th %tile Q(veh)	1.2	0.3	-	-	0	-	-	1	0.8

SATURDAY PROJECTED WITH GDP

PRE-COVID CONDITION

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	196	64	157	197	113	0	1984	0	0	2094	0
Future Volume (vph)	48	196	64	157	197	113	0	1984	0	0	2094	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1881	1615	1805	1784	0	0	3632	0	0	3597	0
Flt Permitted	0.224			0.325								
Satd. Flow (perm)	417	1881	1615	618	1784	0	0	3632	0	0	3597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	0%	0%	1%	0%	0%	2%	0%	0%	3%	0%
Adj. Flow (vph)	50	204	67	164	205	118	0	2067	0	0	2181	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	204	67	164	323	0	0	2067	0	0	2181	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

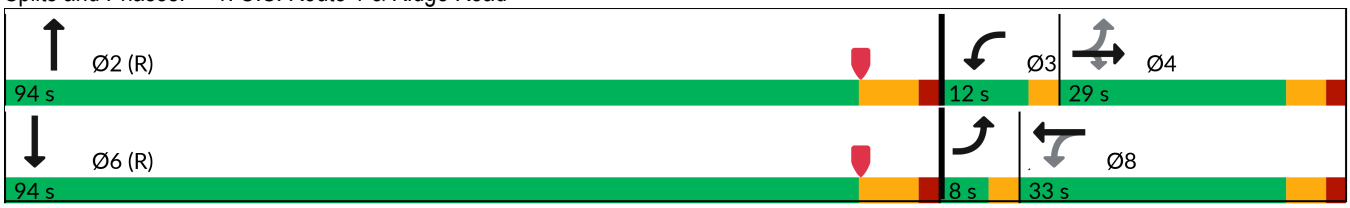


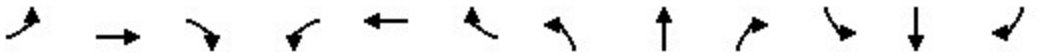
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	29.0	29.0	12.0	33.0			94.0			94.0	
Total Split (%)	5.9%	21.5%	21.5%	8.9%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.5	20.2	20.2	35.8	26.1			91.2			91.2	
Actuated g/C Ratio	0.21	0.15	0.15	0.27	0.19			0.68			0.68	
v/c Ratio	0.36	0.73	0.21	0.66	0.90			0.84			0.90	
Control Delay (s/veh)	44.0	69.3	5.8	54.1	77.5			18.8			25.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	44.0	69.3	5.8	54.1	77.5			18.8			25.0	
LOS	D	E	A	D	E			B			C	
Approach Delay (s/veh)		52.1			69.6			18.8			25.0	
Approach LOS		D			E			B			C	
90th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
70th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
50th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
30th %ile Green (s)	6.3	19.9	19.9	11.9	25.5			86.2			86.2	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	12.2	12.2	8.8	24.0			97.0			97.0	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	38	183	5	123	268			1312			1634	
Fuel Used(gal)	1	5	0	4	9			36			46	
CO Emissions (g/hr)	60	334	13	264	651			2528			3187	
NOx Emissions (g/hr)	12	65	3	51	127			492			620	
VOC Emissions (g/hr)	14	77	3	61	151			586			739	
Dilemma Vehicles (#)	0	6	0	0	10			74			77	
Queue Length 50th (ft)	33	167	0	114	262			701			810	
Queue Length 95th (ft)	69	249	23	180	#428			422			956	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	140	320	348	248	372			2454			2431	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.36	0.64	0.19	0.66	0.87			0.84			0.90	

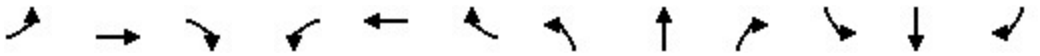
Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 28.5		Intersection LOS: C	
Intersection Capacity Utilization 90.3%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1	0	9	0	5	0	2240	3	0	2382	0
Future Volume (vph)	19	1	0	9	0	5	0	2240	3	0	2382	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137						
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	20	1	0	9	0	5	0	2333	3	0	2481	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1	0	9	0	5	0	2336	0	0	2481	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



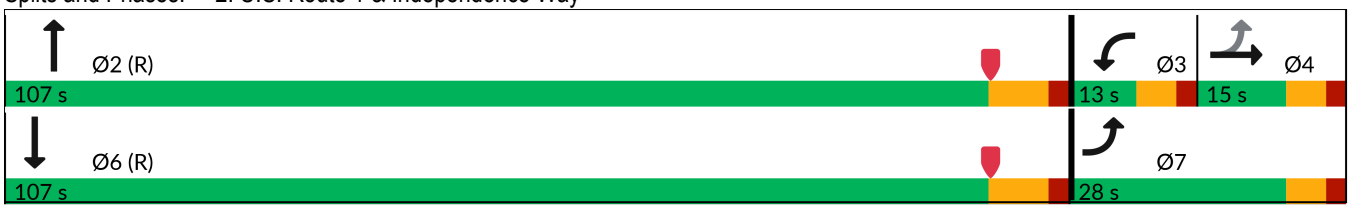
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	8.7	7.0		5.5		135.0		121.7			121.7	
Actuated g/C Ratio	0.06	0.05		0.04		1.00		0.90			0.90	
v/c Ratio	0.09	0.01		0.12		0.00		0.50			0.53	
Control Delay (s/veh)	49.7	55.0		65.8		0.0		2.9			2.8	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	49.7	55.0		65.8		0.0		2.9			2.8	
LOS	D	D		E		A		A			A	
Approach Delay (s/veh)		49.9			42.3			2.9			2.8	
Approach LOS		D			D			A			A	
90th %ile Green (s)	19.6	7.0		6.6				101.4			101.4	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
50th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	19	2		10		0		404			409	
Fuel Used(gal)	0	0		0		0		24			17	
CO Emissions (g/hr)	27	2		17		2		1662			1220	
NOx Emissions (g/hr)	5	0		3		0		323			237	
VOC Emissions (g/hr)	6	0		4		0		385			283	
Dilemma Vehicles (#)	0	0		0		0		53			79	
Queue Length 50th (ft)	8	1		8		0		129			285	
Queue Length 95th (ft)	m9	m2		27		0		294			134	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	570	126		93		1615		4704			4704	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.04	0.01		0.10		0.00		0.50			0.53	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay (s/veh): 3.2		Intersection LOS: A	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	304	358	0	0	374	18	0	0	60	0	0	0
Future Volume (vph)	304	358	0	0	374	18	0	0	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3539	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.379											
Satd. Flow (perm)	1397	3539	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			692			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	330	389	0	0	407	20	0	0	65	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	330	389	0	0	407	20	0	0	65	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

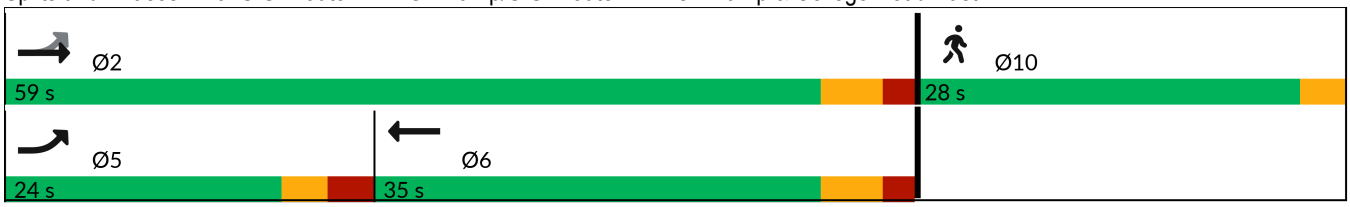
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.2	36.2			17.0	36.2			36.2			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.21	0.11			0.24	0.01			0.04			
Control Delay (s/veh)	0.9	0.1			6.3	0.0			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.9	0.1			6.3	0.0			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			6.0			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	7.9	30.9			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.1	30.1			17.0							
70th %ile Term Code	Gap	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	32	0			195	0			0			
Fuel Used(gal)	1	1			13	0			1			
CO Emissions (g/hr)	78	62			876	34			38			
NOx Emissions (g/hr)	15	12			170	7			7			
VOC Emissions (g/hr)	18	14			203	8			9			
Dilemma Vehicles (#)	0	0			39	0			0			
Queue Length 50th (ft)	0	0			22	0			0			
Queue Length 95th (ft)	0	0			40	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2212	3539			2892	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.15	0.11			0.14	0.01			0.04			

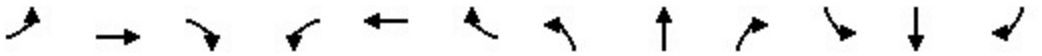
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.2			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay (s/veh): 2.4		Intersection LOS: A	
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.9			
70th %ile Actuated Cycle: 36.1			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

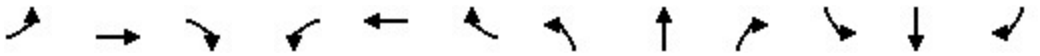


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	947	15	0	779	0	9	0	90	3	151	0
Future Volume (vph)	0	947	15	0	779	0	9	0	90	3	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3533	0	0	3539	0	1805	0	1615	0	3606	0
Flt Permitted							0.644				0.999	
Satd. Flow (perm)	0	3533	0	0	3539	0	1224	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							86			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1052	17	0	866	0	10	0	100	3	168	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1069	0	0	866	0	10	0	100	0	171	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

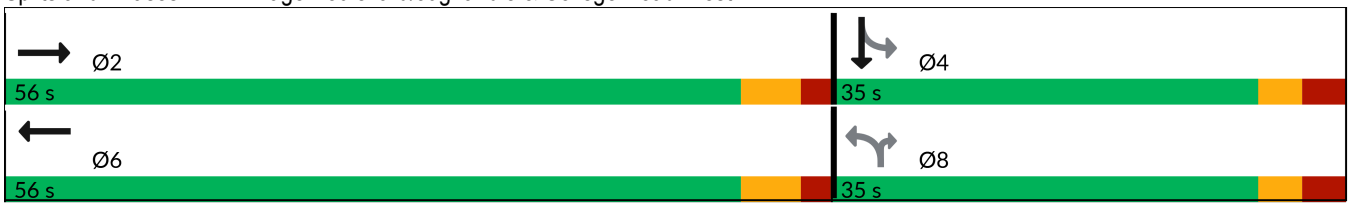


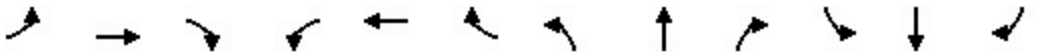
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		18.8			18.8		7.4		7.4		7.4	
Actuated g/C Ratio		0.49			0.49		0.19		0.19		0.19	
v/c Ratio		0.62			0.50		0.04		0.26		0.25	
Control Delay (s/veh)		8.9			7.7		14.0		7.5		14.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		8.9			7.7		14.0		7.5		14.5	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		8.9			7.7			8.1			14.5	
Approach LOS		A			A			A			B	
90th %ile Green (s)		23.1			23.1		8.5		8.5	8.5	8.5	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		18.9			18.9		7.2		7.2	7.2	7.2	
70th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
50th %ile Green (s)		16.1			16.1		7.0		7.0	7.0	7.0	
50th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		21.3			21.3		7.0		7.0	7.0	7.0	
10th %ile Term Code		Dwell			Dwell		Hold		Hold	Min	Min	
Stops (vph)		614			456		11		30		122	
Fuel Used(gal)		10			7		0		1		1	
CO Emissions (g/hr)		703			495		8		45		96	
NOx Emissions (g/hr)		137			96		2		9		19	
VOC Emissions (g/hr)		163			115		2		10		22	
Dilemma Vehicles (#)		99			80		0		0		0	
Queue Length 50th (ft)		72			54		2		2		14	
Queue Length 95th (ft)		123			93		11		31		40	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3533			3539		936		1255		2758	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.30			0.24		0.01		0.08		0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 38.2			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 43.6			
70th %ile Actuated Cycle: 38.1			
50th %ile Actuated Cycle: 35.1			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 40.3			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





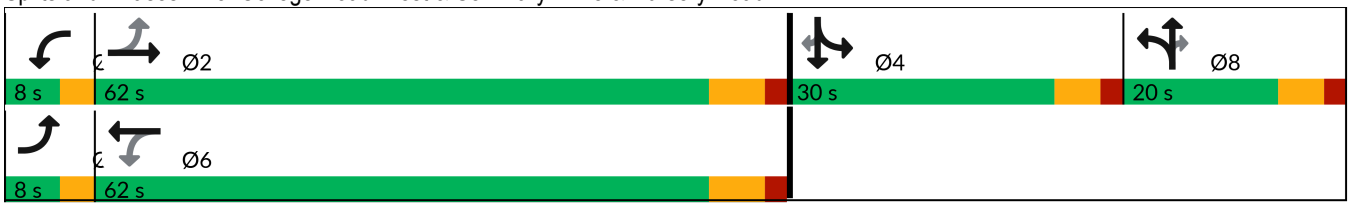
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	176	55	94	207	767	64	39	88	682	43	79
Future Volume (vph)	87	176	55	94	207	767	64	39	88	682	43	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.964				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3377	0	1752	3574	1615	3502	1900	1615	3502	1900	1615
Flt Permitted	0.596			0.579			0.950			0.950		
Satd. Flow (perm)	1132	3377	0	1068	3574	1615	3502	1900	1615	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		46				878			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	4%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	106	215	67	115	252	935	78	48	107	832	52	96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	106	282	0	115	252	935	78	48	107	832	52	96
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.0	30.0		39.0	30.0	87.7	6.7	6.7	6.7	24.0	24.0	24.0
Actuated g/C Ratio	0.44	0.34		0.44	0.34	1.00	0.08	0.08	0.08	0.27	0.27	0.27
v/c Ratio	0.20	0.24		0.22	0.21	0.58	0.29	0.33	0.46	0.87	0.10	0.18
Control Delay (s/veh)	14.2	18.0		14.5	21.3	1.5	41.0	44.5	13.4	42.0	25.0	4.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.2	18.0		14.5	21.3	1.5	41.0	44.5	13.4	42.0	25.0	4.3
LOS	B	B		B	C	A	D	D	B	D	C	A
Approach Delay (s/veh)		17.0			6.5			29.0			37.4	
Approach LOS		B			A			C			D	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.9	8.9	8.9	24.0	24.0	24.0
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.5	7.5	7.5	24.0	24.0	24.0
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.6	6.6	6.6	24.0	24.0	24.0
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.7	5.7	5.7	24.0	24.0	24.0
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
10th %ile Green (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	24.0	24.0	24.0
10th %ile Term Code	Max	Min		Max	Min		Min	Min	Min	Max	Max	Max
Stops (vph)	47	133		53	140	1	58	37	15	604	31	8
Fuel Used(gal)	1	3		1	3	3	1	1	1	14	1	1
CO Emissions (g/hr)	81	234		79	211	210	104	66	64	977	48	38
NOx Emissions (g/hr)	16	45		15	41	41	20	13	12	190	9	7
VOC Emissions (g/hr)	19	54		18	49	49	24	15	15	227	11	9
Dilemma Vehicles (#)	0	10		0	9	0	0	2	0	0	2	0
Queue Length 50th (ft)	31	47		34	51	0	21	26	0	225	21	0
Queue Length 95th (ft)	56	72		60	74	0	38	54	31	271	46	19
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	541	2134		513	2240	1615	558	303	356	958	519	527
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.20	0.13		0.22	0.11	0.58	0.14	0.16	0.30	0.87	0.10	0.18

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 87.7			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 20.1		Intersection LOS: C	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 89.9			
70th %ile Actuated Cycle: 88.5			
50th %ile Actuated Cycle: 87.6			
30th %ile Actuated Cycle: 86.7			
10th %ile Actuated Cycle: 86			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	244	274	549	12	189	61	104	0	0	0
Future Volume (vph)	15	463	244	274	549	12	189	61	104	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.960				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1909	1658	1834	1925	0	0	1777	0	0	0	0
Flt Permitted		0.977		0.379				0.974				
Satd. Flow (perm)	0	1869	1658	732	1925	0	0	1777	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			257		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	257	288	578	13	199	64	109	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	257	288	591	0	0	372	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

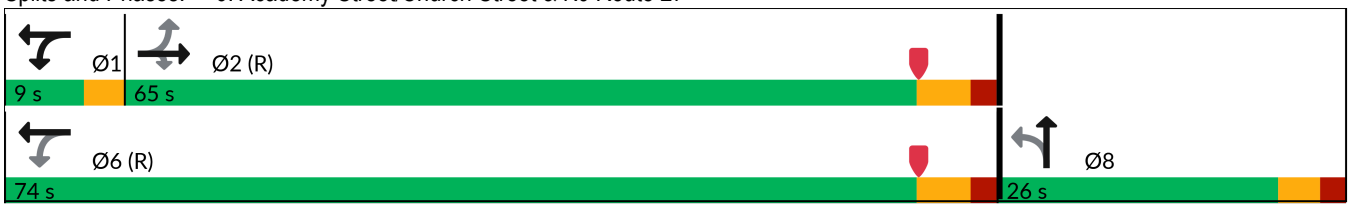
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.46	0.24	0.49	0.43			1.00				
Control Delay (s/veh)		13.2	1.7	5.3	4.4			87.0				
Queue Delay		0.0	0.0	0.0	0.3			0.0				
Total Delay (s/veh)		13.2	1.7	5.3	4.7			87.0				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		9.3			4.9			87.0				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		256	14	58	144			304				
Fuel Used(gal)		5	1	2	4			23				
CO Emissions (g/hr)		347	76	132	271			1637				
NOx Emissions (g/hr)		67	15	26	53			319				
VOC Emissions (g/hr)		80	18	31	63			379				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		167	0	34	84			239				
Queue Length 95th (ft)		243	31	m46	m102			#426				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1102	1083	585	1367			373				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	269			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.46	0.24	0.49	0.54			1.00				

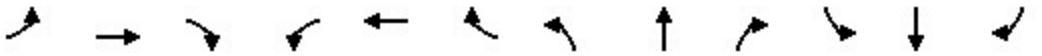
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 21.7		Intersection LOS: C	
Intersection Capacity Utilization 110.6%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27

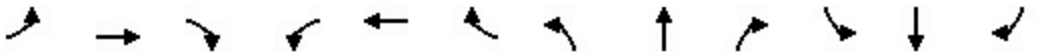


Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	505	23	63	611	61	42	110	72	85	140	160
Future Volume (vph)	38	505	23	63	611	61	42	110	72	85	140	160
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.989			0.957			0.944	
Flt Protected		0.997			0.996			0.991			0.989	
Satd. Flow (prot)	0	2154	0	0	2148	0	0	1793	0	0	1767	0
Flt Permitted		0.917			0.906			0.812			0.815	
Satd. Flow (perm)	0	1981	0	0	1954	0	0	1469	0	0	1456	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	532	24	66	643	64	44	116	76	89	147	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	596	0	0	773	0	0	236	0	0	404	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	



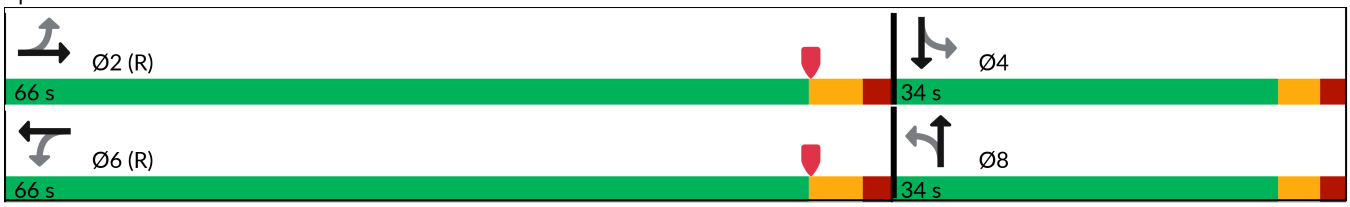
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.3			60.3			28.7			28.7	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.50			0.66			0.56			0.97	
Control Delay (s/veh)		8.5			16.5			36.2			73.1	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		8.6			16.5			36.2			73.1	
LOS		A			B			D			E	
Approach Delay (s/veh)		8.6			16.5			36.2			73.1	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	61.4	61.4		61.4	61.4		27.6	27.6		27.6	27.6	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		178			467			188			331	
Fuel Used(gal)		4			13			14			11	
CO Emissions (g/hr)		315			926			969			759	
NOx Emissions (g/hr)		61			180			189			148	
VOC Emissions (g/hr)		73			215			225			176	
Dilemma Vehicles (#)		0			37			0			17	
Queue Length 50th (ft)		130			302			127			252	
Queue Length 95th (ft)		m158			430			207			#441	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1194			1177			426			422	
Starvation Cap Reductn		80			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.54			0.66			0.55			0.96	

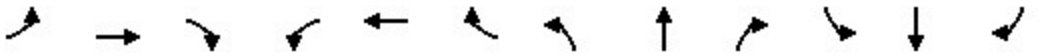
Intersection Summary

Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 27.9		Intersection LOS: C	
Intersection Capacity Utilization 93.2%		ICU Level of Service F	
Analysis Period (min) 15			

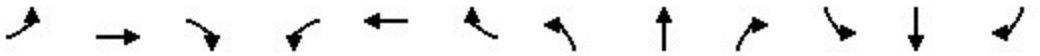
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	3	51	8	18	5	317	61	15	363	190
Future Volume (vph)	24	0	3	51	8	18	5	317	61	15	363	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.969			0.976			0.948	
Flt Protected		0.957			0.968		0.950			0.950		
Satd. Flow (prot)	0	1793	0	0	1714	0	1805	1854	0	1687	1795	0
Flt Permitted		0.690			0.784		0.390			0.520		
Satd. Flow (perm)	0	1293	0	0	1389	0	741	1854	0	923	1795	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			16			17			47	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	6%	0%	0%	0%	0%	0%	7%	0%	1%
Adj. Flow (vph)	26	0	3	54	9	19	5	337	65	16	386	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	82	0	5	402	0	16	588	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

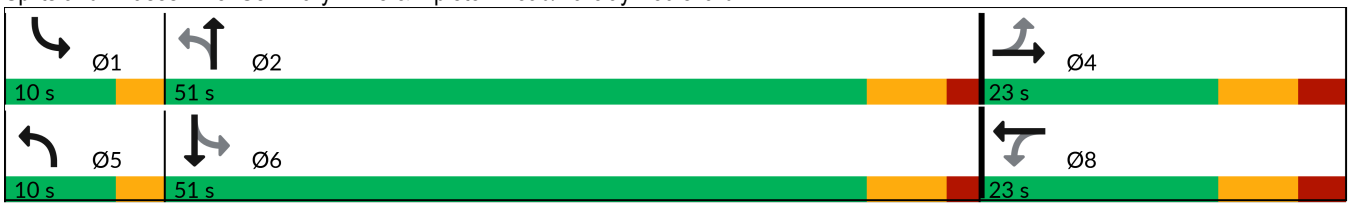


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		8.6			8.6		49.8	46.7		49.9	46.8	
Actuated g/C Ratio		0.13			0.13		0.75	0.70		0.75	0.71	
v/c Ratio		0.12			0.42		0.01	0.31		0.02	0.46	
Control Delay (s/veh)		1.0			31.3		3.4	6.8		3.3	8.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		1.0			31.3		3.4	6.8		3.3	8.1	
LOS		A			C		A	A		A	A	
Approach Delay (s/veh)		1.0			31.3			6.8			7.9	
Approach LOS		A			C			A			A	
90th %ile Green (s)	12.5	12.5		12.5	12.5		5.0	44.0		5.2	44.2	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Gap	Hold	
70th %ile Green (s)	9.1	9.1		9.1	9.1		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.6	7.6		7.6	7.6		0.0	44.0		0.0	44.0	
50th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
30th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
Stops (vph)		0			57		2	146		6	240	
Fuel Used(gal)		0			1		0	5		1	24	
CO Emissions (g/hr)		11			60		5	370		45	1704	
NOx Emissions (g/hr)		2			12		1	72		9	332	
VOC Emissions (g/hr)		3			14		1	86		10	395	
Dilemma Vehicles (#)		2			0		0	24		0	32	
Queue Length 50th (ft)		0			26		1	56		1	90	
Queue Length 95th (ft)		0			71		3	160		7	256	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		368			333		675	1312		781	1280	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.08			0.25		0.01	0.31		0.02	0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 66.3			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 9.0		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 79.7			
70th %ile Actuated Cycle: 68.1			
50th %ile Actuated Cycle: 66.6			
30th %ile Actuated Cycle: 66			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	8	86	0	237	11	82	246
Future Vol, veh/h	8	86	0	237	11	82	246
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	1
Mvmt Flow	10	104	0	286	13	99	296

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	638	149	296	0	0	299	0
Stage 1	292	-	-	-	-	-	-
Stage 2	346	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	414	877	941	-	-	1274	-
Stage 1	738	-	-	-	-	-	-
Stage 2	694	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	382	877	941	-	-	1274	-
Mov Cap-2 Maneuver	382	-	-	-	-	-	-
Stage 1	738	-	-	-	-	-	-
Stage 2	640	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.08	0	2.02
HCM LOS	B		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	941	-	-	382	877	1274	-
HCM Lane V/C Ratio	-	-	-	0.025	0.118	0.078	-
HCM Ctrl Dly (s/v)	0	-	-	14.7	9.7	8.1	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0.3	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	89	278	16	14	276	59	17	0	8	31	0	76
Future Vol, veh/h	89	278	16	14	276	59	17	0	8	31	0	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	109	339	20	17	337	72	21	0	10	38	0	93

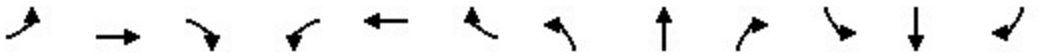
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	409	0	0	359	0	0	937	1009	349	927	946	337
Stage 1	-	-	-	-	-	-	566	566	-	371	371	-
Stage 2	-	-	-	-	-	-	371	443	-	556	576	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1161	-	-	1211	-	-	247	242	699	251	263	710
Stage 1	-	-	-	-	-	-	513	511	-	654	623	-
Stage 2	-	-	-	-	-	-	654	579	-	519	506	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1161	-	-	1211	-	-	186	210	699	214	228	710
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	210	-	214	228	-
Stage 1	-	-	-	-	-	-	453	451	-	642	612	-
Stage 2	-	-	-	-	-	-	558	569	-	452	446	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.96	0.32	21.9	15.04
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	243	414	-	-	87	-	-	214	710
HCM Lane V/C Ratio	0.125	0.093	-	-	0.014	-	-	0.176	0.131
HCM Ctrl Dly (s/v)	21.9	8.4	0	-	8	0	-	25.4	10.8
HCM Lane LOS	C	A	A	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0	-	-	0.6	0.4

AM BUILD

PRE-COVID CONDITION



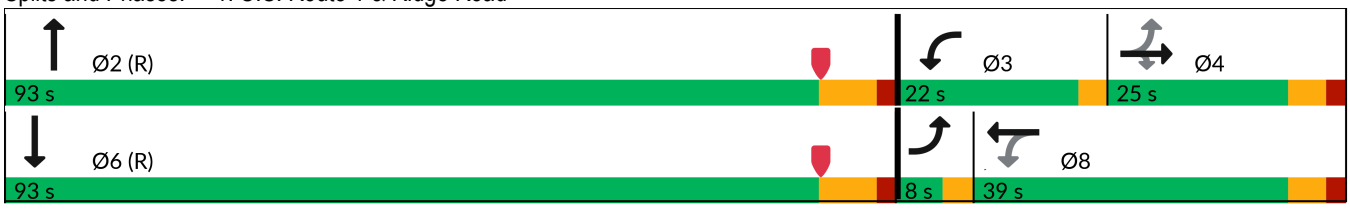
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	292	165	382	342	103	0	1757	0	0	3066	0
Future Volume (vph)	93	292	165	382	342	103	0	1757	0	0	3066	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.965							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1615	1805	1793	0	0	4975	0	0	5070	0
Flt Permitted	0.211			0.182								
Satd. Flow (perm)	393	1863	1615	346	1793	0	0	4975	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		10							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	0%	0%	2%	3%	0%	7%	0%	0%	5%	0%
Adj. Flow (vph)	95	298	168	390	349	105	0	1793	0	0	3129	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	298	168	390	454	0	0	1793	0	0	3129	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	25.0	25.0	22.0	39.0			93.0			93.0	
Total Split (%)	5.7%	17.9%	17.9%	15.7%	27.9%			66.4%			66.4%	
Maximum Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	27.0	19.0	19.0	44.0	33.0			88.0			88.0	
Actuated g/C Ratio	0.19	0.14	0.14	0.31	0.24			0.63			0.63	
v/c Ratio	0.77	1.18	0.57	1.27	1.06			0.57			0.98	
Control Delay (s/veh)	77.0	165.9	35.8	181.4	108.4			14.3			37.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	77.0	165.9	35.8	181.4	108.4			14.3			37.6	
LOS	E	F	D	F	F			B			D	
Approach Delay (s/veh)		111.9			142.2			14.3			37.6	
Approach LOS		F			F			B			D	
90th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
10th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
Stops (vph)	80	237	77	250	376			805			2666	
Fuel Used(gal)	2	13	2	18	16			24			80	
CO Emissions (g/hr)	164	874	149	1282	1122			1661			5572	
NOx Emissions (g/hr)	32	170	29	249	218			323			1084	
VOC Emissions (g/hr)	38	203	35	297	260			385			1291	
Dilemma Vehicles (#)	0	8	0	0	14			61			107	
Queue Length 50th (ft)	63	~324	69	~387	~447			294			957	
Queue Length 95th (ft)	#121	#513	149	#596	#673			314			#1136	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	124	252	293	306	430			3127			3186	

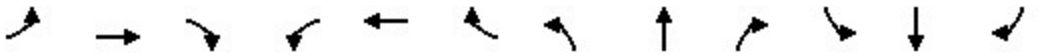
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.77	1.18	0.57	1.27	1.06			0.57			0.98	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 108 (77%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay (s/veh): 51.6		Intersection LOS: D	
Intersection Capacity Utilization 106.8%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	87	0	18	0	10	0	2025	259	0	3553	0
Future Volume (vph)	75	87	0	18	0	10	0	2025	259	0	3553	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.983				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1881	0	1805	0	1615	0	4922	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1881	0	1805	0	1615	0	4922	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						132		56				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	7%	1%	0%	4%	0%
Adj. Flow (vph)	77	90	0	19	0	10	0	2088	267	0	3663	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	90	0	19	0	10	0	2355	0	0	3663	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



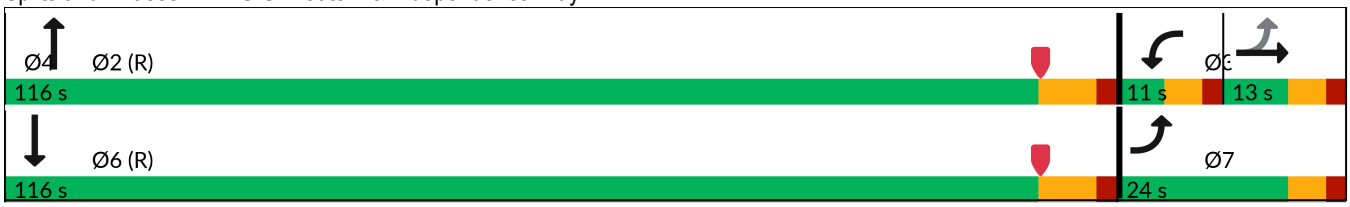
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				116.0			116.0	
Total Split (%)	17.1%	9.3%		7.9%				82.9%			82.9%	
Maximum Green (s)	18.0	7.0		5.0				108.0			108.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	15.2	8.6		5.0		140.0		113.8			113.8	
Actuated g/C Ratio	0.11	0.06		0.04		1.00		0.81			0.81	
v/c Ratio	0.20	0.78		0.30		0.01		0.59			0.88	
Control Delay (s/veh)	47.2	75.5		77.8		0.0		5.5			4.8	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	47.2	75.5		77.8		0.0		5.5			4.8	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		62.5			51.0			5.5			4.8	
Approach LOS		E			D			A			A	
90th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	12.0	12.0		0.0				114.0			114.0	
30th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
10th %ile Green (s)	9.9	9.9		0.0				116.1			116.1	
10th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
Stops (vph)	68	72		19		0		735			669	
Fuel Used(gal)	1	2		1		0		31			29	
CO Emissions (g/hr)	101	149		37		4		2197			1996	
NOx Emissions (g/hr)	20	29		7		1		427			388	
VOC Emissions (g/hr)	23	35		9		1		509			463	
Dilemma Vehicles (#)	0	2		0		0		82			70	
Queue Length 50th (ft)	34	86		17		0		256			178	
Queue Length 95th (ft)	m36	m#95		46		0		285			m179	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	450	115		64		1615		4012			4161	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.17	0.78		0.30		0.01		0.59			0.88	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 6.8		Intersection LOS: A	
Intersection Capacity Utilization 84.9%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	228	927	0	0	809	198	0	0	557	0	0	0
Future Volume (vph)	228	927	0	0	809	198	0	0	557	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3400	3574	0	0	3574	1615	0	0	1627	0	0	0
Flt Permitted	0.236											
Satd. Flow (perm)	845	3574	0	0	3574	1615	0	0	1627	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						211			463			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	243	986	0	0	861	211	0	0	593	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	986	0	0	861	211	0	0	593	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

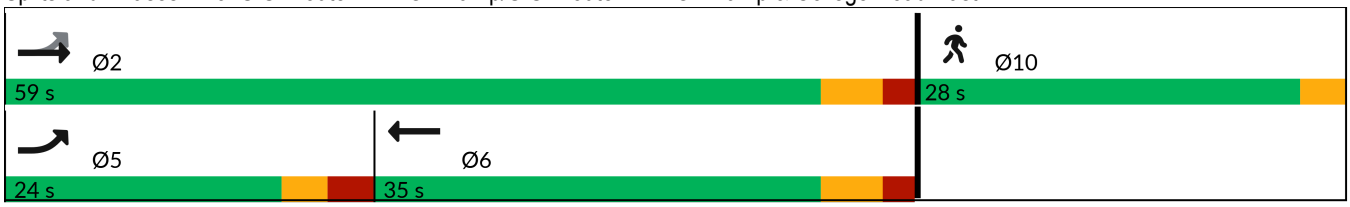
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.4	36.4			17.0	36.4			36.4			
Actuated g/C Ratio	0.84	1.00			0.47	1.00			1.00			
v/c Ratio	0.20	0.28			0.52	0.13			0.36			
Control Delay (s/veh)	0.9	0.2			8.3	0.2			0.6			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.9	0.2			8.3	0.2			0.6			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.3			6.7			0.6				
Approach LOS		A			A			A				
90th %ile Green (s)	8.5	31.5			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.4	30.4			17.0							
70th %ile Term Code	Gap	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	23	0			502	0			0			
Fuel Used(gal)	1	2			28	5			5			
CO Emissions (g/hr)	58	162			1974	376			359			
NOx Emissions (g/hr)	11	31			384	73			70			
VOC Emissions (g/hr)	13	37			457	87			83			
Dilemma Vehicles (#)	0	0			84	0			0			
Queue Length 50th (ft)	0	0			54	0			0			
Queue Length 95th (ft)	0	0			94	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	1970	3574			2849	1615			1627			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.12	0.28			0.30	0.13			0.36			

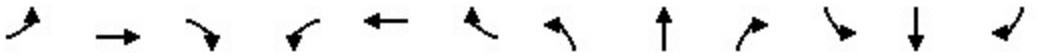
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 37.5			
70th %ile Actuated Cycle: 36.4			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

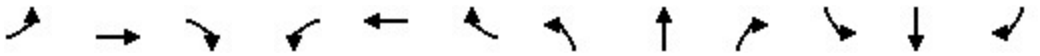


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	919	16	0	760	0	9	0	70	19	341	0
Future Volume (vph)	0	919	16	0	760	0	9	0	70	19	341	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.997	
Satd. Flow (prot)	0	3564	0	0	3574	0	1626	0	1615	0	3565	0
Flt Permitted							0.523				0.997	
Satd. Flow (perm)	0	3564	0	0	3574	0	895	0	1615	0	3565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							75			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	11%	0%	0%	0%	1%	0%
Adj. Flow (vph)	0	988	17	0	817	0	10	0	75	20	367	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1005	0	0	817	0	10	0	75	0	387	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

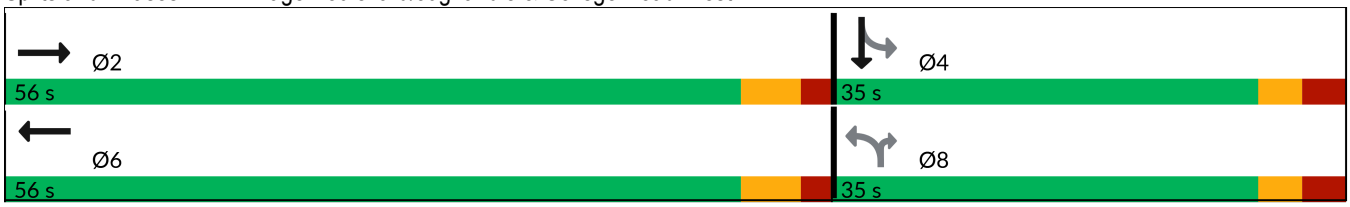


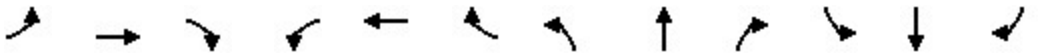
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		18.0			18.0		9.3		9.3		9.3	
Actuated g/C Ratio		0.46			0.46		0.24		0.24		0.24	
v/c Ratio		0.62			0.50		0.05		0.17		0.46	
Control Delay (s/veh)		10.2			9.0		13.6		5.6		15.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		10.2			9.0		13.6		5.6		15.5	
LOS		B			A		B		A		B	
Approach Delay (s/veh)		10.2			9.0			6.5			15.5	
Approach LOS		B			A			A			B	
90th %ile Green (s)		24.2			24.2		12.7		12.7	12.7	12.7	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		19.2			19.2		10.3		10.3	10.3	10.3	
70th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
50th %ile Green (s)		16.9			16.9		9.1		9.1	9.1	9.1	
50th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
30th %ile Green (s)		15.0			15.0		7.9		7.9	7.9	7.9	
30th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		621			468		9		19		286	
Fuel Used(gal)		10			7		0		0		3	
CO Emissions (g/hr)		718			512		8		32		230	
NOx Emissions (g/hr)		140			100		1		6		45	
VOC Emissions (g/hr)		166			119		2		7		53	
Dilemma Vehicles (#)		89			72		0		0		0	
Queue Length 50th (ft)		76			58		2		0		37	
Queue Length 95th (ft)		141			108		11		23		83	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3564			3574		669		1226		2665	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.28			0.23		0.01		0.06		0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 39.5			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 10.5		Intersection LOS: B	
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 48.9			
70th %ile Actuated Cycle: 41.5			
50th %ile Actuated Cycle: 38			
30th %ile Actuated Cycle: 34.9			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





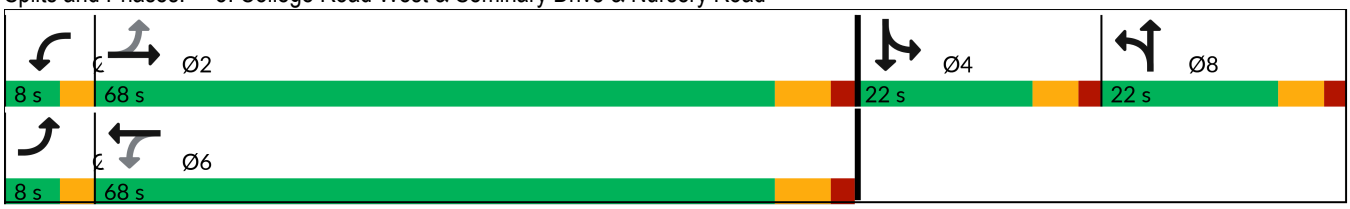
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	610	280	351	509	248	47	14	99	232	10	13
Future Volume (vph)	34	610	280	351	509	248	47	14	99	232	10	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.953				0.850		0.869			0.986	
Flt Protected	0.950			0.950			0.950			0.950	0.960	
Satd. Flow (prot)	1805	3440	0	1787	1881	1615	1805	1506	0	1643	3273	0
Flt Permitted	0.349			0.206			0.950			0.950	0.960	
Satd. Flow (perm)	663	3440	0	388	1881	1615	1805	1506	0	1643	3273	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91				173		103			7	
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	11%	0%	0%	0%
Adj. Flow (vph)	35	635	292	366	530	258	49	15	103	242	10	14
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	35	927	0	366	530	258	49	118	0	121	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	40.9	31.8		42.2	35.3	76.3	6.9	6.9		10.3	10.3	
Actuated g/C Ratio	0.54	0.42		0.55	0.46	1.00	0.09	0.09		0.13	0.13	
v/c Ratio	0.08	0.62		1.19	0.61	0.16	0.30	0.52		0.55	0.32	
Control Delay (s/veh)	8.8	18.4		133.7	21.1	0.2	39.1	18.8		41.3	30.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.8	18.4		133.7	21.1	0.2	39.1	18.8		41.3	30.9	
LOS	A	B		F	C	A	D	B		D	C	
Approach Delay (s/veh)		18.1			52.1			24.8			35.7	
Approach LOS		B			D			C			D	
90th %ile Green (s)	5.0	38.8		5.0	38.8		10.5	10.5		15.8	15.8	
90th %ile Term Code	Max	Hold		Max	Gap		Gap	Gap		Gap	Gap	
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.5	7.5		11.8	11.8	
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Gap	Gap	
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.5	6.5		9.8	9.8	
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Gap	Gap	
30th %ile Green (s)	0.0	30.0		5.0	38.0		5.6	5.6		8.2	8.2	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Gap	Gap	
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.0	5.0		7.0	7.0	
10th %ile Term Code	Skip	Min		Max	Hold		Min	Min		Min	Min	
Stops (vph)	16	602		153	373	0	43	32		103	110	
Fuel Used(gal)	0	14		12	8	1	1	1		2	2	
CO Emissions (g/hr)	27	967		861	537	63	75	99		165	170	
NOx Emissions (g/hr)	5	188		167	104	12	15	19		32	33	
VOC Emissions (g/hr)	6	224		200	124	15	17	23		38	40	
Dilemma Vehicles (#)	0	44		0	25	0	0	5		0	6	
Queue Length 50th (ft)	6	153		~112	189	0	21	6		57	31	
Queue Length 95th (ft)	22	260		#338	349	0	61	59		129	68	
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150			400		
Base Capacity (vph)	430	2796		307	1519	1615	382	400		348	699	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.08	0.33		1.19	0.35	0.16	0.13	0.30		0.35	0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 76.3			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay (s/veh): 35.8		Intersection LOS: D	
Intersection Capacity Utilization 72.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 92.1			
70th %ile Actuated Cycle: 76.3			
50th %ile Actuated Cycle: 73.3			
30th %ile Actuated Cycle: 70.8			
10th %ile Actuated Cycle: 69			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	484	775	345	626	10	398	80	63	0	0	0
Future Volume (vph)	12	484	775	345	626	10	398	80	63	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.984				
Flt Protected		0.999		0.950				0.964				
Satd. Flow (prot)	0	1893	1658	1852	1927	0	0	1796	0	0	0	0
Flt Permitted		0.981		0.355				0.964				
Satd. Flow (perm)	0	1859	1658	692	1927	0	0	1796	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			842		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	13	526	842	375	680	11	433	87	68	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	539	842	375	691	0	0	588	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

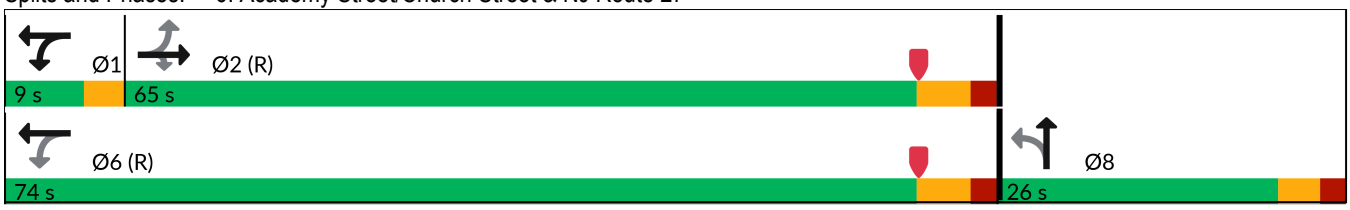
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.49	0.64	0.67	0.51			1.56				
Control Delay (s/veh)		13.8	3.2	6.4	4.7			294.6				
Queue Delay		0.0	0.0	0.0	0.5			0.0				
Total Delay (s/veh)		13.8	3.2	6.4	5.2			294.6				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		7.3			5.6			294.6				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		274	41	79	186			400				
Fuel Used(gal)		5	4	2	5			58				
CO Emissions (g/hr)		368	255	174	316			4082				
NOx Emissions (g/hr)		72	50	34	61			794				
VOC Emissions (g/hr)		85	59	40	73			946				
Dilemma Vehicles (#)		25	0	0	0			0				
Queue Length 50th (ft)		185	0	45	105			~533				
Queue Length 95th (ft)		268	47	m65	m141			#741				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1096	1323	560	1368			377				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	284			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.49	0.64	0.67	0.64			1.56				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.56			
Intersection Signal Delay (s/veh): 62.4		Intersection LOS: E	
Intersection Capacity Utilization 124.4%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	468	48	95	684	19	67	270	49	54	292	231
Future Volume (vph)	28	468	48	95	684	19	67	270	49	54	292	231
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.997			0.983			0.946	
Flt Protected		0.997			0.994			0.991			0.995	
Satd. Flow (prot)	0	2122	0	0	2145	0	0	1790	0	0	1754	0
Flt Permitted		0.937			0.871			0.588			0.869	
Satd. Flow (perm)	0	1994	0	0	1880	0	0	1062	0	0	1532	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	2%	2%	6%	5%	2%	9%	6%	2%	1%
Adj. Flow (vph)	29	488	50	99	713	20	70	281	51	56	304	241
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	567	0	0	832	0	0	402	0	0	601	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.47			0.74			1.31			1.35	
Control Delay (s/veh)		7.5			19.4			192.5			204.4	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		7.5			19.4			192.5			204.4	
LOS		A			B			F			F	
Approach Delay (s/veh)		7.5			19.4			192.5			204.4	
Approach LOS		A			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		138			560			297			447	
Fuel Used(gal)		4			15			36			31	
CO Emissions (g/hr)		286			1068			2518			2192	
NOx Emissions (g/hr)		56			208			490			426	
VOC Emissions (g/hr)		66			247			583			508	
Dilemma Vehicles (#)		0			40			0			21	
Queue Length 50th (ft)		97			353			~331			~505	
Queue Length 95th (ft)		m121			511			#515			#716	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1196			1128			307			444	
Starvation Cap Reductn		70			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.50			0.74			1.31			1.35	

Intersection Summary

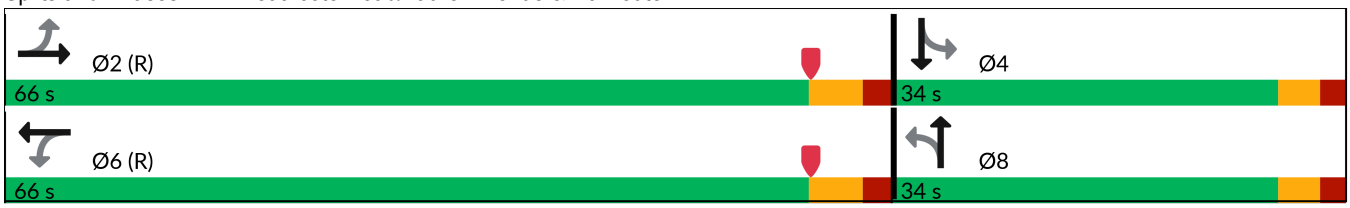
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.35		
Intersection Signal Delay (s/veh): 91.9	Intersection LOS: F	
Intersection Capacity Utilization 116.0%	ICU Level of Service H	
Analysis Period (min) 15		

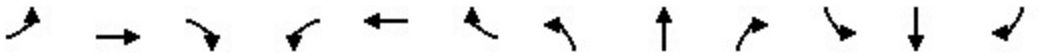
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

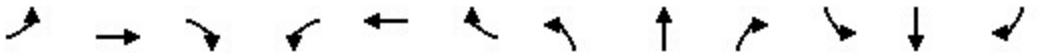
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	7	32	46	29	11	41	504	11	5	889	212
Future Volume (vph)	53	7	32	46	29	11	41	504	11	5	889	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.982			0.997			0.971	
Flt Protected		0.972			0.974		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1796	0	1805	1876	0	1805	1845	0
Flt Permitted		0.771			0.780		0.082			0.431		
Satd. Flow (perm)	0	1382	0	0	1438	0	156	1876	0	819	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			8			2			21	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	0%	0%	0%	0%	9%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	57	8	34	49	31	12	44	542	12	5	956	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	92	0	44	554	0	5	1184	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

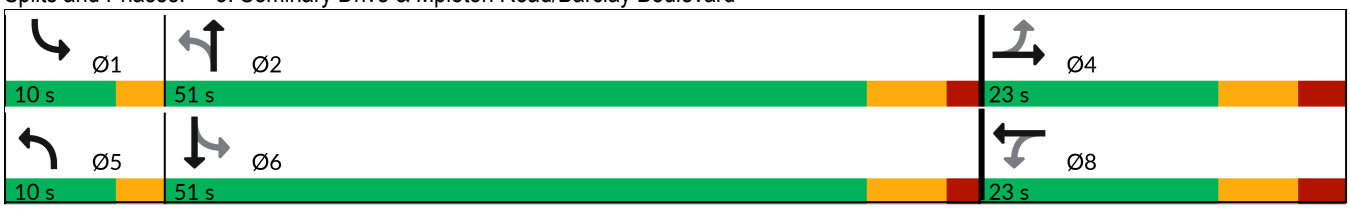


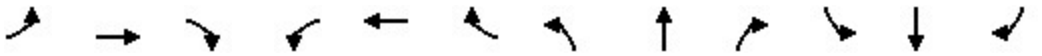
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		9.4			9.4		53.7	50.5		52.1	47.3	
Actuated g/C Ratio		0.13			0.13		0.76	0.72		0.74	0.67	
v/c Ratio		0.48			0.47		0.18	0.41		0.01	0.95	
Control Delay (s/veh)		32.1			36.8		5.0	8.1		3.4	35.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		32.1			36.8		5.0	8.1		3.4	35.8	
LOS		C			D		A	A		A	D	
Approach Delay (s/veh)		32.1			36.8			7.9			35.6	
Approach LOS		C			D			A			D	
90th %ile Green (s)	13.6	13.6		13.6	13.6		6.0	45.0		5.0	44.0	
90th %ile Term Code	Gap	Gap		Gap	Gap		Gap	Hold		Min	Max	
70th %ile Green (s)	10.7	10.7		10.7	10.7		5.6	52.6		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Skip	Max	
50th %ile Green (s)	8.8	8.8		8.8	8.8		5.1	52.1		0.0	44.0	
50th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Skip	Max	
30th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		62			69		11	221		2	669	
Fuel Used(gal)		2			1		1	8		0	57	
CO Emissions (g/hr)		132			76		36	529		15	3959	
NOx Emissions (g/hr)		26			15		7	103		3	770	
VOC Emissions (g/hr)		31			18		8	123		3	917	
Dilemma Vehicles (#)		5			0		0	25		0	53	
Queue Length 50th (ft)		32			38		4	97		1	~643	
Queue Length 95th (ft)		78			83		14	253		3	#978	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		323			320		287	1342		718	1242	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31			0.29		0.15	0.41		0.01	0.95	

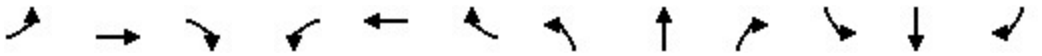
Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 70.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 27.1		Intersection LOS: C	
Intersection Capacity Utilization 78.8%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 81.6			
70th %ile Actuated Cycle: 78.3			
50th %ile Actuated Cycle: 75.9			
30th %ile Actuated Cycle: 66			
10th %ile Actuated Cycle: 51			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	586	86	76	1456	1017	20	13	19	250	46	128
Future Volume (vph)	135	586	86	76	1456	1017	20	13	19	250	46	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.951				0.850
Flt Protected	0.950			0.950				0.981		0.950	0.967	
Satd. Flow (prot)	1787	3438	1509	1805	3438	1583	0	1715	0	1618	1676	1583
Flt Permitted	0.950			0.950				0.981		0.950	0.967	
Satd. Flow (perm)	1787	3438	1509	1805	3438	1583	0	1715	0	1618	1676	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			696		21				144
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	5%	7%	0%	5%	2%	0%	13%	0%	6%	0%	2%
Adj. Flow (vph)	152	658	97	85	1636	1143	22	15	21	281	52	144
Shared Lane Traffic (%)										41%		
Lane Group Flow (vph)	152	658	97	85	1636	1143	0	58	0	166	167	144
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

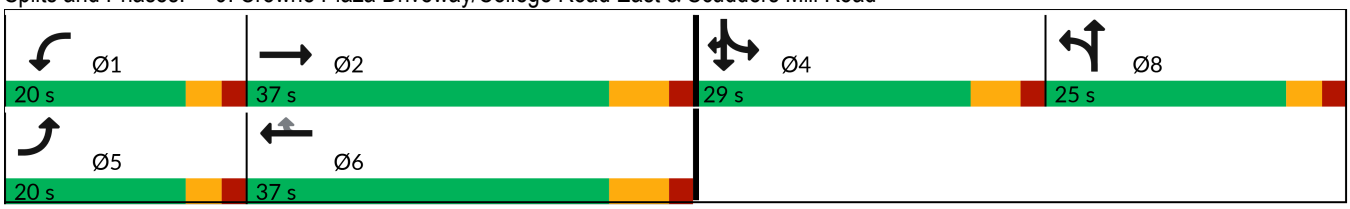


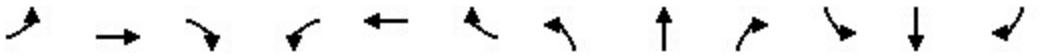
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	11.1	36.1	82.8	8.7	30.8	30.8		7.2		13.1	13.1	13.1
Actuated g/C Ratio	0.13	0.44	1.00	0.11	0.37	0.37		0.09		0.16	0.16	0.16
v/c Ratio	0.64	0.44	0.06	0.45	1.28	1.12		0.35		0.65	0.63	0.39
Control Delay (s/veh)	48.6	21.2	0.1	45.6	159.9	78.9		34.0		46.5	45.1	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	48.6	21.2	0.1	45.6	159.9	78.9		34.0		46.5	45.1	9.3
LOS	D	C	A	D	F	E		C		D	D	A
Approach Delay (s/veh)		23.6			124.2			34.0			34.8	
Approach LOS		C			F			C			C	
90th %ile Green (s)	15.0	32.3		12.7	30.0	30.0	9.9	9.9		20.8	20.8	20.8
90th %ile Term Code	Max	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	14.0	33.9		10.1	30.0	30.0	7.7	7.7		15.8	15.8	15.8
70th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	11.6	33.1		8.5	30.0	30.0	6.3	6.3		13.1	13.1	13.1
50th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Gap	Gap	Gap
30th %ile Green (s)	9.5	32.5		7.0	30.0	30.0	6.0	6.0		10.6	10.6	10.6
30th %ile Term Code	Gap	Hold		Gap	Max	Max	Min	Min		Gap	Gap	Gap
10th %ile Green (s)	6.6	41.6		0.0	30.0	30.0	0.0	0.0		7.2	7.2	7.2
10th %ile Term Code	Gap	Hold		Skip	Max	Max	Skip	Skip		Gap	Gap	Gap
Stops (vph)	119	403	0	66	1065	367		34		129	130	20
Fuel Used(gal)	5	15	1	3	82	35		1		8	8	5
CO Emissions (g/hr)	328	1072	68	187	5746	2437		55		585	586	375
NOx Emissions (g/hr)	64	209	13	36	1118	474		11		114	114	73
VOC Emissions (g/hr)	76	248	16	43	1332	565		13		136	136	87
Dilemma Vehicles (#)	0	29	0	0	67	0		2		0	7	0
Queue Length 50th (ft)	77	133	0	43	~597	~450		19		87	88	0
Queue Length 95th (ft)	153	235	0	96	#894	#774		60		164	164	48
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	331	1498	1509	335	1276	1025		440		461	477	553
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.46	0.44	0.06	0.25	1.28	1.12		0.13		0.36	0.35	0.26

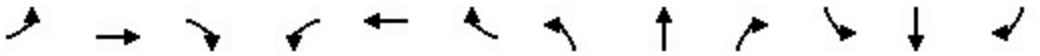
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 82.8			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.28			
Intersection Signal Delay (s/veh): 91.9		Intersection LOS: F	
Intersection Capacity Utilization 89.6%		ICU Level of Service E	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 98.7			
70th %ile Actuated Cycle: 90.5			
50th %ile Actuated Cycle: 84			
30th %ile Actuated Cycle: 79.1			
10th %ile Actuated Cycle: 61.8			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road





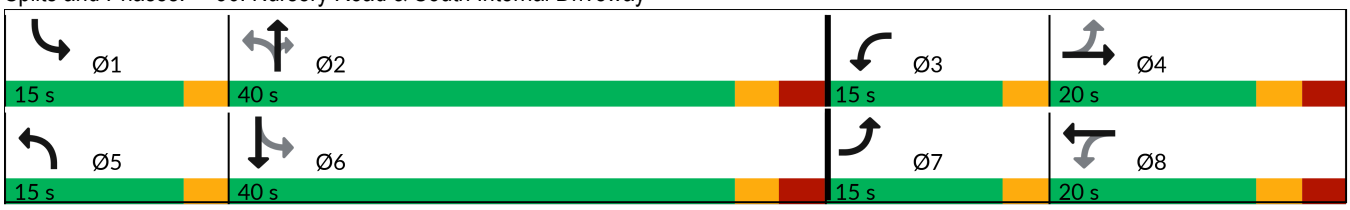
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	4	83	105	13	0	45	53	197	1	66	0
Future Volume (vph)	1	4	83	105	13	0	45	53	197	1	66	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.856							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1626	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted				0.606			0.657			0.719		
Satd. Flow (perm)	1900	1626	0	1151	1900	0	1248	1900	1615	1366	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		90							214			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	4	90	114	14	0	49	58	214	1	72	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	94	0	114	14	0	49	58	214	1	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	10.0	5.9		12.3	9.6		19.0	18.4	18.4	18.0	16.8	
Actuated g/C Ratio	0.30	0.18		0.37	0.29		0.57	0.55	0.55	0.54	0.50	
v/c Ratio	0.00	0.26		0.21	0.03		0.06	0.06	0.22	0.00	0.08	
Control Delay (s/veh)	7.0	7.9		7.9	12.0		7.6	12.2	3.8	8.0	14.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	7.0	7.9		7.9	12.0		7.6	12.2	3.8	8.0	14.7	
LOS	A	A		A	B		A	B	A	A	B	
Approach Delay (s/veh)		7.9			8.4			5.9			14.6	
Approach LOS		A			A			A			B	
90th %ile Green (s)	5.0	7.0		7.8	9.8		6.4	9.4	9.4	5.0	8.0	
90th %ile Term Code	Min	Gap		Gap	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.4		6.7	15.1		5.9	15.6	15.6	0.0	6.7	
70th %ile Term Code	Skip	Gap		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		5.5	13.5		0.0	5.9	5.9	0.0	5.9	
50th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	13.8	13.8	0.0	13.8	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	20.0	20.0	0.0	20.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	27		54	12		27	39	35	2	53	
Fuel Used(gal)	0	1		1	0		1	1	1	0	1	
CO Emissions (g/hr)	1	39		66	12		36	49	102	1	58	
NOx Emissions (g/hr)	0	8		13	2		7	10	20	0	11	
VOC Emissions (g/hr)	0	9		15	3		8	11	24	0	13	
Dilemma Vehicles (#)	0	8		0	1		0	4	0	0	5	
Queue Length 50th (ft)	0	1		8	1		6	8	0	0	10	
Queue Length 95th (ft)	2	31		39	14		21	36	42	2	44	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	899	801		825	889		965	1716	1479	989	1716	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.12		0.14	0.02		0.05	0.03	0.14	0.00	0.04	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 33.4		
Natural Cycle: 40		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.26		
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A
Intersection Capacity Utilization 35.0%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 47.2		
70th %ile Actuated Cycle: 42.7		
50th %ile Actuated Cycle: 31.4		
30th %ile Actuated Cycle: 19.8		
10th %ile Actuated Cycle: 26		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	32.2

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	150	554	0	591	20	142	730
Future Vol, veh/h	150	554	0	591	20	142	730
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91	91
Heavy Vehicles, %	0	1	0	2	11	1	1
Mvmt Flow	165	609	0	649	22	156	802

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1374	336	802	0	0	671	0
Stage 1	660	-	-	-	-	-	-
Stage 2	713	-	-	-	-	-	-
Critical Hdwy	6.8	6.92	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.31	2.5	-	-	2.21	-
Pot Cap-1 Maneuver	~ 139	663	451	-	-	922	-
Stage 1	481	-	-	-	-	-	-
Stage 2	452	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 116	663	451	-	-	922	-
Mov Cap-2 Maneuver	~ 116	-	-	-	-	-	-
Stage 1	481	-	-	-	-	-	-
Stage 2	375	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	98.2	0	1.58
HCM LOS	F		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	451	-	-	116	663	922	-
HCM Lane V/C Ratio	-	-	-	1.426	0.918	0.169	-
HCM Ctrl Dly (s/v)	0	-	-	$ 302.6	42.8	9.7	-
HCM Lane LOS	A	-	-	F	E	A	-
HCM 95th %tile Q(veh)	0	-	-	11.5	12.1	0.6	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	896	9	13	533	21	7	0	6	21	0	42
Future Vol, veh/h	24	896	9	13	533	21	7	0	6	21	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	26	974	10	14	579	23	8	0	7	23	0	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	984	0	0	1639	1661	979	1634	1643	579
Stage 1	-	-	-	-	-	-	1031	1031	-	608	608	-
Stage 2	-	-	-	-	-	-	608	630	-	1026	1036	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	985	-	-	710	-	-	81	98	306	82	101	518
Stage 1	-	-	-	-	-	-	284	313	-	486	489	-
Stage 2	-	-	-	-	-	-	486	478	-	286	311	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	985	-	-	710	-	-	71	94	306	76	96	518
Mov Cap-2 Maneuver	-	-	-	-	-	-	71	94	-	76	96	-
Stage 1	-	-	-	-	-	-	276	305	-	477	479	-
Stage 2	-	-	-	-	-	-	435	468	-	272	303	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.23	0.23	42.66	32.08
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	110	985	-	-	710	-	-	76	518
HCM Lane V/C Ratio	0.129	0.026	-	-	0.02	-	-	0.299	0.088
HCM Ctrl Dly (s/v)	42.7	8.8	-	-	10.2	-	-	71	12.6
HCM Lane LOS	E	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	1.1	0.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	18	18	0	0	17	20	17	1	29	0
Future Vol, veh/h	0	0	18	18	0	0	17	20	17	1	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	20	20	0	0	18	22	18	1	32	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	92	111	32	102	102	31	32	0	0	40	0	0
Stage 1	34	34	-	68	68	-	-	-	-	-	-	-
Stage 2	59	77	-	34	34	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	896	783	1048	884	792	1049	1594	-	-	1582	-	-
Stage 1	987	871	-	947	842	-	-	-	-	-	-	-
Stage 2	958	835	-	987	871	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	885	773	1048	857	782	1049	1594	-	-	1582	-	-
Mov Cap-2 Maneuver	885	773	-	857	782	-	-	-	-	-	-	-
Stage 1	987	870	-	936	832	-	-	-	-	-	-	-
Stage 2	947	825	-	968	870	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.5	9.3	2.29	0.24
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	519	-	-	1048	857	60	-	-
HCM Lane V/C Ratio	0.012	-	-	0.019	0.023	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	9.3	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	15	15	24	0
Demand Flow Rate, veh/h	15	15	24	0
Vehicles Circulating, veh/h	15	12	0	27
Vehicles Exiting, veh/h	12	12	30	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.7	2.7	2.7	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	15	15	24	0
Cap Entry Lane, veh/h	1359	1363	1380	1342
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	15	15	24	0
Cap Entry, veh/h	1359	1363	1380	1342
V/C Ratio	0.011	0.011	0.017	0.000
Control Delay, s/veh	2.7	2.7	2.7	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

PM BUILD

PRE-COVID CONDITION

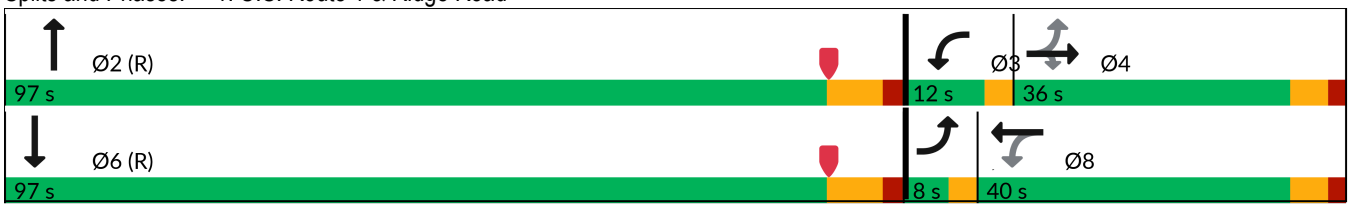
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	350	77	149	292	84	0	3059	0	0	1983	0
Future Volume (vph)	119	350	77	149	292	84	0	3059	0	0	1983	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.966							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1787	1881	1615	1805	1795	0	0	5219	0	0	5119	0
Flt Permitted	0.150			0.123								
Satd. Flow (perm)	282	1881	1615	234	1795	0	0	5219	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83		6							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	2%	3%	0%	2%	0%	0%	4%	0%
Adj. Flow (vph)	124	365	80	155	304	88	0	3186	0	0	2066	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	365	80	155	392	0	0	3186	0	0	2066	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	12.0	40.0			97.0			97.0	
Total Split (%)	5.5%	24.8%	24.8%	8.3%	27.6%			66.9%			66.9%	
Maximum Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	37.4	29.4	29.4	44.4	33.4			92.6			92.6	
Actuated g/C Ratio	0.26	0.20	0.20	0.31	0.23			0.64			0.64	
v/c Ratio	1.00	0.96	0.20	0.92	0.94			0.96			0.63	
Control Delay (s/veh)	125.7	93.5	9.3	91.1	84.8			17.7			17.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	125.7	93.5	9.3	91.1	84.8			17.7			17.1	
LOS	F	F	A	F	F			B			B	
Approach Delay (s/veh)		88.7			86.6			17.7			17.1	
Approach LOS		F			F			B			B	
90th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	26.9	26.9	9.0	30.9			92.1			92.1	
10th %ile Term Code	Max	Gap	Gap	Max	Hold			Coord			Coord	
Stops (vph)	90	316	11	100	336			2377			1149	
Fuel Used(gal)	4	10	0	4	12			62			33	
CO Emissions (g/hr)	284	709	24	311	841			4310			2274	
NOx Emissions (g/hr)	55	138	5	61	164			839			443	
VOC Emissions (g/hr)	66	164	5	72	195			999			527	
Dilemma Vehicles (#)	0	11	0	0	12			102			68	
Queue Length 50th (ft)	87	345	0	111	360			595			414	
Queue Length 95th (ft)	#215	#551	38	#227	#558			758			459	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	124	389	399	169	425			3333			3269	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	1.00	0.94	0.20	0.92	0.92			0.96			0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 16 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 29.8		Intersection LOS: C	
Intersection Capacity Utilization 97.2%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	17	0	182	0	59	0	3278	32	0	2135	0
Future Volume (vph)	27	17	0	182	0	59	0	3278	32	0	2135	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5210	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5210	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		2				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	11%	0%	4%	0%
Adj. Flow (vph)	29	18	0	196	0	63	0	3525	34	0	2296	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	18	0	196	0	63	0	3559	0	0	2296	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	

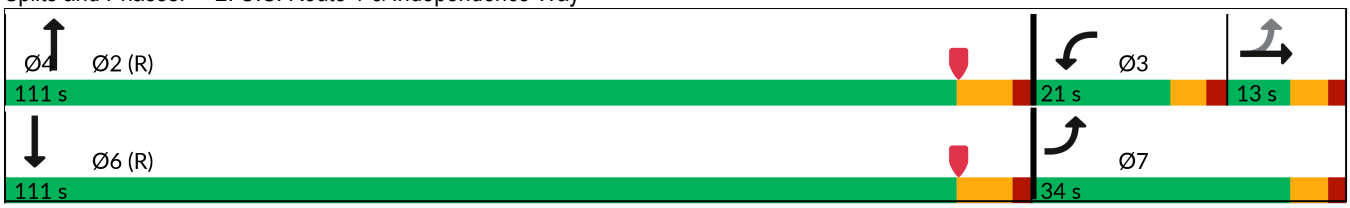
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	34.0	13.0		21.0				111.0			111.0	
Total Split (%)	23.4%	9.0%		14.5%				76.6%			76.6%	
Maximum Green (s)	28.0	7.0		15.0				103.0			103.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	18.8	7.0		18.5		145.0		107.7			107.7	
Actuated g/C Ratio	0.13	0.05		0.13		1.00		0.74			0.74	
v/c Ratio	0.06	0.20		0.85		0.04		0.92			0.60	
Control Delay (s/veh)	39.1	59.9		92.2		0.1		20.7			8.1	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	39.1	59.9		92.2		0.1		20.7			8.1	
LOS	D	E		F		A		C			A	
Approach Delay (s/veh)		47.1			69.8			20.7			8.1	
Approach LOS		D			E			C			A	
90th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	0.0	0.0		24.1				106.9			106.9	
30th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
10th %ile Green (s)	0.0	0.0		23.5				107.5			107.5	
10th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
Stops (vph)	22	18		146		0		2514			729	
Fuel Used(gal)	0	0		6		0		83			25	
CO Emissions (g/hr)	32	27		386		23		5781			1724	
NOx Emissions (g/hr)	6	5		75		4		1125			335	
VOC Emissions (g/hr)	7	6		89		5		1340			400	
Dilemma Vehicles (#)	0	1		0		0		113			71	
Queue Length 50th (ft)	11	17		~201		0		944			270	
Queue Length 95th (ft)	m17	m29		#366		0		1018			286	
Internal Link Dist (ft)		319			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	676	91		230		1615		3869			3801	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.04	0.20		0.85		0.04		0.92			0.60	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 86.7%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	369	431	0	0	1048	448	0	0	316	0	0	0
Future Volume (vph)	369	431	0	0	1048	448	0	0	316	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3467	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.147											
Satd. Flow (perm)	536	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						369			634			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	415	484	0	0	1178	503	0	0	355	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	415	484	0	0	1178	503	0	0	355	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

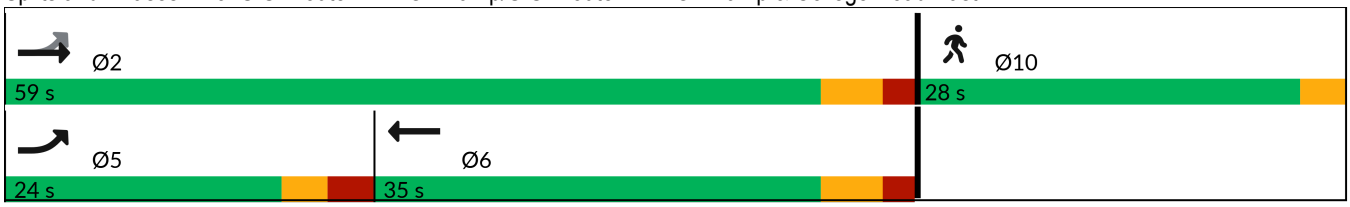
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	38.1	44.2			22.8	44.2			44.2			
Actuated g/C Ratio	0.86	1.00			0.52	1.00			1.00			
v/c Ratio	0.39	0.14			0.63	0.31			0.22			
Control Delay (s/veh)	2.3	0.1			9.7	0.5			0.3			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	2.3	0.1			9.7	0.5			0.3			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		1.1			7.0			0.3				
Approach LOS		A			A			A				
90th %ile Green (s)	12.4	45.9			27.5							
90th %ile Term Code	Gap	Hold			Gap							
70th %ile Green (s)	10.3	40.3			24.0							
70th %ile Term Code	Gap	Hold			Gap							
50th %ile Green (s)	9.0	38.0			23.0							
50th %ile Term Code	Gap	Hold			Gap							
30th %ile Green (s)	8.0	35.4			21.4							
30th %ile Term Code	Gap	Hold			Gap							
10th %ile Green (s)	7.0	31.4			18.4							
10th %ile Term Code	Min	Hold			Gap							
Stops (vph)	43	0			664	0			0			
Fuel Used(gal)	1	1			37	12			3			
CO Emissions (g/hr)	105	74			2588	853			202			
NOx Emissions (g/hr)	20	14			503	166			39			
VOC Emissions (g/hr)	24	17			600	198			47			
Dilemma Vehicles (#)	0	0			89	0			0			
Queue Length 50th (ft)	0	0			95	0			0			
Queue Length 95th (ft)	11	0			166	0			0			
Internal Link Dist (ft)		282			478			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	1670	3574			2397	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.25	0.14			0.49	0.31			0.22			

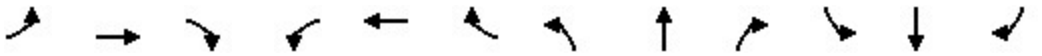
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 44.2			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 4.4		Intersection LOS: A	
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 51.9			
70th %ile Actuated Cycle: 46.3			
50th %ile Actuated Cycle: 44			
30th %ile Actuated Cycle: 41.4			
10th %ile Actuated Cycle: 37.4			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

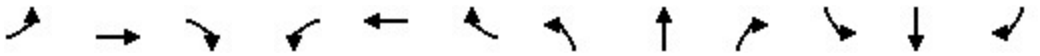


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	831	18	0	1047	0	25	0	219	11	257	0
Future Volume (vph)	0	831	18	0	1047	0	25	0	219	11	257	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.998	
Satd. Flow (prot)	0	3564	0	0	3610	0	1805	0	1599	0	3569	0
Flt Permitted							0.566				0.998	
Satd. Flow (perm)	0	3564	0	0	3610	0	1075	0	1599	0	3569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4							112			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Adj. Flow (vph)	0	944	20	0	1190	0	28	0	249	13	292	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	964	0	0	1190	0	28	0	249	0	305	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

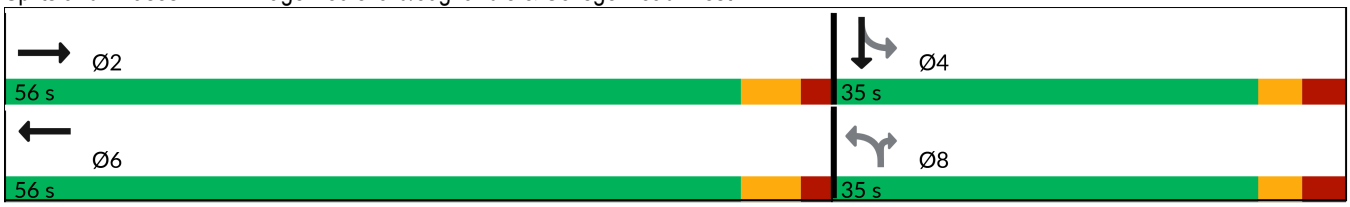


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		20.9			20.9		9.8		9.8		9.8	
Actuated g/C Ratio		0.48			0.48		0.23		0.23		0.23	
v/c Ratio		0.56			0.68		0.11		0.55		0.38	
Control Delay (s/veh)		9.4			11.0		16.3		14.5		16.5	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		9.4			11.0		16.3		14.5		16.5	
LOS		A			B		B		B		B	
Approach Delay (s/veh)		9.4			11.0			14.7			16.5	
Approach LOS		A			B			B			B	
90th %ile Green (s)		31.0			31.0		15.8		15.8	15.8	15.8	
90th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
70th %ile Green (s)		23.5			23.5		11.2		11.2	11.2	11.2	
70th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
50th %ile Green (s)		20.0			20.0		8.8		8.8	8.8	8.8	
50th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
30th %ile Green (s)		16.5			16.5		7.4		7.4	7.4	7.4	
30th %ile Term Code		Hold			Gap		Hold		Hold	Gap	Gap	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Min		Min	Min	Min	
Stops (vph)		513			699		21		105		207	
Fuel Used(gal)		9			11		0		2		2	
CO Emissions (g/hr)		606			773		21		144		173	
NOx Emissions (g/hr)		118			150		4		28		34	
VOC Emissions (g/hr)		140			179		5		33		40	
Dilemma Vehicles (#)		74			92		0		0		0	
Queue Length 50th (ft)		71			96		5		27		32	
Queue Length 95th (ft)		143			191		23		92		75	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3457			3502		749		1148		2488	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.28			0.34		0.04		0.22		0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 43.2			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 11.4		Intersection LOS: B	
Intersection Capacity Utilization 59.5%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 58.8			
70th %ile Actuated Cycle: 46.7			
50th %ile Actuated Cycle: 40.8			
30th %ile Actuated Cycle: 35.9			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



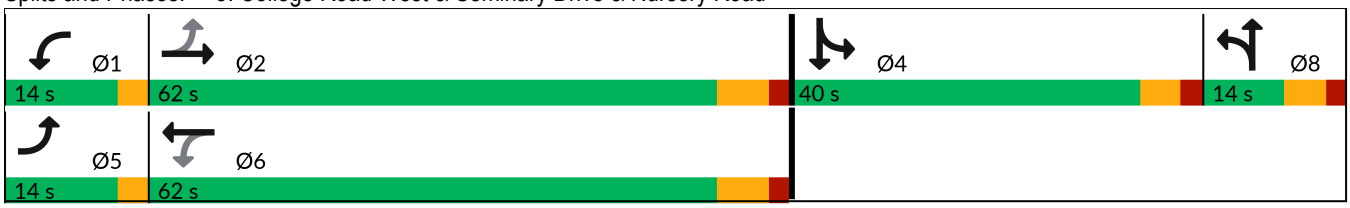
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	230	116	177	784	339	118	17	185	388	23	45
Future Volume (vph)	35	230	116	177	784	339	118	17	185	388	23	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.950				0.850		0.862			0.974	
Flt Protected	0.950			0.950			0.950			0.950	0.964	
Satd. Flow (prot)	1805	3407	0	1805	1900	1615	1805	1623	0	1643	3247	0
Flt Permitted	0.109			0.498			0.950			0.950	0.964	
Satd. Flow (perm)	207	3407	0	946	1900	1615	1805	1623	0	1643	3247	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		84				159		201			17	
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	38	250	126	192	852	368	128	18	201	422	25	49
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	38	376	0	192	852	368	128	219	0	211	285	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	14.0	62.0		14.0	62.0		14.0	14.0		40.0	40.0	
Total Split (%)	10.8%	47.7%		10.8%	47.7%		10.8%	10.8%		30.8%	30.8%	
Maximum Green (s)	11.0	55.0		11.0	55.0		8.0	8.0		34.0	34.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	58.9	48.8		65.0	55.5	106.4	8.1	8.1		18.2	18.2	
Actuated g/C Ratio	0.55	0.46		0.61	0.52	1.00	0.08	0.08		0.17	0.17	
v/c Ratio	0.19	0.23		0.29	0.86	0.23	0.93	0.71		0.75	0.50	
Control Delay (s/veh)	11.8	14.6		11.1	34.7	0.3	113.7	23.2		59.4	40.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	11.8	14.6		11.1	34.7	0.3	113.7	23.2		59.4	40.7	
LOS	B	B		B	C	A	F	C		E	D	
Approach Delay (s/veh)		14.3			22.6			56.6			48.7	
Approach LOS		B			C			E			D	
90th %ile Green (s)	7.8	51.8		11.0	55.0		8.0	8.0		27.4	27.4	
90th %ile Term Code	Gap	Hold		Max	Max		Max	Max		Gap	Gap	
70th %ile Green (s)	6.5	50.5		11.0	55.0		8.0	8.0		21.3	21.3	
70th %ile Term Code	Gap	Hold		Max	Max		Max	Max		Gap	Gap	
50th %ile Green (s)	5.8	51.4		9.4	55.0		8.0	8.0		18.2	18.2	
50th %ile Term Code	Gap	Hold		Gap	Max		Max	Max		Gap	Gap	
30th %ile Green (s)	0.0	43.9		8.1	55.0		8.0	8.0		15.2	15.2	
30th %ile Term Code	Skip	Hold		Gap	Max		Max	Max		Gap	Gap	
10th %ile Green (s)	0.0	45.5		6.5	55.0		8.0	8.0		10.7	10.7	
10th %ile Term Code	Skip	Hold		Gap	Max		Max	Max		Gap	Gap	
Stops (vph)	15	155		74	605	0	93	33		177	211	
Fuel Used(gal)	0	4		2	14	1	4	2		5	5	
CO Emissions (g/hr)	29	303		123	1000	87	304	172		329	360	
NOx Emissions (g/hr)	6	59		24	195	17	59	34		64	70	
VOC Emissions (g/hr)	7	70		29	232	20	70	40		76	83	
Dilemma Vehicles (#)	0	12		0	35	0	0	9		0	9	
Queue Length 50th (ft)	10	60		52	511	0	91	12		157	94	
Queue Length 95th (ft)	27	107		103	#906	0	#237	#117		251	141	
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150			400		
Base Capacity (vph)	290	1817		667	991	1615	137	308		529	1058	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.13	0.21		0.29	0.86	0.23	0.93	0.71		0.40	0.27	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 106.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 87.7%		ICU Level of Service E	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 120.2			
70th %ile Actuated Cycle: 112.8			
50th %ile Actuated Cycle: 109			
30th %ile Actuated Cycle: 97.2			
10th %ile Actuated Cycle: 92.7			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	689	408	218	562	12	413	276	200	0	0	0
Future Volume (vph)	15	689	408	218	562	12	413	276	200	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.970				
Flt Protected		0.999		0.950				0.977				
Satd. Flow (prot)	0	1929	1658	1834	1940	0	0	1793	0	0	0	0
Flt Permitted		0.983		0.175				0.977				
Satd. Flow (perm)	0	1898	1658	338	1940	0	0	1793	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			425		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	1%	0%	9%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	16	718	425	227	585	13	430	288	208	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	734	425	227	598	0	0	926	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

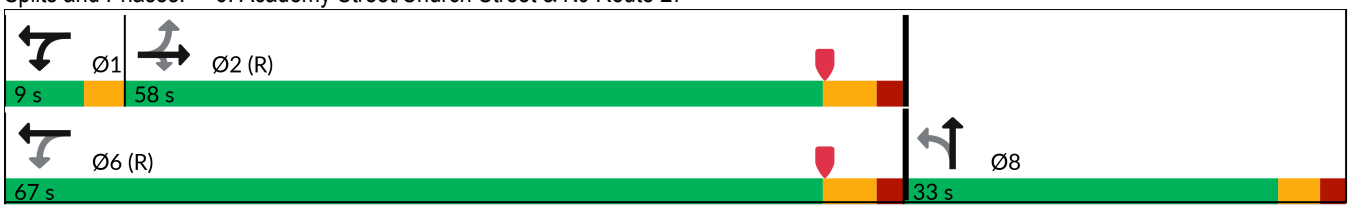
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.74	0.40	0.74	0.48			1.84				
Control Delay (s/veh)		24.6	2.5	16.7	6.4			413.2				
Queue Delay		0.0	0.0	0.0	0.4			0.0				
Total Delay (s/veh)		24.6	2.5	16.7	6.8			413.2				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		16.5			9.5			413.2				
Approach LOS		B			A			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		542	24	76	191			622				
Fuel Used(gal)		10	2	2	4			117				
CO Emissions (g/hr)		713	132	149	305			8195				
NOx Emissions (g/hr)		139	26	29	59			1594				
VOC Emissions (g/hr)		165	30	34	71			1899				
Dilemma Vehicles (#)		35	0	0	0			0				
Queue Length 50th (ft)		349	0	36	117			~900				
Queue Length 95th (ft)		500	45	m58	m141			#1137				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		986	1066	306	1242			502				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	246			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.74	0.40	0.74	0.60			1.84				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.84			
Intersection Signal Delay (s/veh): 140.8		Intersection LOS: F	
Intersection Capacity Utilization 134.9%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	819	16	86	577	63	49	290	93	79	325	170
Future Volume (vph)	49	819	16	86	577	63	49	290	93	79	325	170
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.988			0.971			0.960	
Flt Protected		0.997			0.994			0.994			0.993	
Satd. Flow (prot)	0	2170	0	0	2163	0	0	1834	0	0	1778	0
Flt Permitted		0.928			0.800			0.758			0.733	
Satd. Flow (perm)	0	2020	0	0	1741	0	0	1398	0	0	1313	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1372			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	1%	0%	0%	0%	4%	0%	0%	0%	3%	2%	1%
Adj. Flow (vph)	50	836	16	88	589	64	50	296	95	81	332	173
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	902	0	0	741	0	0	441	0	0	586	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.74			0.71			1.09			1.54	
Control Delay (s/veh)		10.1			18.7			106.2			285.3	
Queue Delay		0.3			0.0			0.0			0.0	
Total Delay (s/veh)		10.4			18.7			106.2			285.3	
LOS		B			B			F			F	
Approach Delay (s/veh)		10.4			18.7			106.2			285.3	
Approach LOS		B			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		339			494			358			425	
Fuel Used(gal)		8			14			33			41	
CO Emissions (g/hr)		528			956			2297			2831	
NOx Emissions (g/hr)		103			186			447			551	
VOC Emissions (g/hr)		122			221			532			656	
Dilemma Vehicles (#)		0			36			0			19	
Queue Length 50th (ft)		216			305			~318			~528	
Queue Length 95th (ft)		m288			450			#507			#737	
Internal Link Dist (ft)		509			1292			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1212			1044			405			380	
Starvation Cap Reductn		54			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.78			0.71			1.09			1.54	

Intersection Summary

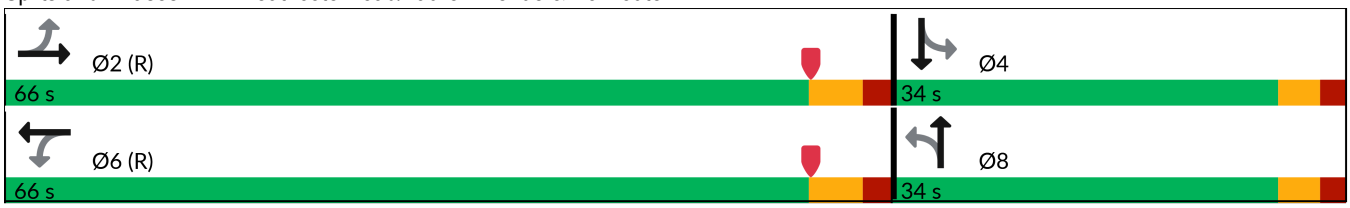
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.54		
Intersection Signal Delay (s/veh): 88.9	Intersection LOS: F	
Intersection Capacity Utilization 116.2%	ICU Level of Service H	
Analysis Period (min) 15		

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

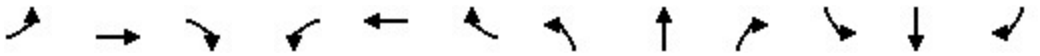
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	0	20	25	7	6	40	870	55	22	383	148
Future Volume (vph)	41	0	20	25	7	6	40	870	55	22	383	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.979			0.991			0.958	
Flt Protected		0.968			0.968		0.950			0.950		
Satd. Flow (prot)	0	1756	0	0	1709	0	1805	1865	0	1805	1797	0
Flt Permitted		0.813			0.813		0.412			0.185		
Satd. Flow (perm)	0	1475	0	0	1436	0	783	1865	0	352	1797	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			6			6			35	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			416			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	8%	0%	0%	0%	1%	0%	0%	1%	2%
Adj. Flow (vph)	42	0	21	26	7	6	41	897	57	23	395	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	39	0	41	954	0	23	548	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

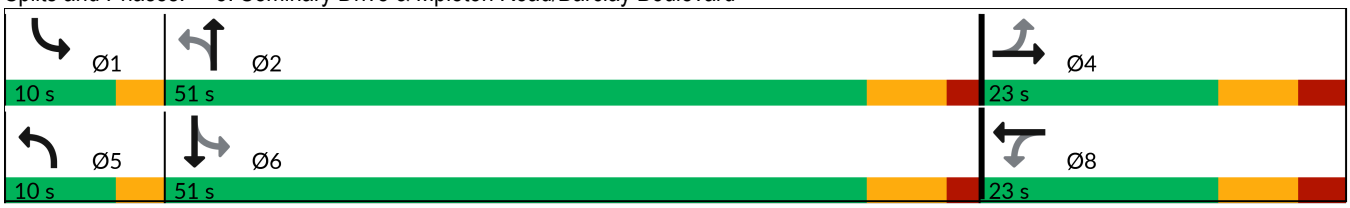


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.7			7.7		53.1	50.7		52.4	49.2	
Actuated g/C Ratio		0.12			0.12		0.81	0.77		0.80	0.75	
v/c Ratio		0.25			0.22		0.06	0.66		0.06	0.40	
Control Delay (s/veh)		6.5			30.5		2.6	12.6		2.8	7.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		6.5			30.5		2.6	12.6		2.8	7.8	
LOS		A			C		A	B		A	A	
Approach Delay (s/veh)		6.5			30.5			12.1			7.6	
Approach LOS		A			C			B			A	
90th %ile Green (s)	9.2	9.2		9.2	9.2		5.6	44.4		5.2	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Gap	Max	
70th %ile Green (s)	7.4	7.4		7.4	7.4		5.1	44.1		5.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Min	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		5.1	52.1		0.0	44.0	
50th %ile Term Code	Min	Min		Min	Min		Gap	Hold		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		7			32		10	466		6	212	
Fuel Used(gal)		1			0		0	15		1	23	
CO Emissions (g/hr)		36			30		33	1057		64	1625	
NOx Emissions (g/hr)		7			6		6	206		12	316	
VOC Emissions (g/hr)		8			7		8	245		15	377	
Dilemma Vehicles (#)		3			0		0	31		0	25	
Queue Length 50th (ft)		0			14		4	215		2	122	
Queue Length 95th (ft)		20			42		11	#640		7	216	
Internal Link Dist (ft)		797			156			336			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		419			345		755	1446		448	1359	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

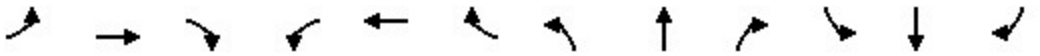
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.15			0.11		0.05	0.66		0.05	0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 65.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 10.8		Intersection LOS: B	
Intersection Capacity Utilization 67.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 76.8			
70th %ile Actuated Cycle: 74.5			
50th %ile Actuated Cycle: 74.1			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	1230	16	8	642	254	25	13	14	747	5	131
Future Volume (vph)	87	1230	16	8	642	254	25	13	14	747	5	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	100		0
Storage Lanes	1		1	1		1	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.964				0.850
Flt Protected	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (prot)	1805	3574	1553	1805	3505	1583	0	1737	0	1715	1720	1583
Flt Permitted	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (perm)	1805	3574	1553	1805	3505	1583	0	1737	0	1715	1720	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			276		14				142
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		611			1998			443			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	4%	0%	3%	2%	6%	0%	0%	0%	0%	2%
Adj. Flow (vph)	95	1337	17	9	698	276	27	14	15	812	5	142
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	95	1337	17	9	698	276	0	56	0	406	411	142
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Perm	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

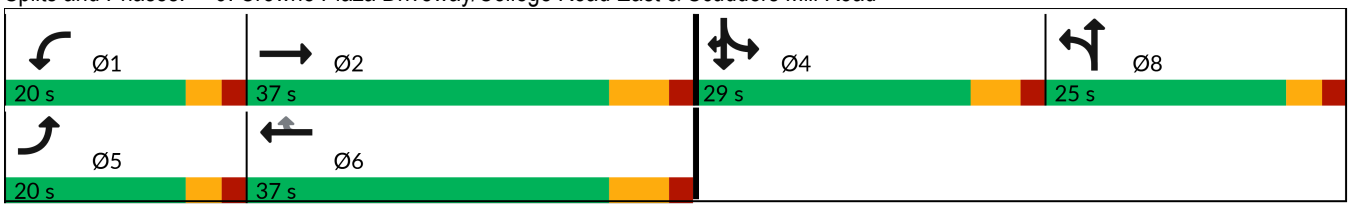


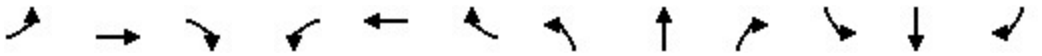
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			6						
Detector Phase	5	2		1	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0	30.0	6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0	37.0	11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0	37.0	25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%	33.3%	22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0	30.0	20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0	7.0		5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min	Min	None	None		None	None	None
Act Effct Green (s)	9.3	40.1	88.3	6.1	30.6	30.6		7.3		23.5	23.5	23.5
Actuated g/C Ratio	0.11	0.45	1.00	0.07	0.35	0.35		0.08		0.27	0.27	0.27
v/c Ratio	0.50	0.82	0.01	0.07	0.57	0.38		0.36		0.89	0.90	0.27
Control Delay (s/veh)	49.2	27.8	0.0	44.3	28.0	5.0		39.6		57.9	59.0	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	49.2	27.8	0.0	44.3	28.0	5.0		39.6		57.9	59.0	7.0
LOS	D	C	A	D	C	A		D		E	E	A
Approach Delay (s/veh)		28.9			21.7			39.6			50.8	
Approach LOS		C			C			D			D	
90th %ile Green (s)	13.4	37.3		6.1	30.0	30.0	10.0	10.0		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max	Max	Gap	Gap		Max	Max	Max
70th %ile Green (s)	10.8	45.8		0.0	30.0	30.0	7.9	7.9		23.0	23.0	23.0
70th %ile Term Code	Gap	Hold		Skip	Max	Max	Gap	Gap		Max	Max	Max
50th %ile Green (s)	9.2	44.2		0.0	30.0	30.0	6.7	6.7		23.0	23.0	23.0
50th %ile Term Code	Gap	Hold		Skip	Max	Max	Gap	Gap		Max	Max	Max
30th %ile Green (s)	7.7	42.7		0.0	30.0	30.0	6.0	6.0		23.0	23.0	23.0
30th %ile Term Code	Gap	Hold		Skip	Max	Max	Min	Min		Max	Max	Max
10th %ile Green (s)	0.0	30.0		0.0	30.0	30.0	0.0	0.0		23.0	23.0	23.0
10th %ile Term Code	Skip	Max		Skip	Max	Max	Skip	Skip		Max	Max	Max
Stops (vph)	77	942	0	10	507	27		39		301	304	19
Fuel Used(gal)	3	35	0	0	20	4		1		22	22	5
CO Emissions (g/hr)	212	2468	13	23	1369	272		61		1521	1543	379
NOx Emissions (g/hr)	41	480	2	4	266	53		12		296	300	74
VOC Emissions (g/hr)	49	572	3	5	317	63		14		353	358	88
Dilemma Vehicles (#)	0	57	0	0	36	0		2		0	19	0
Queue Length 50th (ft)	53	326	0	5	177	0		24		245	248	0
Queue Length 95th (ft)	106	#598	0	22	266	57		63		#484	#491	48
Internal Link Dist (ft)		531			1918			363			583	
Turn Bay Length (ft)	165		170	75		270				100		
Base Capacity (vph)	312	1622	1553	312	1215	729		412		455	457	525
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.30	0.82	0.01	0.03	0.57	0.38		0.14		0.89	0.90	0.27

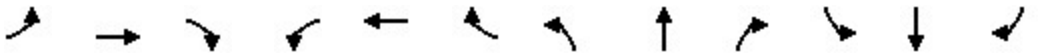
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 88.3			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 33.1		Intersection LOS: C	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99.4			
70th %ile Actuated Cycle: 94.7			
50th %ile Actuated Cycle: 91.9			
30th %ile Actuated Cycle: 89.7			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road





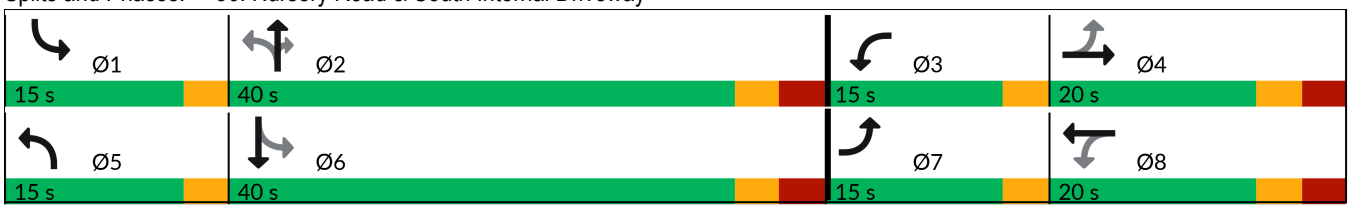
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	8	81	275	6	0	65	109	215	1	97	0
Future Volume (vph)	1	8	81	275	6	0	65	109	215	1	97	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.864							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1642	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.755			0.482			0.547			0.681		
Satd. Flow (perm)	1434	1642	0	916	1900	0	1039	1900	1615	1294	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		88							234			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			734			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	9	88	299	7	0	71	118	234	1	105	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	97	0	299	7	0	71	118	234	1	105	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.0	5.9		18.6	14.1		16.9	12.6	12.6	14.6	8.9	
Actuated g/C Ratio	0.29	0.14		0.44	0.34		0.40	0.30	0.30	0.35	0.21	
v/c Ratio	0.00	0.32		0.49	0.01		0.13	0.21	0.36	0.00	0.26	
Control Delay (s/veh)	8.0	10.3		11.4	12.5		9.6	14.8	4.8	9.0	20.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.0	10.3		11.4	12.5		9.6	14.8	4.8	9.0	20.1	
LOS	A	B		B	B		A	B	A	A	C	
Approach Delay (s/veh)		10.3			11.4			8.4			20.0	
Approach LOS		B			B			A			B	
90th %ile Green (s)	5.0	7.5		12.0	14.5		7.5	12.4	12.4	5.0	9.9	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.8		11.0	19.8		6.8	17.8	17.8	0.0	8.0	
70th %ile Term Code	Skip	Gap		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		9.4	17.4		6.0	15.9	15.9	0.0	6.9	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		6.8	14.8		0.0	6.0	6.0	0.0	6.0	
30th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	10.4	10.4	0.0	10.4	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	28		159	7		38	78	33	2	80	
Fuel Used(gal)	0	1		3	0		1	1	2	0	1	
CO Emissions (g/hr)	1	43		195	6		53	104	112	1	93	
NOx Emissions (g/hr)	0	8		38	1		10	20	22	0	18	
VOC Emissions (g/hr)	0	10		45	1		12	24	26	0	22	
Dilemma Vehicles (#)	0	7		0	0		0	8	0	0	7	
Queue Length 50th (ft)	0	2		47	1		11	21	0	0	25	
Queue Length 95th (ft)	2	36		105	9		32	69	45	2	66	
Internal Link Dist (ft)		266			404			654			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	759	642		703	763		674	1541	1354	704	1541	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.15		0.43	0.01		0.11	0.08	0.17	0.00	0.07	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 42		
Natural Cycle: 40		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.49		
Intersection Signal Delay (s/veh): 10.9		Intersection LOS: B
Intersection Capacity Utilization 42.2%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 54.9		
70th %ile Actuated Cycle: 49.6		
50th %ile Actuated Cycle: 45.3		
30th %ile Actuated Cycle: 32.8		
10th %ile Actuated Cycle: 27.4		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	9.7

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	18	201	0	706	193	363	411
Future Vol, veh/h	18	201	0	706	193	363	411
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	1	0	0
Mvmt Flow	21	231	0	811	222	417	472

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1993	517	472	0	0	1033	0
Stage 1	922	-	-	-	-	-	-
Stage 2	1071	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	54	509	729	-	-	680	-
Stage 1	352	-	-	-	-	-	-
Stage 2	295	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	21	509	729	-	-	680	-
Mov Cap-2 Maneuver	21	-	-	-	-	-	-
Stage 1	352	-	-	-	-	-	-
Stage 2	114	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	53.6	0	8.59
HCM LOS	F		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	729	-	-	21	509	680	-
HCM Lane V/C Ratio	-	-	-	0.992	0.454	0.613	-
HCM Ctrl Dly (s/v)	0	-	-	$ 453.1	17.8	18.3	-
HCM Lane LOS	A	-	-	F	C	C	-
HCM 95th %tile Q(veh)	0	-	-	2.8	2.3	4.2	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	356	8	5	902	40	13	0	15	9	0	37
Future Vol, veh/h	43	356	8	5	902	40	13	0	15	9	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	50	414	9	6	1049	47	15	0	17	10	0	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1095	0	0	423	0	0	1579	1626	419	1574	1584	1049
Stage 1	-	-	-	-	-	-	519	519	-	1060	1060	-
Stage 2	-	-	-	-	-	-	1060	1107	-	514	523	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	645	-	-	1147	-	-	89	103	639	90	110	279
Stage 1	-	-	-	-	-	-	544	536	-	273	303	-
Stage 2	-	-	-	-	-	-	273	288	-	547	534	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	645	-	-	1147	-	-	69	95	639	80	101	279
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	95	-	80	101	-
Stage 1	-	-	-	-	-	-	502	495	-	272	302	-
Stage 2	-	-	-	-	-	-	230	287	-	491	492	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.17	0.04	40.7	27.31
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	133	645	-	-	1147	-	-	80	279
HCM Lane V/C Ratio	0.245	0.078	-	-	0.005	-	-	0.13	0.154
HCM Ctrl Dly (s/v)	40.7	11.1	-	-	8.2	-	-	56.4	20.2
HCM Lane LOS	E	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	0.9	0.3	-	-	0	-	-	0.4	0.5

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	33	29	0	0	38	39	33	1	34	0
Future Vol, veh/h	0	0	33	29	0	0	38	39	33	1	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	36	32	0	0	41	42	36	1	37	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	164	200	37	182	182	60	37	0	0	78	0	0
Stage 1	39	39	-	143	143	-	-	-	-	-	-	-
Stage 2	125	161	-	39	39	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	805	699	1041	784	716	1011	1587	-	-	1533	-	-
Stage 1	981	866	-	865	782	-	-	-	-	-	-	-
Stage 2	884	769	-	981	866	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	783	680	1041	736	696	1011	1587	-	-	1533	-	-
Mov Cap-2 Maneuver	783	680	-	736	696	-	-	-	-	-	-	-
Stage 1	980	866	-	841	761	-	-	-	-	-	-	-
Stage 2	860	748	-	947	866	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.58	10.11	2.53	0.21
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	570	-	-	1041	736	51	-	-
HCM Lane V/C Ratio	0.026	-	-	0.034	0.043	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.6	10.1	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	2.8
Intersection LOS	A

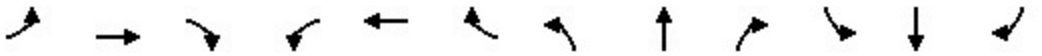
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	16	21	44	0
Demand Flow Rate, veh/h	16	21	44	0
Vehicles Circulating, veh/h	21	20	0	41
Vehicles Exiting, veh/h	20	24	37	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.8	2.9	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	16	21	44	0
Cap Entry Lane, veh/h	1351	1352	1380	1323
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	16	21	44	0
Cap Entry, veh/h	1351	1352	1380	1323
V/C Ratio	0.012	0.016	0.032	0.000
Control Delay, s/veh	2.8	2.8	2.9	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

SATURDAY BUILD

PRE-COVID CONDITION

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	196	64	137	197	113	0	1959	0	0	2058	0
Future Volume (vph)	48	196	64	137	197	113	0	1959	0	0	2058	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1881	1615	1805	1784	0	0	3632	0	0	3597	0
Flt Permitted	0.216			0.326								
Satd. Flow (perm)	402	1881	1615	619	1784	0	0	3632	0	0	3597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	0%	0%	1%	0%	0%	2%	0%	0%	3%	0%
Adj. Flow (vph)	50	204	67	143	205	118	0	2041	0	0	2144	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	204	67	143	323	0	0	2041	0	0	2144	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

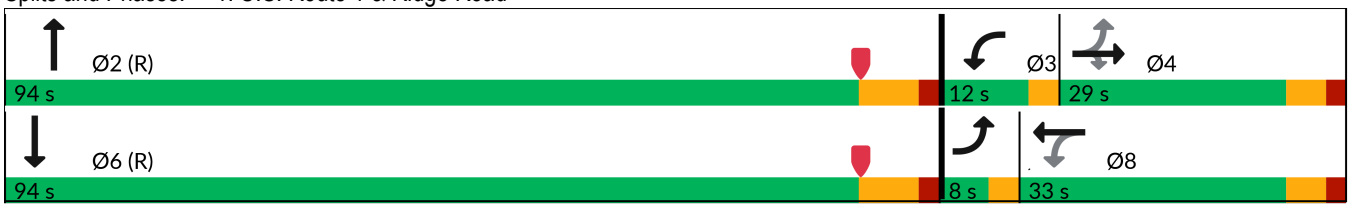


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	29.0	29.0	12.0	33.0			94.0			94.0	
Total Split (%)	5.9%	21.5%	21.5%	8.9%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.7	20.4	20.4	35.6	25.9			91.4			91.4	
Actuated g/C Ratio	0.21	0.15	0.15	0.26	0.19			0.68			0.68	
v/c Ratio	0.36	0.72	0.21	0.59	0.90			0.83			0.88	
Control Delay (s/veh)	44.3	68.6	5.8	49.8	78.4			18.1			23.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	44.3	68.6	5.8	49.8	78.4			18.1			23.7	
LOS	D	E	A	D	E			B			C	
Approach Delay (s/veh)		51.7			69.6			18.1			23.7	
Approach LOS		D			E			B			C	
90th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
70th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
50th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
30th %ile Green (s)	6.3	21.0	21.0	10.8	25.5			86.2			86.2	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	12.2	12.2	8.0	23.2			97.8			97.8	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	38	182	5	106	269			1264			1580	
Fuel Used(gal)	1	5	0	3	9			35			44	
CO Emissions (g/hr)	60	331	13	220	656			2434			3060	
NOx Emissions (g/hr)	12	64	3	43	128			474			595	
VOC Emissions (g/hr)	14	77	3	51	152			564			709	
Dilemma Vehicles (#)	0	6	0	0	10			73			76	
Queue Length 50th (ft)	33	167	0	98	262			681			776	
Queue Length 95th (ft)	69	249	23	159	#428			393			914	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	138	320	348	245	372			2458			2435	

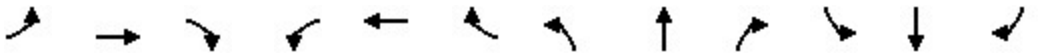
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.36	0.64	0.19	0.58	0.87			0.83			0.88	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 27.5		Intersection LOS: C	
Intersection Capacity Utilization 89.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1	0	9	0	5	0	2199	3	0	2326	0
Future Volume (vph)	19	1	0	9	0	5	0	2199	3	0	2326	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137						
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	20	1	0	9	0	5	0	2291	3	0	2423	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1	0	9	0	5	0	2294	0	0	2423	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



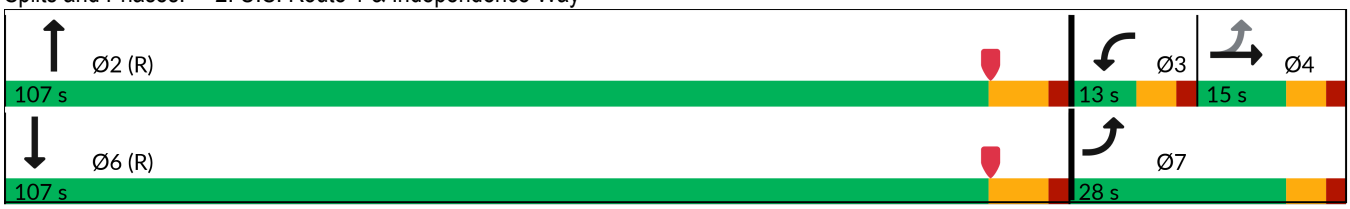
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	8.7	7.0		5.5		135.0		121.7			121.7	
Actuated g/C Ratio	0.06	0.05		0.04		1.00		0.90			0.90	
v/c Ratio	0.09	0.01		0.12		0.00		0.49			0.52	
Control Delay (s/veh)	49.5	55.0		65.8		0.0		2.8			3.0	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	49.5	55.0		65.8		0.0		2.8			3.0	
LOS	D	D		E		A		A			A	
Approach Delay (s/veh)		49.8			42.3			2.8			3.0	
Approach LOS		D			D			A			A	
90th %ile Green (s)	19.6	7.0		6.6				101.4			101.4	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
50th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	18	2		10		0		391			417	
Fuel Used(gal)	0	0		0		0		23			17	
CO Emissions (g/hr)	27	2		17		2		1623			1220	
NOx Emissions (g/hr)	5	0		3		0		316			237	
VOC Emissions (g/hr)	6	0		4		0		376			283	
Dilemma Vehicles (#)	0	0		0		0		52			79	
Queue Length 50th (ft)	8	1		8		0		125			274	
Queue Length 95th (ft)	m9	m2		27		0		284			156	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	570	126		93		1615		4704			4704	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.04	0.01		0.10		0.00		0.49			0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 3.3		Intersection LOS: A	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	247	305	0	0	307	18	0	0	60	0	0	0
Future Volume (vph)	247	305	0	0	307	18	0	0	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3539	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.407											
Satd. Flow (perm)	1500	3539	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			733			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	268	332	0	0	334	20	0	0	65	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	268	332	0	0	334	20	0	0	65	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

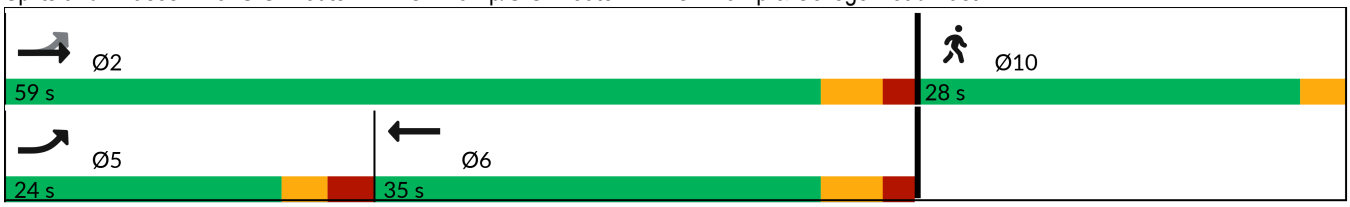
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.0	36.0			17.0	36.0			36.0			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.16	0.09			0.20	0.01			0.04			
Control Delay (s/veh)	0.8	0.1			5.9	0.0			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.8	0.1			5.9	0.0			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			5.6			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	7.2	30.2			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	25	0			154	0			0			
Fuel Used(gal)	1	1			10	0			1			
CO Emissions (g/hr)	62	53			714	34			38			
NOx Emissions (g/hr)	12	10			139	7			7			
VOC Emissions (g/hr)	14	12			165	8			9			
Dilemma Vehicles (#)	0	0			32	0			0			
Queue Length 50th (ft)	0	0			17	0			0			
Queue Length 95th (ft)	0	0			32	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2250	3539			2905	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.12	0.09			0.11	0.01			0.04			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.20			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 31.2%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.2			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

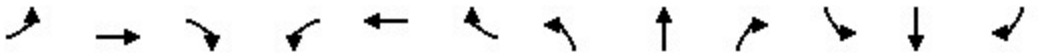
Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	721	15	0	578	0	9	0	90	3	151	0
Future Volume (vph)	0	721	15	0	578	0	9	0	90	3	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3530	0	0	3539	0	1805	0	1615	0	3606	0
Flt Permitted							0.702				0.999	
Satd. Flow (perm)	0	3530	0	0	3539	0	1334	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4							100			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	801	17	0	642	0	10	0	100	3	168	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	818	0	0	642	0	10	0	100	0	171	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

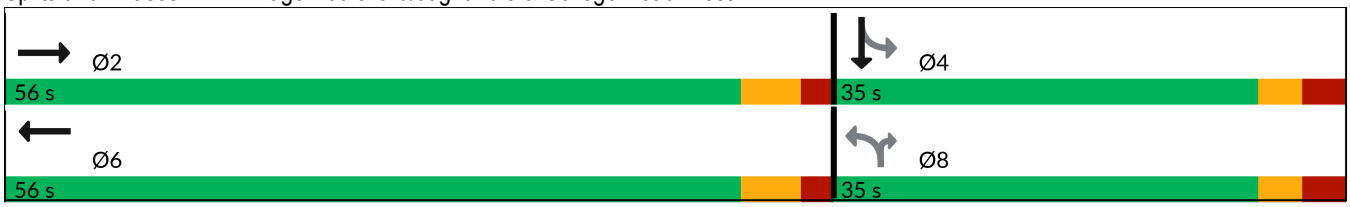


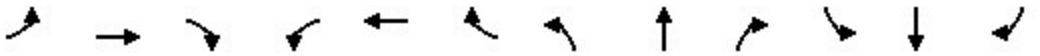
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		19.1			19.1		7.1		7.1		7.1	
Actuated g/C Ratio		0.56			0.56		0.21		0.21		0.21	
v/c Ratio		0.42			0.33		0.04		0.24		0.23	
Control Delay (s/veh)		7.1			6.5		11.6		5.3		12.4	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		7.1			6.5		11.6		5.3		12.4	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		7.1			6.5			5.9			12.4	
Approach LOS		A			A			A			B	
90th %ile Green (s)		16.7			16.7		7.7		7.7	7.7	7.7	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
70th %ile Term Code		Min			Min		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		27.3			27.3		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		417			310		11		23		119	
Fuel Used(gal)		7			5		0		1		1	
CO Emissions (g/hr)		482			338		8		40		90	
NOx Emissions (g/hr)		94			66		2		8		18	
VOC Emissions (g/hr)		112			78		2		9		21	
Dilemma Vehicles (#)		71			57		0		0		0	
Queue Length 50th (ft)		50			37		2		0		14	
Queue Length 95th (ft)		84			63		9		22		32	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3530			3539		1127		1380		3047	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.23			0.18		0.01		0.07		0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 34.3			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 7.3		Intersection LOS: A	
Intersection Capacity Utilization 47.1%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.4			
70th %ile Actuated Cycle: 34			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 33.3			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





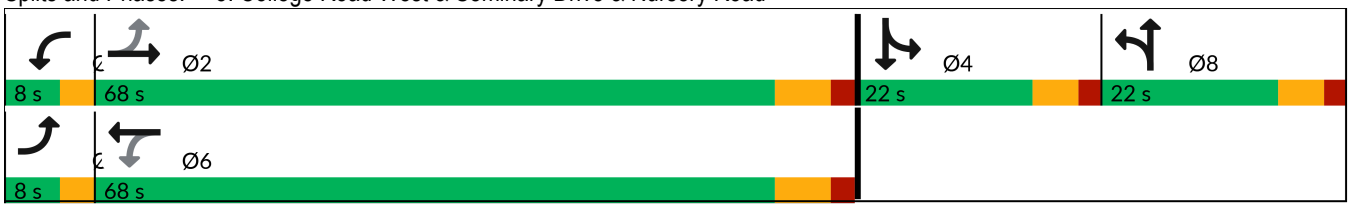
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	163	56	96	198	495	64	24	88	469	29	47
Future Volume (vph)	55	163	56	96	198	495	64	24	88	469	29	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.95
Frt		0.962				0.850		0.882			0.977	
Flt Protected	0.950			0.950			0.950			0.950	0.964	
Satd. Flow (prot)	1805	3372	0	1752	1881	1615	1805	1676	0	1643	3257	0
Flt Permitted	0.609			0.569			0.950			0.950	0.964	
Satd. Flow (perm)	1157	3372	0	1050	1881	1615	1805	1676	0	1643	3257	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		57				604		107			13	
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	4%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	67	199	68	117	241	604	78	29	107	572	35	57
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	67	267	0	117	241	604	78	136	0	286	378	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free						
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0		7.0	7.0	
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0		13.0	13.0	
Total Split (s)	8.0	68.0		8.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	6.7%	56.7%		6.7%	56.7%		18.3%	18.3%		18.3%	18.3%	
Maximum Green (s)	5.0	61.0		5.0	61.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	39.0	30.0		39.6	31.7	80.9	7.9	7.9		16.0	16.0	
Actuated g/C Ratio	0.48	0.37		0.49	0.39	1.00	0.10	0.10		0.20	0.20	
v/c Ratio	0.11	0.21		0.21	0.33	0.37	0.45	0.53		0.88	0.58	
Control Delay (s/veh)	10.9	14.3		11.7	19.9	0.7	42.6	18.9		61.7	32.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	10.9	14.3		11.7	19.9	0.7	42.6	18.9		61.7	32.7	
LOS	B	B		B	B	A	D	B		E	C	
Approach Delay (s/veh)		13.6			6.8			27.5			45.2	
Approach LOS		B			A			C			D	
90th %ile Green (s)	5.0	30.0		5.0	30.0		10.8	10.8		16.0	16.0	
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
70th %ile Green (s)	5.0	30.0		5.0	30.0		9.0	9.0		16.0	16.0	
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
50th %ile Green (s)	5.0	30.0		5.0	30.0		7.9	7.9		16.0	16.0	
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
30th %ile Green (s)	5.0	30.0		5.0	30.0		6.7	6.7		16.0	16.0	
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap		Max	Max	
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.1	5.1		16.0	16.0	
10th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap		Max	Max	
Stops (vph)	26	112		48	136	0	57	35		198	263	
Fuel Used(gal)	1	3		1	3	2	1	1		6	6	
CO Emissions (g/hr)	46	200		73	199	129	105	101		397	397	
NOx Emissions (g/hr)	9	39		14	39	25	20	20		77	77	
VOC Emissions (g/hr)	11	46		17	46	30	24	23		92	92	
Dilemma Vehicles (#)	0	10		0	9	0	0	5		0	19	
Queue Length 50th (ft)	16	36		29	86	0	38	14		156	92	
Queue Length 95th (ft)	34	58		53	134	0	72	54		#276	129	
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150			400		
Base Capacity (vph)	598	2558		557	1419	1615	357	417		324	654	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.11	0.10		0.21	0.17	0.37	0.22	0.33		0.88	0.58	

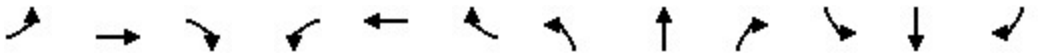
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 80.9			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 21.6		Intersection LOS: C	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 83.8			
70th %ile Actuated Cycle: 82			
50th %ile Actuated Cycle: 80.9			
30th %ile Actuated Cycle: 79.7			
10th %ile Actuated Cycle: 78.1			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	218	253	549	12	168	59	89	0	0	0
Future Volume (vph)	15	463	218	253	549	12	168	59	89	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.962				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1909	1658	1834	1925	0	0	1780	0	0	0	0
Flt Permitted		0.977		0.379				0.974				
Satd. Flow (perm)	0	1869	1658	732	1925	0	0	1780	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			229		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	229	266	578	13	177	62	94	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	229	266	591	0	0	333	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



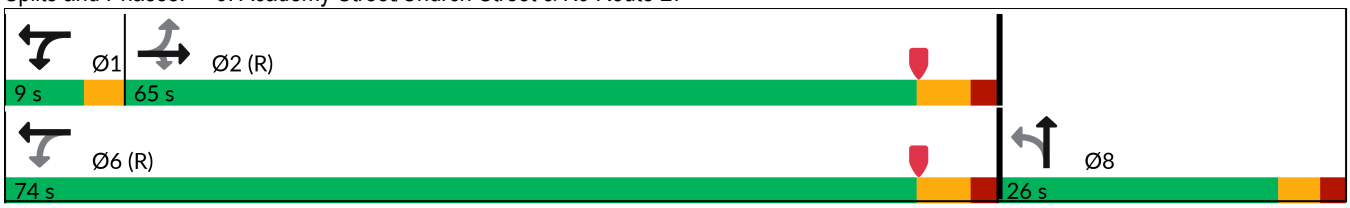
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.7	71.7			20.3				
Actuated g/C Ratio		0.59	0.59	0.72	0.72			0.20				
v/c Ratio		0.46	0.21	0.44	0.43			0.93				
Control Delay (s/veh)		13.2	1.7	4.8	4.3			72.0				
Queue Delay		0.0	0.0	0.0	0.2			0.0				
Total Delay (s/veh)		13.2	1.7	4.8	4.6			72.0				
LOS		B	A	A	A			E				
Approach Delay (s/veh)		9.6			4.6			72.0				
Approach LOS		A			A			E				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	9.7			17.3	17.3				
10th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
Stops (vph)		256	13	51	140			281				
Fuel Used(gal)		5	1	2	4			20				
CO Emissions (g/hr)		347	68	120	269			1402				
NOx Emissions (g/hr)		67	13	23	52			273				
VOC Emissions (g/hr)		80	16	28	62			325				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		167	0	31	85			208				
Queue Length 95th (ft)		243	29	m42	m103			#367				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1102	1072	599	1381			373				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	71.7
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	262			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.46	0.21	0.44	0.53			0.89				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 108.4%		ICU Level of Service G	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	490	23	63	593	61	42	110	72	85	140	156
Future Volume (vph)	38	490	23	63	593	61	42	110	72	85	140	156
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.989			0.957			0.945	
Flt Protected		0.997			0.996			0.991			0.989	
Satd. Flow (prot)	0	2152	0	0	2148	0	0	1793	0	0	1768	0
Flt Permitted		0.917			0.906			0.814			0.812	
Satd. Flow (perm)	0	1979	0	0	1954	0	0	1473	0	0	1452	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	516	24	66	624	64	44	116	76	89	147	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	580	0	0	754	0	0	236	0	0	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

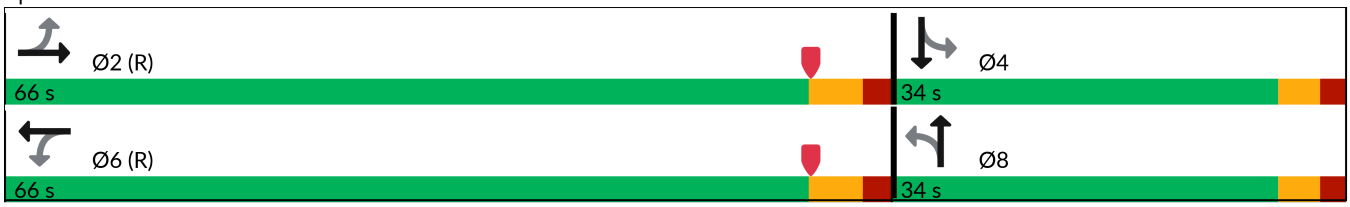
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.4			60.4			28.6			28.6	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.49			0.64			0.56			0.96	
Control Delay (s/veh)		8.2			16.0			36.3			72.5	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		8.3			16.0			36.3			72.5	
LOS		A			B			D			E	
Approach Delay (s/veh)		8.3			16.0			36.3			72.5	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	62.0	62.0		62.0	62.0		27.0	27.0		27.0	27.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		162			446			187			327	
Fuel Used(gal)		4			13			14			11	
CO Emissions (g/hr)		301			893			969			747	
NOx Emissions (g/hr)		59			174			189			145	
VOC Emissions (g/hr)		70			207			225			173	
Dilemma Vehicles (#)		0			36			0			17	
Queue Length 50th (ft)		120			290			127			249	
Queue Length 95th (ft)		m149			414			207			#436	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1195			1180			427			421	
Starvation Cap Reductn		80			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.52			0.64			0.55			0.95	

Intersection Summary

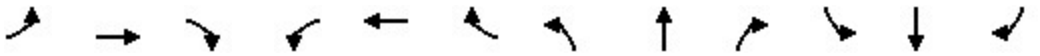
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	3	37	8	18	5	279	49	15	315	190
Future Volume (vph)	24	0	3	37	8	18	5	279	49	15	315	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.962			0.978			0.944	
Flt Protected		0.957			0.972		0.950			0.950		
Satd. Flow (prot)	0	1793	0	0	1717	0	1805	1858	0	1687	1787	0
Flt Permitted		0.825			0.804		0.434			0.552		
Satd. Flow (perm)	0	1546	0	0	1420	0	825	1858	0	980	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			19			16			54	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	6%	0%	0%	0%	0%	0%	7%	0%	1%
Adj. Flow (vph)	26	0	3	39	9	19	5	297	52	16	335	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	67	0	5	349	0	16	537	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

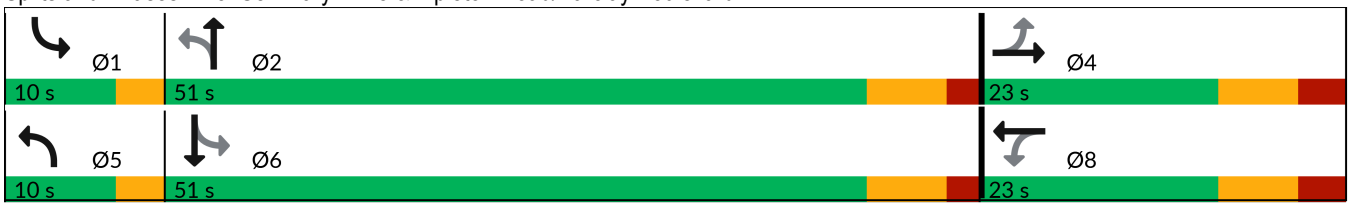


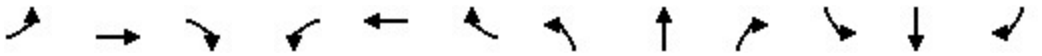
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		8.0			8.0		50.2	48.7		50.2	48.7	
Actuated g/C Ratio		0.13			0.13		0.80	0.78		0.80	0.78	
v/c Ratio		0.11			0.34		0.01	0.24		0.02	0.38	
Control Delay (s/veh)		0.8			27.0		3.0	5.4		3.0	6.2	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		0.8			27.0		3.0	5.4		3.0	6.2	
LOS		A			C		A	A		A	A	
Approach Delay (s/veh)		0.8			27.0			5.4			6.1	
Approach LOS		A			C			A			A	
90th %ile Green (s)	10.8	10.8		10.8	10.8		5.0	44.0		5.1	44.1	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Gap	Hold	
70th %ile Green (s)	8.0	8.0		8.0	8.0		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
Stops (vph)		0			43		2	102		6	172	
Fuel Used(gal)		0			1		0	4		1	22	
CO Emissions (g/hr)		11			45		5	298		45	1511	
NOx Emissions (g/hr)		2			9		1	58		9	294	
VOC Emissions (g/hr)		3			10		1	69		10	350	
Dilemma Vehicles (#)		2			0		0	17		0	24	
Queue Length 50th (ft)		0			18		1	45		1	74	
Queue Length 95th (ft)		0			58		3	128		6	209	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		449			364		777	1448		871	1402	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.06			0.18		0.01	0.24		0.02	0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 62.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 7.1		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.9			
70th %ile Actuated Cycle: 67			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



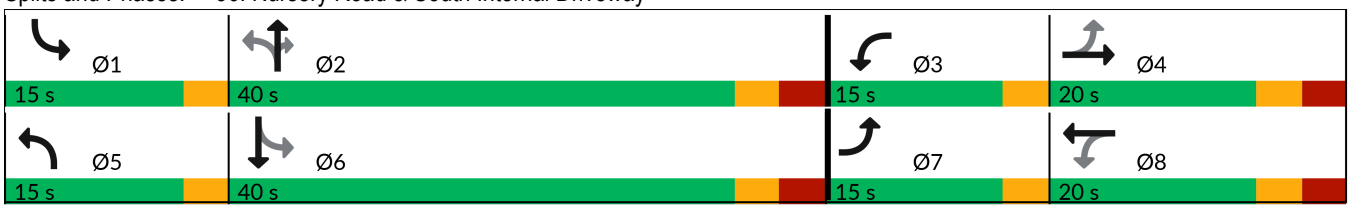


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	9	123	281	9	0	111	153	308	1	139	0
Future Volume (vph)	1	9	123	281	9	0	111	153	308	1	139	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.860							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1634	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.800			0.500			0.521			0.652		
Satd. Flow (perm)	1520	1634	0	950	1900	0	990	1900	1615	1239	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		134							335			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	10	134	305	10	0	121	166	335	1	151	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	144	0	305	10	0	121	166	335	1	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.1	6.3		19.4	14.8		20.6	16.1	16.1	16.4	9.5	
Actuated g/C Ratio	0.26	0.14		0.42	0.32		0.44	0.35	0.35	0.35	0.20	
v/c Ratio	0.00	0.43		0.52	0.02		0.21	0.25	0.43	0.00	0.39	
Control Delay (s/veh)	10.0	10.8		13.7	14.0		9.9	14.4	4.3	9.0	23.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	10.0	10.8		13.7	14.0		9.9	14.4	4.3	9.0	23.2	
LOS	A	B		B	B		A	B	A	A	C	
Approach Delay (s/veh)		10.7			13.7			8.1			23.1	
Approach LOS		B			B			A			C	
90th %ile Green (s)	5.0	8.7		12.0	15.7		9.6	17.0	17.0	5.0	12.4	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	6.2		12.0	21.2		8.7	21.5	21.5	0.0	9.8	
70th %ile Term Code	Skip	Gap		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		10.0	18.0		7.3	18.5	18.5	0.0	8.2	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		8.4	16.4		6.2	16.1	16.1	0.0	6.9	
30th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	7.6	7.6	0.0	7.6	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	34		171	9		59	100	39	2	112	
Fuel Used(gal)	0	1		3	0		1	2	2	0	2	
CO Emissions (g/hr)	1	61		213	9		88	141	153	1	139	
NOx Emissions (g/hr)	0	12		42	2		17	27	30	0	27	
VOC Emissions (g/hr)	0	14		49	2		20	33	36	0	32	
Dilemma Vehicles (#)	0	9		0	1		0	10	0	0	9	
Queue Length 50th (ft)	0	3		55	2		19	30	0	0	39	
Queue Length 95th (ft)	3	46		125	12		50	92	52	2	95	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	723	631		668	743		681	1385	1268	721	1385	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.23		0.46	0.01		0.18	0.12	0.26	0.00	0.11	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 46.6		
Natural Cycle: 50		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.52		
Intersection Signal Delay (s/veh): 11.7		Intersection LOS: B
Intersection Capacity Utilization 53.8%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 60.7		
70th %ile Actuated Cycle: 54.7		
50th %ile Actuated Cycle: 48.5		
30th %ile Actuated Cycle: 44.5		
10th %ile Actuated Cycle: 24.6		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	8	67	0	189	11	65	210
Future Vol, veh/h	8	67	0	189	11	65	210
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	1
Mvmt Flow	10	81	0	228	13	78	253

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	517	120	253	0	0	241	0
Stage 1	234	-	-	-	-	-	-
Stage 2	283	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	493	915	1001	-	-	1337	-
Stage 1	789	-	-	-	-	-	-
Stage 2	746	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	464	915	1001	-	-	1337	-
Mov Cap-2 Maneuver	464	-	-	-	-	-	-
Stage 1	789	-	-	-	-	-	-
Stage 2	702	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.7	0	1.86
HCM LOS	A		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1001	-	-	464	915	1337	-
HCM Lane V/C Ratio	-	-	-	0.021	0.088	0.059	-
HCM Ctrl Dly (s/v)	0	-	-	12.9	9.3	7.9	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.2	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	249	16	14	248	46	17	0	8	15	0	54
Future Vol, veh/h	56	249	16	14	248	46	17	0	8	15	0	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	68	304	20	17	302	56	21	0	10	18	0	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	359	0	0	323	0	0	787	843	313	777	796	302
Stage 1	-	-	-	-	-	-	450	450	-	337	337	-
Stage 2	-	-	-	-	-	-	337	393	-	440	460	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1211	-	-	1248	-	-	312	303	732	317	322	742
Stage 1	-	-	-	-	-	-	592	575	-	682	645	-
Stage 2	-	-	-	-	-	-	682	610	-	600	569	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1211	-	-	1248	-	-	265	282	732	291	300	742
Mov Cap-2 Maneuver	-	-	-	-	-	-	265	282	-	291	300	-
Stage 1	-	-	-	-	-	-	559	543	-	672	636	-
Stage 2	-	-	-	-	-	-	613	601	-	558	537	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.42	0.36	16.92	12.04
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	332	1211	-	-	1248	-	-	291	742
HCM Lane V/C Ratio	0.092	0.056	-	-	0.014	-	-	0.063	0.089
HCM Ctrl Dly (s/v)	16.9	8.1	-	-	7.9	-	-	18.2	10.3
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	0.2	0.3

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	49	42	0	0	54	54	47	1	49	0
Future Vol, veh/h	0	0	49	42	0	0	54	54	47	1	49	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	53	46	0	0	59	59	51	1	53	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	232	283	53	257	257	84	53	0	0	110	0	0
Stage 1	55	55	-	202	202	-	-	-	-	-	-	-
Stage 2	176	227	-	55	55	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	728	630	1020	700	650	980	1565	-	-	1493	-	-
Stage 1	962	853	-	805	738	-	-	-	-	-	-	-
Stage 2	830	720	-	962	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	698	604	1020	636	624	980	1565	-	-	1493	-	-
Mov Cap-2 Maneuver	698	604	-	636	624	-	-	-	-	-	-	-
Stage 1	961	852	-	773	709	-	-	-	-	-	-	-
Stage 2	797	691	-	911	852	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.72	11.09	2.57	0.15
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	574	-	-	1020	636	36	-	-
HCM Lane V/C Ratio	0.037	-	-	0.052	0.072	0.001	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	8.7	11.1	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	24	30	60	0
Demand Flow Rate, veh/h	24	30	60	0
Vehicles Circulating, veh/h	30	26	0	56
Vehicles Exiting, veh/h	26	34	54	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.9	2.9	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	24	30	60	0
Cap Entry Lane, veh/h	1338	1344	1380	1303
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	24	30	60	0
Cap Entry, veh/h	1338	1344	1380	1303
V/C Ratio	0.018	0.022	0.043	0.000
Control Delay, s/veh	2.8	2.9	2.9	2.8
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

AM BUILD WITH IMPROVEMENTS

PRE-COVID CONDITION

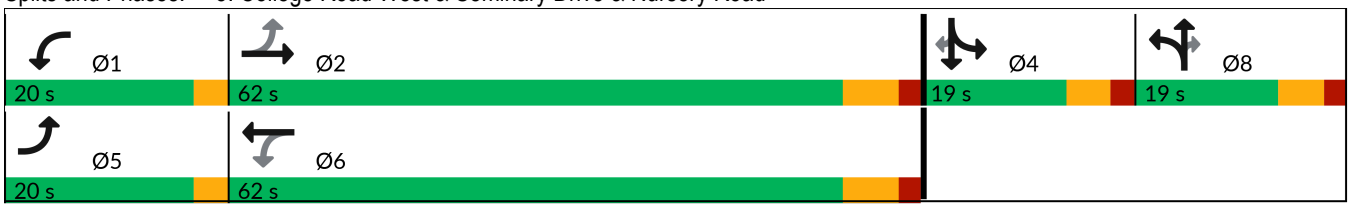
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	610	280	351	509	248	47	14	99	232	10	13
Future Volume (vph)	34	610	280	351	509	248	47	14	99	232	10	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.953				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3440	0	1787	3574	1615	3502	1900	1455	3502	1900	1615
Flt Permitted	0.455			0.180			0.950			0.950		
Satd. Flow (perm)	864	3440	0	339	3574	1615	3502	1900	1455	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		83				258			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	11%	0%	0%	0%
Adj. Flow (vph)	35	635	292	366	530	258	49	15	103	242	10	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	927	0	366	530	258	49	15	103	242	10	14
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

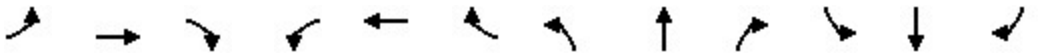
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	41.1	31.6		52.6	43.7	81.2	6.1	6.1	6.1	10.1	10.1	10.1
Actuated g/C Ratio	0.51	0.39		0.65	0.54	1.00	0.08	0.08	0.08	0.12	0.12	0.12
v/c Ratio	0.07	0.67		0.79	0.28	0.16	0.19	0.11	0.47	0.56	0.04	0.05
Control Delay (s/veh)	7.9	22.9		25.2	12.5	0.2	40.2	40.6	14.2	40.4	35.0	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.9	22.9		25.2	12.5	0.2	40.2	40.6	14.2	40.4	35.0	0.3
LOS	A	C		C	B	A	D	D	B	D	C	A
Approach Delay (s/veh)		22.3			13.8			24.2			38.1	
Approach LOS		C			B			C			D	
90th %ile Green (s)	6.2	35.8		17.0	46.6		8.5	8.5	8.5	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Max	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.6	30.0		16.9	41.3		6.2	6.2	6.2	11.6	11.6	11.6
70th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.2	30.0		14.2	39.0		5.6	5.6	5.6	10.1	10.1	10.1
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		12.1	45.1		5.1	5.1	5.1	8.9	8.9	8.9
30th %ile Term Code	Skip	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		9.7	42.7		0.0	0.0	0.0	7.3	7.3	7.3
10th %ile Term Code	Skip	Min		Gap	Hold		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	17	647		169	262	0	43	15	14	208	12	0
Fuel Used(gal)	0	15		5	6	1	1	0	1	5	0	0
CO Emissions (g/hr)	28	1055		330	398	63	76	24	71	328	15	5
NOx Emissions (g/hr)	5	205		64	77	12	15	5	14	64	3	1
VOC Emissions (g/hr)	6	244		76	92	15	18	6	16	76	3	1
Dilemma Vehicles (#)	0	41		0	23	0	0	1	0	0	0	0
Queue Length 50th (ft)	6	191		86	83	0	12	7	0	61	5	0
Queue Length 95th (ft)	19	299		#235	132	0	32	29	40	110	21	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	748	2402		528	2469	1615	571	310	336	571	310	362
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.05	0.39		0.69	0.21	0.16	0.09	0.05	0.31	0.42	0.03	0.04

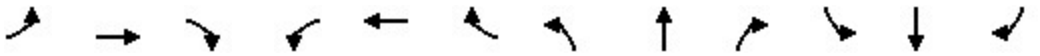
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 81.2			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 20.2		Intersection LOS: C	
Intersection Capacity Utilization 72.7%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 96.3			
70th %ile Actuated Cycle: 86.7			
50th %ile Actuated Cycle: 81.9			
30th %ile Actuated Cycle: 78.1			
10th %ile Actuated Cycle: 63			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	586	86	76	1456	1017	20	13	19	250	46	128
Future Volume (vph)	135	586	86	76	1456	1017	20	13	19	250	46	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		2	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.951				0.850
Flt Protected	0.950			0.950				0.981		0.950	0.967	
Satd. Flow (prot)	1787	3438	1509	1805	4940	1583	0	1715	0	1618	1676	1583
Flt Permitted	0.950			0.950				0.981		0.950	0.967	
Satd. Flow (perm)	1787	3438	1509	1805	4940	1583	0	1715	0	1618	1676	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			730		21				144
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	5%	7%	0%	5%	2%	0%	13%	0%	6%	0%	2%
Adj. Flow (vph)	152	658	97	85	1636	1143	22	15	21	281	52	144
Shared Lane Traffic (%)										41%		
Lane Group Flow (vph)	152	658	97	85	1636	1143	0	58	0	166	167	144
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Free	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

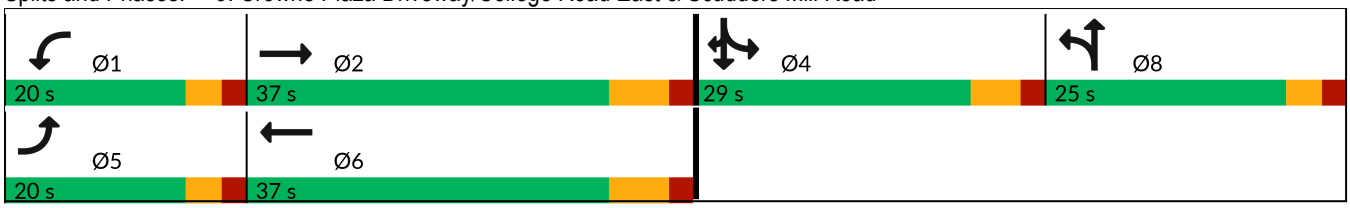


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			Free						
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0		11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0		25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%		22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0		20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0			5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Act Effct Green (s)	11.1	36.1	82.8	8.7	30.8	82.8		7.2		13.1	13.1	13.1
Actuated g/C Ratio	0.13	0.44	1.00	0.11	0.37	1.00		0.09		0.16	0.16	0.16
v/c Ratio	0.64	0.44	0.06	0.45	0.89	0.72		0.35		0.65	0.63	0.39
Control Delay (s/veh)	48.6	21.2	0.1	45.6	34.8	2.9		34.0		46.5	45.1	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	48.6	21.2	0.1	45.6	34.8	2.9		34.0		46.5	45.1	9.3
LOS	D	C	A	D	C	A		C		D	D	A
Approach Delay (s/veh)		23.6			22.4			34.0			34.8	
Approach LOS		C			C			C			C	
90th %ile Green (s)	15.0	32.3		12.7	30.0		9.9	9.9		20.8	20.8	20.8
90th %ile Term Code	Max	Hold		Gap	Max		Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	14.0	33.9		10.1	30.0		7.7	7.7		15.8	15.8	15.8
70th %ile Term Code	Gap	Hold		Gap	Max		Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	11.6	33.1		8.5	30.0		6.3	6.3		13.1	13.1	13.1
50th %ile Term Code	Gap	Hold		Gap	Max		Gap	Gap		Gap	Gap	Gap
30th %ile Green (s)	9.5	32.5		7.0	30.0		6.0	6.0		10.6	10.6	10.6
30th %ile Term Code	Gap	Hold		Gap	Max		Min	Min		Gap	Gap	Gap
10th %ile Green (s)	6.6	41.6		0.0	30.0		0.0	0.0		7.2	7.2	7.2
10th %ile Term Code	Gap	Hold		Skip	Max		Skip	Skip		Gap	Gap	Gap
Stops (vph)	119	403	0	66	1165	2		34		129	130	20
Fuel Used(gal)	5	15	1	3	47	14		1		8	8	5
CO Emissions (g/hr)	328	1072	68	187	3261	945		55		585	586	375
NOx Emissions (g/hr)	64	209	13	36	634	184		11		114	114	73
VOC Emissions (g/hr)	76	248	16	43	756	219		13		136	136	87
Dilemma Vehicles (#)	0	29	0	0	82	0		2		0	7	0
Queue Length 50th (ft)	77	133	0	43	298	0		19		87	88	0
Queue Length 95th (ft)	153	235	0	96	#512	0		60		164	164	48
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				350		
Base Capacity (vph)	331	1498	1509	335	1835	1583		440		461	477	553
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.46	0.44	0.06	0.25	0.89	0.72		0.13		0.36	0.35	0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 82.8			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 24.2		Intersection LOS: C	
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 98.7			
70th %ile Actuated Cycle: 90.5			
50th %ile Actuated Cycle: 84			
30th %ile Actuated Cycle: 79.1			
10th %ile Actuated Cycle: 61.8			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



PM BUILD WITH IMPROVEMENTS

PRE-COVID CONDITION

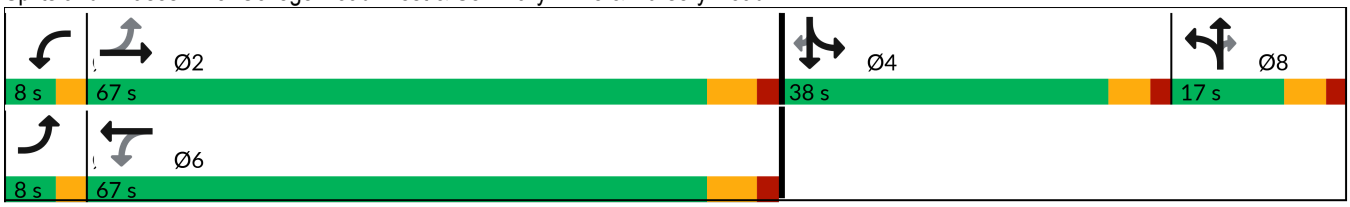
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	230	116	177	784	339	118	17	185	388	23	45
Future Volume (vph)	35	230	116	177	784	339	118	17	185	388	23	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.950				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3407	0	1805	3610	1615	3502	1900	1599	3502	1900	1615
Flt Permitted	0.265			0.496			0.950			0.950		
Satd. Flow (perm)	503	3407	0	942	3610	1615	3502	1900	1599	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		90				250			201			109
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	38	250	126	192	852	368	128	18	201	422	25	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	376	0	192	852	368	128	18	201	422	25	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

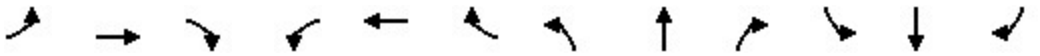
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.8	30.7		41.1	34.2	79.8	7.7	7.7	7.7	14.3	14.3	14.3
Actuated g/C Ratio	0.50	0.38		0.52	0.43	1.00	0.10	0.10	0.10	0.18	0.18	0.18
v/c Ratio	0.11	0.28		0.36	0.55	0.23	0.38	0.10	0.60	0.67	0.07	0.13
Control Delay (s/veh)	11.2	14.0		13.4	20.5	0.3	38.1	35.6	13.9	36.6	28.1	0.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.2	14.0		13.4	20.5	0.3	38.1	35.6	13.9	36.6	28.1	0.7
LOS	B	B		B	C	A	D	D	B	D	C	A
Approach Delay (s/veh)		13.7			14.3			23.9			32.6	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	33.1		5.0	33.1		11.0	11.0	11.0	20.1	20.1	20.1
90th %ile Term Code	Max	Hold		Max	Gap		Max	Max	Max	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		8.3	8.3	8.3	15.8	15.8	15.8
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		7.4	7.4	7.4	13.8	13.8	13.8
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		5.0	38.0		6.6	6.6	6.6	12.3	12.3	12.3
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.5	5.5	5.5	10.2	10.2	10.2
10th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
Stops (vph)	18	172		94	567	0	105	18	30	343	20	0
Fuel Used(gal)	0	4		2	12	1	3	0	2	8	0	0
CO Emissions (g/hr)	31	311		143	815	87	185	28	134	526	28	17
NOx Emissions (g/hr)	6	61		28	159	17	36	5	26	102	5	3
VOC Emissions (g/hr)	7	72		33	189	20	43	6	31	122	7	4
Dilemma Vehicles (#)	0	16		0	37	0	0	1	0	0	1	0
Queue Length 50th (ft)	8	48		45	171	0	30	8	0	100	10	0
Queue Length 95th (ft)	27	93		100	274	0	62	30	62	158	32	0
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	332	2598		539	2729	1615	485	263	394	1412	766	716
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.11	0.14		0.36	0.31	0.23	0.26	0.07	0.51	0.30	0.03	0.07

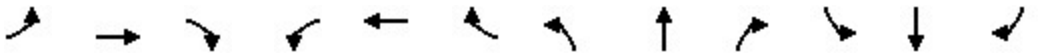
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 79.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 18.9		Intersection LOS: B	
Intersection Capacity Utilization 66.7%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 91.2			
70th %ile Actuated Cycle: 81.1			
50th %ile Actuated Cycle: 78.2			
30th %ile Actuated Cycle: 75.9			
10th %ile Actuated Cycle: 72.7			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	1230	16	8	642	254	25	13	14	747	5	131
Future Volume (vph)	87	1230	16	8	642	254	25	13	14	747	5	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		2	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.964				0.850
Flt Protected	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (prot)	1805	3574	1553	1805	5036	1583	0	1737	0	1715	1720	1583
Flt Permitted	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (perm)	1805	3574	1553	1805	5036	1583	0	1737	0	1715	1720	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			276		14				142
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		611			1998			443			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	4%	0%	3%	2%	6%	0%	0%	0%	0%	2%
Adj. Flow (vph)	95	1337	17	9	698	276	27	14	15	812	5	142
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	95	1337	17	9	698	276	0	56	0	406	411	142
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Free	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

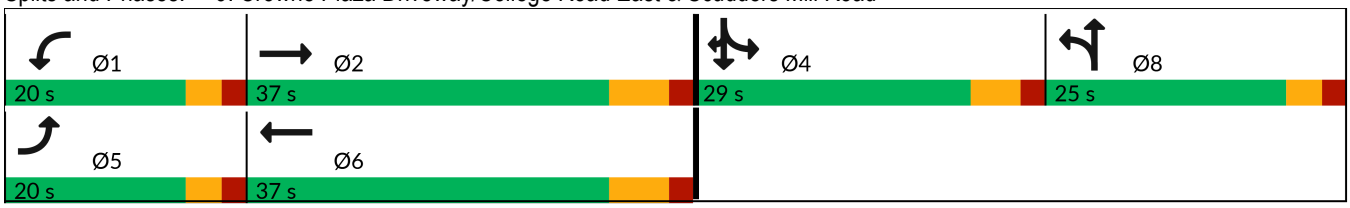


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			Free						
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0		11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0		25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%		22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0		20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0			5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Act Effct Green (s)	9.3	40.1	88.3	6.1	30.6	88.3		7.3		23.5	23.5	23.5
Actuated g/C Ratio	0.11	0.45	1.00	0.07	0.35	1.00		0.08		0.27	0.27	0.27
v/c Ratio	0.50	0.82	0.01	0.07	0.40	0.17		0.36		0.89	0.90	0.27
Control Delay (s/veh)	49.2	27.8	0.0	44.3	24.7	0.2		39.6		57.9	59.0	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	49.2	27.8	0.0	44.3	24.7	0.2		39.6		57.9	59.0	7.0
LOS	D	C	A	D	C	A		D		E	E	A
Approach Delay (s/veh)		28.9			18.0			39.6			50.8	
Approach LOS		C			B			D			D	
90th %ile Green (s)	13.4	37.3		6.1	30.0		10.0	10.0		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max		Gap	Gap		Max	Max	Max
70th %ile Green (s)	10.8	45.8		0.0	30.0		7.9	7.9		23.0	23.0	23.0
70th %ile Term Code	Gap	Hold		Skip	Max		Gap	Gap		Max	Max	Max
50th %ile Green (s)	9.2	44.2		0.0	30.0		6.7	6.7		23.0	23.0	23.0
50th %ile Term Code	Gap	Hold		Skip	Max		Gap	Gap		Max	Max	Max
30th %ile Green (s)	7.7	42.7		0.0	30.0		6.0	6.0		23.0	23.0	23.0
30th %ile Term Code	Gap	Hold		Skip	Max		Min	Min		Max	Max	Max
10th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0		23.0	23.0	23.0
10th %ile Term Code	Skip	Max		Skip	Max		Skip	Skip		Max	Max	Max
Stops (vph)	77	942	0	10	468	0		39		301	304	19
Fuel Used(gal)	3	35	0	0	19	3		1		22	22	5
CO Emissions (g/hr)	212	2468	13	23	1296	226		61		1521	1543	379
NOx Emissions (g/hr)	41	480	2	4	252	44		12		296	300	74
VOC Emissions (g/hr)	49	572	3	5	300	52		14		353	358	88
Dilemma Vehicles (#)	0	57	0	0	36	0		2		0	19	0
Queue Length 50th (ft)	53	326	0	5	115	0		24		245	248	0
Queue Length 95th (ft)	106	#598	0	22	168	0		63		#484	#491	48
Internal Link Dist (ft)		531			1918			363			583	
Turn Bay Length (ft)	165		170	75		270				350		
Base Capacity (vph)	312	1622	1553	312	1746	1583		412		455	457	525
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.30	0.82	0.01	0.03	0.40	0.17		0.14		0.89	0.90	0.27

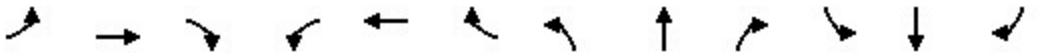
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 88.3			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 32.1		Intersection LOS: C	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99.4			
70th %ile Actuated Cycle: 94.7			
50th %ile Actuated Cycle: 91.9			
30th %ile Actuated Cycle: 89.7			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road

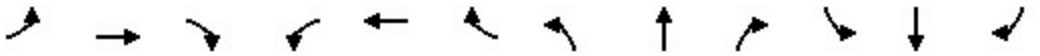


SATURDAY BUILD WITH IMPROVEMENTS

PRE-COVID CONDITION



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	163	56	96	198	495	64	24	88	469	29	47
Future Volume (vph)	55	163	56	96	198	495	64	24	88	469	29	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.962				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3372	0	1752	3574	1615	3502	1900	1615	3502	1900	1615
Flt Permitted	0.602			0.567			0.950			0.950		
Satd. Flow (perm)	1144	3372	0	1046	3574	1615	3502	1900	1615	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		52				604			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	4%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	67	199	68	117	241	604	78	29	107	572	35	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	267	0	117	241	604	78	29	107	572	35	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

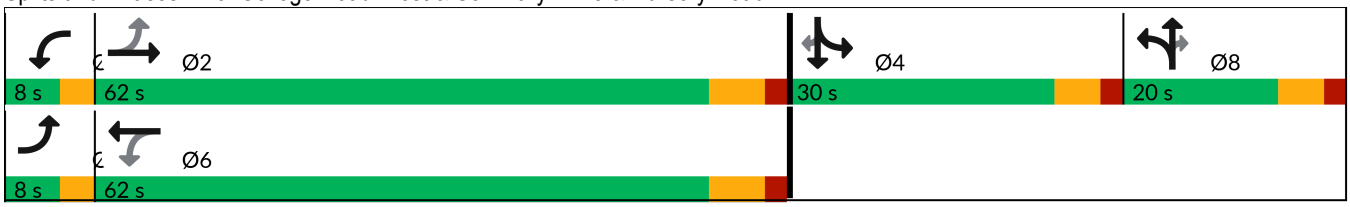


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.1	30.1		39.8	31.8	82.0	6.4	6.4	6.4	18.4	18.4	18.4
Actuated g/C Ratio	0.48	0.37		0.49	0.39	1.00	0.08	0.08	0.08	0.22	0.22	0.22
v/c Ratio	0.11	0.21		0.21	0.17	0.37	0.29	0.20	0.46	0.73	0.08	0.13
Control Delay (s/veh)	12.1	15.6		12.9	18.7	0.7	39.5	40.0	13.3	35.4	25.2	0.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.1	15.6		12.9	18.7	0.7	39.5	40.0	13.3	35.4	25.2	0.7
LOS	B	B		B	B	A	D	D	B	D	C	A
Approach Delay (s/veh)		14.9			6.7			26.5			31.9	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.1	8.1	8.1	24.0	24.0	24.0
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.0	7.0	7.0	20.9	20.9	20.9
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.4	6.4	6.4	18.8	18.8	18.8
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.7	5.7	5.7	15.9	15.9	15.9
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.0	5.0	5.0	13.2	13.2	13.2
10th %ile Term Code	Skip	Min		Max	Hold		Min	Min	Min	Gap	Gap	Gap
Stops (vph)	28	115		51	127	0	57	24	15	414	22	0
Fuel Used(gal)	1	3		1	3	2	1	1	1	9	0	0
CO Emissions (g/hr)	49	206		77	189	129	102	40	64	627	33	18
NOx Emissions (g/hr)	9	40		15	37	25	20	8	12	122	6	3
VOC Emissions (g/hr)	11	48		18	44	30	24	9	15	145	8	4
Dilemma Vehicles (#)	0	10		0	9	0	0	1	0	0	2	0
Queue Length 50th (ft)	17	38		30	43	0	20	14	0	140	14	0
Queue Length 95th (ft)	38	65		60	70	0	38	38	31	176	34	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	586	2286		550	2405	1615	599	325	374	1028	558	557
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.11	0.12		0.21	0.10	0.37	0.13	0.09	0.29	0.56	0.06	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 82			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 17.6		Intersection LOS: B	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 89.1			
70th %ile Actuated Cycle: 84.9			
50th %ile Actuated Cycle: 82.2			
30th %ile Actuated Cycle: 78.6			
10th %ile Actuated Cycle: 75.2			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



AM BUILD WITH BUILDINGS E1 & E2

WITH IMPROVEMENTS

PRE-COVID CONDITION

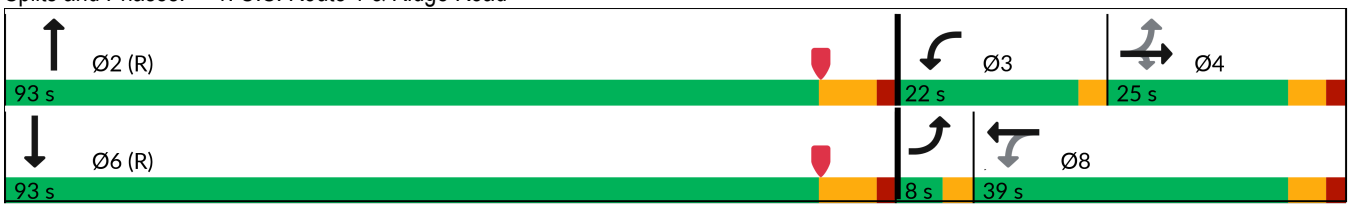
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	292	165	384	342	103	0	1761	0	0	3069	0
Future Volume (vph)	93	292	165	384	342	103	0	1761	0	0	3069	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.965							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1863	1615	1805	1793	0	0	4975	0	0	5070	0
Flt Permitted	0.211			0.182								
Satd. Flow (perm)	393	1863	1615	346	1793	0	0	4975	0	0	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		10							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	0%	0%	2%	3%	0%	7%	0%	0%	5%	0%
Adj. Flow (vph)	95	298	168	392	349	105	0	1797	0	0	3132	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	298	168	392	454	0	0	1797	0	0	3132	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

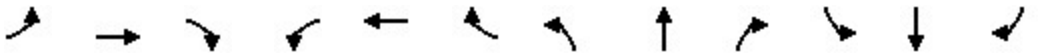
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	25.0	25.0	22.0	39.0			93.0			93.0	
Total Split (%)	5.7%	17.9%	17.9%	15.7%	27.9%			66.4%			66.4%	
Maximum Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	27.0	19.0	19.0	44.0	33.0			88.0			88.0	
Actuated g/C Ratio	0.19	0.14	0.14	0.31	0.24			0.63			0.63	
v/c Ratio	0.77	1.18	0.57	1.28	1.06			0.57			0.98	
Control Delay (s/veh)	77.0	165.9	35.8	183.9	108.4			14.3			37.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	77.0	165.9	35.8	183.9	108.4			14.3			37.9	
LOS	E	F	D	F	F			B			D	
Approach Delay (s/veh)		111.9			143.4			14.3			37.9	
Approach LOS		F			F			B			D	
90th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	19.0	19.0	19.0	33.0			85.0			85.0	
10th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
Stops (vph)	80	237	77	251	376			810			2672	
Fuel Used(gal)	2	13	2	19	16			24			80	
CO Emissions (g/hr)	164	874	149	1302	1122			1670			5590	
NOx Emissions (g/hr)	32	170	29	253	218			325			1088	
VOC Emissions (g/hr)	38	203	35	302	260			387			1296	
Dilemma Vehicles (#)	0	8	0	0	14			61			107	
Queue Length 50th (ft)	63	~324	69	~391	~447			294			960	
Queue Length 95th (ft)	#121	#513	149	#598	#673			316			#1138	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	124	252	293	306	430			3127			3186	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.77	1.18	0.57	1.28	1.06			0.57			0.98	

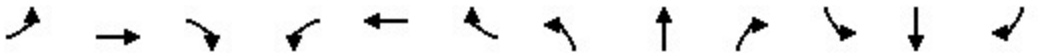
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 108 (77%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.28			
Intersection Signal Delay (s/veh): 51.8		Intersection LOS: D	
Intersection Capacity Utilization 106.9%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	87	0	18	0	10	0	2030	259	0	3557	0
Future Volume (vph)	75	87	0	18	0	10	0	2030	259	0	3557	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.983				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1881	0	1805	0	1615	0	4922	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1881	0	1805	0	1615	0	4922	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						132		56				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	7%	1%	0%	4%	0%
Adj. Flow (vph)	77	90	0	19	0	10	0	2093	267	0	3667	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	90	0	19	0	10	0	2360	0	0	3667	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



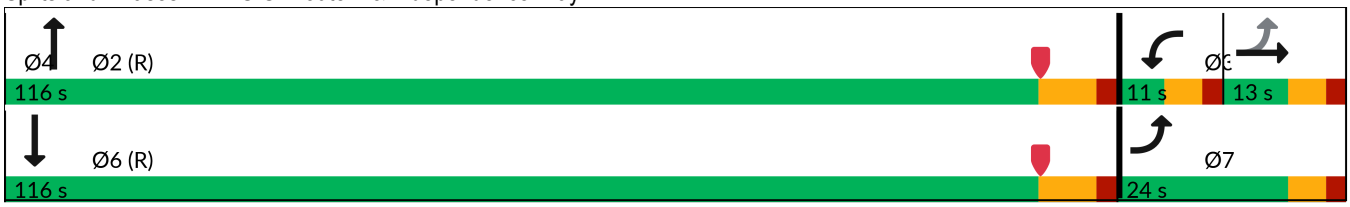
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	24.0	13.0		11.0				116.0			116.0	
Total Split (%)	17.1%	9.3%		7.9%				82.9%			82.9%	
Maximum Green (s)	18.0	7.0		5.0				108.0			108.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	15.2	8.6		5.0		140.0		113.8			113.8	
Actuated g/C Ratio	0.11	0.06		0.04		1.00		0.81			0.81	
v/c Ratio	0.20	0.78		0.30		0.01		0.59			0.88	
Control Delay (s/veh)	47.2	75.4		77.8		0.0		5.5			4.8	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	47.2	75.4		77.8		0.0		5.5			4.8	
LOS	D	E		E		A		A			A	
Approach Delay (s/veh)		62.4			51.0			5.5			4.8	
Approach LOS		E			D			A			A	
90th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	18.0	7.0		5.0				108.0			108.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	12.0	12.0		0.0				114.0			114.0	
30th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
10th %ile Green (s)	9.9	9.9		0.0				116.1			116.1	
10th %ile Term Code	Hold	Gap		Skip				Coord			Coord	
Stops (vph)	68	72		19		0		739			668	
Fuel Used(gal)	1	2		1		0		32			29	
CO Emissions (g/hr)	101	149		37		4		2205			1997	
NOx Emissions (g/hr)	20	29		7		1		429			388	
VOC Emissions (g/hr)	23	34		9		1		511			463	
Dilemma Vehicles (#)	0	2		0		0		82			70	
Queue Length 50th (ft)	34	86		17		0		257			179	
Queue Length 95th (ft)	m36	m#95		46		0		286			m180	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	450	115		64		1615		4012			4161	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.17	0.78		0.30		0.01		0.59			0.88	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 6.8		Intersection LOS: A	
Intersection Capacity Utilization 84.9%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	233	934	0	0	815	198	0	0	557	0	0	0
Future Volume (vph)	233	934	0	0	815	198	0	0	557	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3400	3574	0	0	3574	1615	0	0	1627	0	0	0
Flt Permitted	0.233											
Satd. Flow (perm)	834	3574	0	0	3574	1615	0	0	1627	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						211			461			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	3%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	248	994	0	0	867	211	0	0	593	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	248	994	0	0	867	211	0	0	593	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	



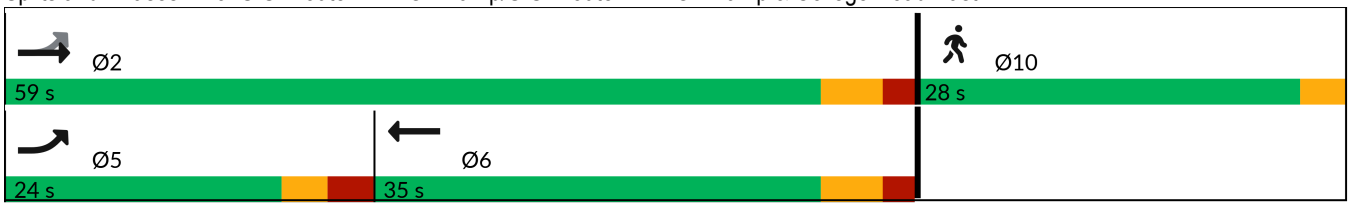
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.4	36.4			17.0	36.4			36.4			
Actuated g/C Ratio	0.84	1.00			0.47	1.00			1.00			
v/c Ratio	0.20	0.28			0.52	0.13			0.36			
Control Delay (s/veh)	0.9	0.2			8.3	0.2			0.6			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.9	0.2			8.3	0.2			0.6			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.3			6.7			0.6				
Approach LOS		A			A			A				
90th %ile Green (s)	8.5	31.5			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.5	30.5			17.0							
70th %ile Term Code	Gap	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	23	0			508	0			0			
Fuel Used(gal)	1	2			28	5			5			
CO Emissions (g/hr)	59	163			1990	376			359			
NOx Emissions (g/hr)	11	32			387	73			70			
VOC Emissions (g/hr)	14	38			461	87			83			
Dilemma Vehicles (#)	0	0			85	0			0			
Queue Length 50th (ft)	0	0			54	0			0			
Queue Length 95th (ft)	0	0			95	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	1966	3574			2848	1615			1627			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.13	0.28			0.30	0.13			0.36			

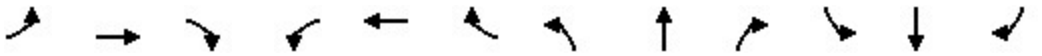
Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 2.8		Intersection LOS: A	
Intersection Capacity Utilization 50.1%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 37.5			
70th %ile Actuated Cycle: 36.5			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East

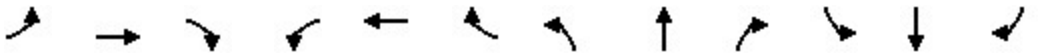


Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	941	16	0	777	0	9	0	70	19	341	0
Future Volume (vph)	0	941	16	0	777	0	9	0	70	19	341	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.998							0.850			
Flt Protected							0.950				0.997	
Satd. Flow (prot)	0	3568	0	0	3574	0	1626	0	1615	0	3565	0
Flt Permitted							0.523				0.997	
Satd. Flow (perm)	0	3568	0	0	3574	0	895	0	1615	0	3565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							75			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	11%	0%	0%	0%	1%	0%
Adj. Flow (vph)	0	1012	17	0	835	0	10	0	75	20	367	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1029	0	0	835	0	10	0	75	0	387	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

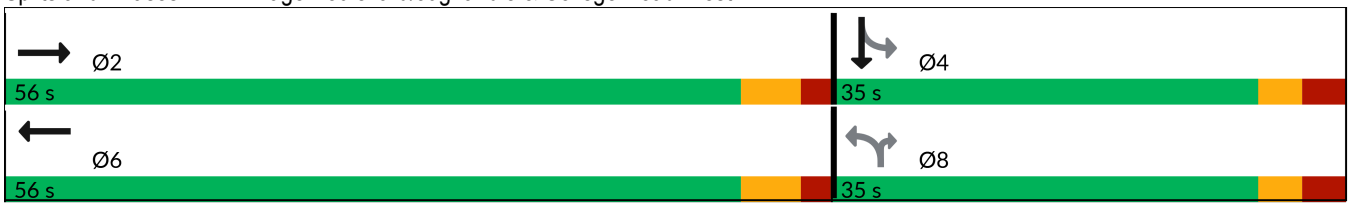


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		18.2			18.2		9.4		9.4		9.4	
Actuated g/C Ratio		0.46			0.46		0.24		0.24		0.24	
v/c Ratio		0.63			0.51		0.05		0.17		0.46	
Control Delay (s/veh)		10.4			9.1		13.7		5.6		15.6	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		10.4			9.1		13.7		5.6		15.6	
LOS		B			A		B		A		B	
Approach Delay (s/veh)		10.4			9.1			6.6			15.6	
Approach LOS		B			A			A			B	
90th %ile Green (s)		24.7			24.7		12.9		12.9	12.9	12.9	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		19.6			19.6		10.4		10.4	10.4	10.4	
70th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
50th %ile Green (s)		17.3			17.3		9.1		9.1	9.1	9.1	
50th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
30th %ile Green (s)		15.0			15.0		7.9		7.9	7.9	7.9	
30th %ile Term Code		Min			Min		Hold		Hold	Gap	Gap	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
Stops (vph)		638			480		10		19		286	
Fuel Used(gal)		11			8		0		0		3	
CO Emissions (g/hr)		738			526		8		32		230	
NOx Emissions (g/hr)		144			102		2		6		45	
VOC Emissions (g/hr)		171			122		2		7		53	
Dilemma Vehicles (#)		90			73		0		0		0	
Queue Length 50th (ft)		79			60		2		0		37	
Queue Length 95th (ft)		146			112		11		23		84	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3568			3574		664		1219		2648	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

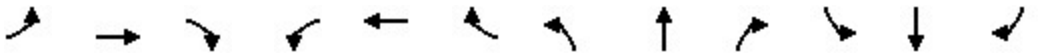
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.29			0.23		0.02		0.06		0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 39.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 10.6		Intersection LOS: B	
Intersection Capacity Utilization 57.3%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 49.6			
70th %ile Actuated Cycle: 42			
50th %ile Actuated Cycle: 38.4			
30th %ile Actuated Cycle: 34.9			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	611	280	351	511	268	47	17	99	253	11	14
Future Volume (vph)	37	611	280	351	511	268	47	17	99	253	11	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.953				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3440	0	1787	3574	1615	3502	1900	1455	3502	1900	1615
Flt Permitted	0.454			0.179			0.950			0.950		
Satd. Flow (perm)	863	3440	0	337	3574	1615	3502	1900	1455	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		83				279			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	11%	0%	0%	0%
Adj. Flow (vph)	39	636	292	366	532	279	49	18	103	264	11	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	928	0	366	532	279	49	18	103	264	11	15
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

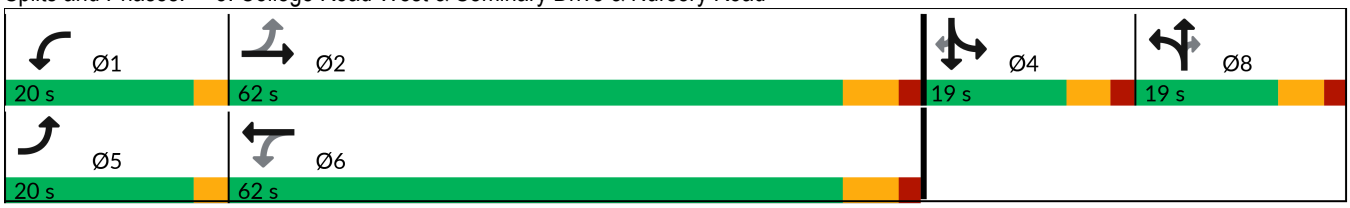


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	41.3	31.8		52.9	44.0	81.9	6.1	6.1	6.1	10.5	10.5	10.5
Actuated g/C Ratio	0.50	0.39		0.65	0.54	1.00	0.07	0.07	0.07	0.13	0.13	0.13
v/c Ratio	0.08	0.67		0.79	0.28	0.17	0.19	0.13	0.48	0.59	0.05	0.05
Control Delay (s/veh)	8.0	23.1		25.8	12.7	0.2	40.7	41.4	14.3	41.1	35.2	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.0	23.1		25.8	12.7	0.2	40.7	41.4	14.3	41.1	35.2	0.3
LOS	A	C		C	B	A	D	D	B	D	D	A
Approach Delay (s/veh)		22.5			13.8			24.8			38.7	
Approach LOS		C			B			C			D	
90th %ile Green (s)	6.3	36.8		17.0	47.5		8.5	8.5	8.5	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Max	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.7	30.0		16.9	41.2		6.2	6.2	6.2	12.3	12.3	12.3
70th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.2	30.0		14.3	39.1		5.6	5.6	5.6	10.7	10.7	10.7
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		12.3	45.3		5.1	5.1	5.1	9.3	9.3	9.3
30th %ile Term Code	Skip	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		9.8	42.8		0.0	0.0	0.0	7.6	7.6	7.6
10th %ile Term Code	Skip	Min		Gap	Hold		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	18	649		171	265	0	43	18	14	226	12	0
Fuel Used(gal)	0	15		5	6	1	1	0	1	5	0	0
CO Emissions (g/hr)	30	1059		334	402	68	76	29	71	360	16	5
NOx Emissions (g/hr)	6	206		65	78	13	15	6	14	70	3	1
VOC Emissions (g/hr)	7	245		77	93	16	18	7	16	84	4	1
Dilemma Vehicles (#)	0	41		0	23	0	0	1	0	0	0	0
Queue Length 50th (ft)	7	194		88	85	0	12	9	0	67	5	0
Queue Length 95th (ft)	20	299		#237	133	0	32	32	40	121	22	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	744	2383		524	2449	1615	567	307	334	567	307	360
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.05	0.39		0.70	0.22	0.17	0.09	0.06	0.31	0.47	0.04	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 81.9			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 20.5		Intersection LOS: C	
Intersection Capacity Utilization 73.3%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 97.3			
70th %ile Actuated Cycle: 87.4			
50th %ile Actuated Cycle: 82.6			
30th %ile Actuated Cycle: 78.7			
10th %ile Actuated Cycle: 63.4			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	484	778	347	626	10	401	81	64	0	0	0
Future Volume (vph)	12	484	778	347	626	10	401	81	64	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998			0.984				
Flt Protected		0.999		0.950				0.965				
Satd. Flow (prot)	0	1893	1658	1852	1927	0	0	1798	0	0	0	0
Flt Permitted		0.981		0.355				0.965				
Satd. Flow (perm)	0	1859	1658	692	1927	0	0	1798	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			846		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	13	526	846	377	680	11	436	88	70	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	539	846	377	691	0	0	594	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

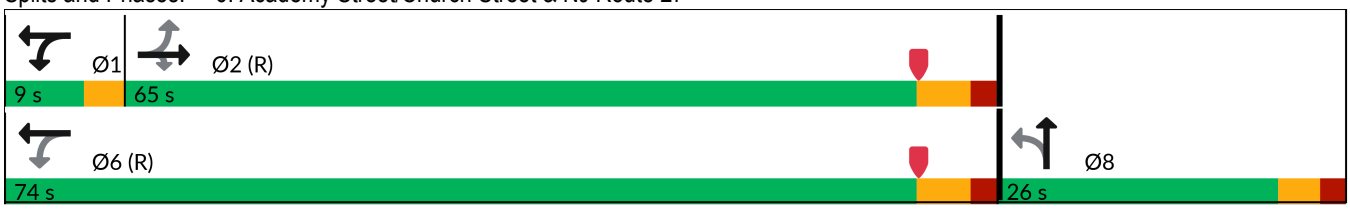
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.0	71.0			21.0				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.49	0.64	0.67	0.51			1.58				
Control Delay (s/veh)		13.8	3.2	6.5	4.7			301.3				
Queue Delay		0.0	0.0	0.0	0.5			0.0				
Total Delay (s/veh)		13.8	3.2	6.5	5.2			301.3				
LOS		B	A	A	A			F				
Approach Delay (s/veh)		7.3			5.7			301.3				
Approach LOS		A			A			F				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		274	42	80	186			403				
Fuel Used(gal)		5	4	3	5			60				
CO Emissions (g/hr)		368	257	175	316			4172				
NOx Emissions (g/hr)		72	50	34	61			812				
VOC Emissions (g/hr)		85	60	41	73			967				
Dilemma Vehicles (#)		25	0	0	0			0				
Queue Length 50th (ft)		185	0	45	104			~541				
Queue Length 95th (ft)		268	47	m65	m141			#751				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1096	1325	560	1368			377				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	68.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	285			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.49	0.64	0.67	0.64			1.58				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.58			
Intersection Signal Delay (s/veh): 64.0		Intersection LOS: E	
Intersection Capacity Utilization 124.7%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	469	48	95	687	19	67	270	49	54	292	231
Future Volume (vph)	28	469	48	95	687	19	67	270	49	54	292	231
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.997			0.983			0.946	
Flt Protected		0.997			0.994			0.991			0.995	
Satd. Flow (prot)	0	2122	0	0	2145	0	0	1790	0	0	1754	0
Flt Permitted		0.937			0.871			0.588			0.869	
Satd. Flow (perm)	0	1994	0	0	1880	0	0	1062	0	0	1532	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	3%	0%	2%	2%	6%	5%	2%	9%	6%	2%	1%
Adj. Flow (vph)	29	489	50	99	716	20	70	281	51	56	304	241
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	568	0	0	835	0	0	402	0	0	601	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.47			0.74			1.31			1.35	
Control Delay (s/veh)		7.5			19.5			192.5			204.4	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		7.6			19.5			192.5			204.4	
LOS		A			B			F			F	
Approach Delay (s/veh)		7.6			19.5			192.5			204.4	
Approach LOS		A			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		140			562			297			447	
Fuel Used(gal)		4			15			36			31	
CO Emissions (g/hr)		287			1073			2518			2192	
NOx Emissions (g/hr)		56			209			490			426	
VOC Emissions (g/hr)		66			249			583			508	
Dilemma Vehicles (#)		0			40			0			21	
Queue Length 50th (ft)		98			355			~331			~505	
Queue Length 95th (ft)		m122			513			#515			#716	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1196			1128			307			444	
Starvation Cap Reductn		71			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.50			0.74			1.31			1.35	

Intersection Summary

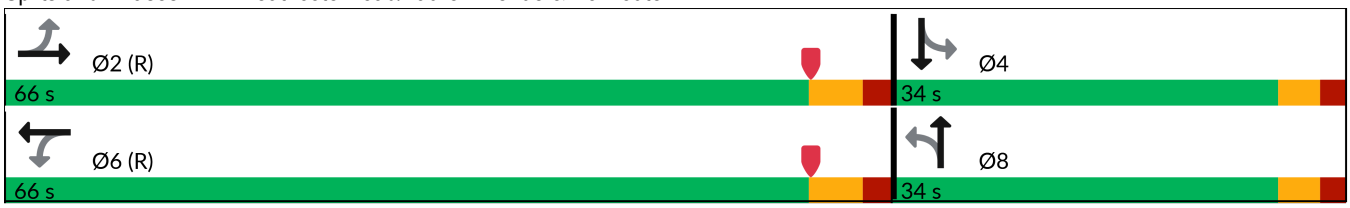
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.35		
Intersection Signal Delay (s/veh): 91.8	Intersection LOS: F	
Intersection Capacity Utilization 116.2%	ICU Level of Service H	
Analysis Period (min) 15		

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



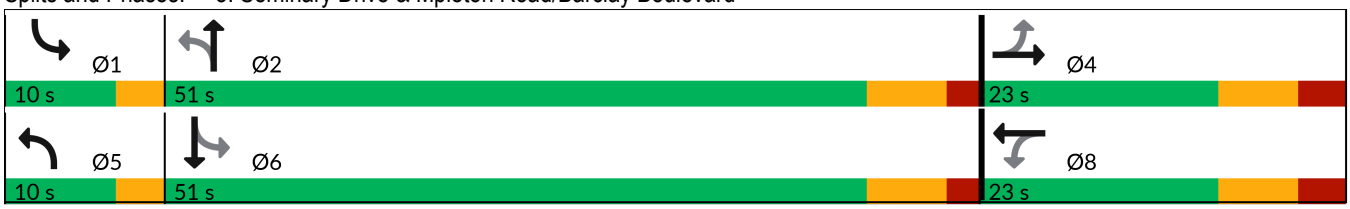
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	7	32	47	29	11	41	509	12	5	893	212
Future Volume (vph)	53	7	32	47	29	11	41	509	12	5	893	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.983			0.997			0.971	
Flt Protected		0.972			0.974		0.950			0.950		
Satd. Flow (prot)	0	1742	0	0	1798	0	1805	1876	0	1805	1845	0
Flt Permitted		0.770			0.777		0.082			0.427		
Satd. Flow (perm)	0	1380	0	0	1435	0	156	1876	0	811	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			8			2			21	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	0%	0%	0%	0%	9%	0%	1%	0%	0%	0%	0%
Adj. Flow (vph)	57	8	34	51	31	12	44	547	13	5	960	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	94	0	44	560	0	5	1188	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		9.4			9.4		53.7	50.5		52.2	47.3	
Actuated g/C Ratio		0.13			0.13		0.76	0.71		0.74	0.67	
v/c Ratio		0.48			0.47		0.18	0.42		0.01	0.96	
Control Delay (s/veh)		31.9			37.1		5.0	8.2		3.6	36.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		31.9			37.1		5.0	8.2		3.6	36.6	
LOS		C			D		A	A		A	D	
Approach Delay (s/veh)		31.9			37.1			8.0			36.4	
Approach LOS		C			D			A			D	
90th %ile Green (s)	13.8	13.8		13.8	13.8		6.0	45.0		5.0	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Min	Max	
70th %ile Green (s)	10.8	10.8		10.8	10.8		5.6	52.6		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Skip	Max	
50th %ile Green (s)	8.9	8.9		8.9	8.9		5.2	52.2		0.0	44.0	
50th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Skip	Max	
30th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Min	Min		Min	Min		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		62			69		11	226		2	670	
Fuel Used(gal)		2			1		1	8		0	57	
CO Emissions (g/hr)		132			77		36	538		15	3985	
NOx Emissions (g/hr)		26			15		7	105		3	775	
VOC Emissions (g/hr)		31			18		8	125		3	924	
Dilemma Vehicles (#)		5			0		0	25		0	53	
Queue Length 50th (ft)		32			39		4	99		1	~650	
Queue Length 95th (ft)		78			84		14	258		3	#986	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		322			320		287	1341		712	1241	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31			0.29		0.15	0.42		0.01	0.96	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 70.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 79.0%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 81.8			
70th %ile Actuated Cycle: 78.4			
50th %ile Actuated Cycle: 76.1			
30th %ile Actuated Cycle: 66			
10th %ile Actuated Cycle: 51			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



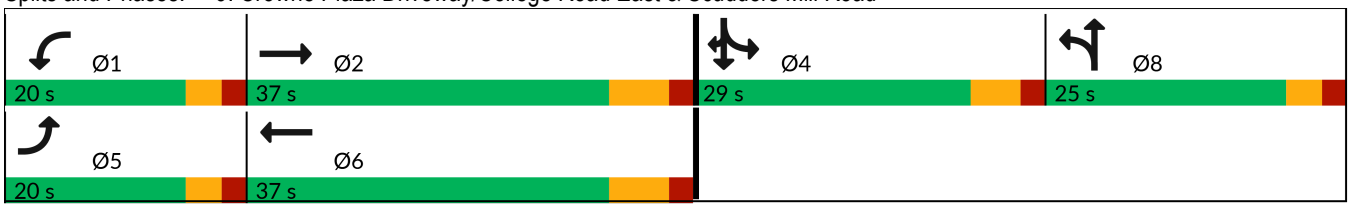
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	586	86	76	1456	1021	20	13	19	254	46	128
Future Volume (vph)	136	586	86	76	1456	1021	20	13	19	254	46	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		2	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.951				0.850
Flt Protected	0.950			0.950				0.981		0.950	0.967	
Satd. Flow (prot)	1787	3438	1509	1805	4940	1583	0	1715	0	1618	1676	1583
Flt Permitted	0.950			0.950				0.981		0.950	0.967	
Satd. Flow (perm)	1787	3438	1509	1805	4940	1583	0	1715	0	1618	1676	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			733		21				144
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	5%	7%	0%	5%	2%	0%	13%	0%	6%	0%	2%
Adj. Flow (vph)	153	658	97	85	1636	1147	22	15	21	285	52	144
Shared Lane Traffic (%)										41%		
Lane Group Flow (vph)	153	658	97	85	1636	1147	0	58	0	168	169	144
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Free	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

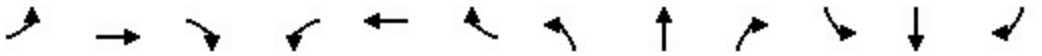
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			Free						
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0		11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0		25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%		22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0		20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0			5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Act Effct Green (s)	11.2	36.2	83.0	8.7	30.8	83.0		7.2		13.3	13.3	13.3
Actuated g/C Ratio	0.13	0.44	1.00	0.10	0.37	1.00		0.09		0.16	0.16	0.16
v/c Ratio	0.64	0.44	0.06	0.45	0.89	0.72		0.35		0.65	0.63	0.39
Control Delay (s/veh)	48.8	21.3	0.1	45.8	35.1	2.9		34.1		46.5	45.1	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	48.8	21.3	0.1	45.8	35.1	2.9		34.1		46.5	45.1	9.2
LOS	D	C	A	D	D	A		C		D	D	A
Approach Delay (s/veh)		23.7			22.5			34.1			34.8	
Approach LOS		C			C			C			C	
90th %ile Green (s)	15.0	32.3		12.7	30.0		9.9	9.9		21.1	21.1	21.1
90th %ile Term Code	Max	Hold		Gap	Max		Gap	Gap		Gap	Gap	Gap
70th %ile Green (s)	14.1	34.0		10.1	30.0		7.7	7.7		16.0	16.0	16.0
70th %ile Term Code	Gap	Hold		Gap	Max		Gap	Gap		Gap	Gap	Gap
50th %ile Green (s)	11.7	33.2		8.5	30.0		6.3	6.3		13.2	13.2	13.2
50th %ile Term Code	Gap	Hold		Gap	Max		Gap	Gap		Gap	Gap	Gap
30th %ile Green (s)	9.6	32.6		7.0	30.0		6.0	6.0		10.8	10.8	10.8
30th %ile Term Code	Gap	Hold		Gap	Max		Min	Min		Gap	Gap	Gap
10th %ile Green (s)	6.6	41.6		0.0	30.0		0.0	0.0		7.2	7.2	7.2
10th %ile Term Code	Gap	Hold		Skip	Max		Skip	Skip		Gap	Gap	Gap
Stops (vph)	122	403	0	66	1163	2		34		131	130	20
Fuel Used(gal)	5	15	1	3	47	14		1		8	8	5
CO Emissions (g/hr)	333	1073	68	188	3265	949		55		593	589	375
NOx Emissions (g/hr)	65	209	13	37	635	185		11		115	115	73
VOC Emissions (g/hr)	77	249	16	43	757	220		13		137	137	87
Dilemma Vehicles (#)	0	28	0	0	82	0		2		0	7	0
Queue Length 50th (ft)	77	133	0	43	300	0		19		89	89	0
Queue Length 95th (ft)	155	236	0	96	#514	0		60		165	165	48
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165		170	75		270				350		
Base Capacity (vph)	331	1498	1509	334	1830	1583		439		459	476	552
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.46	0.44	0.06	0.25	0.89	0.72		0.13		0.37	0.36	0.26

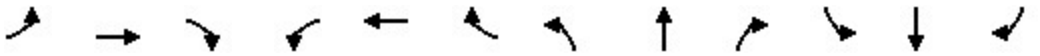
Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 83			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 24.3		Intersection LOS: C	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99			
70th %ile Actuated Cycle: 90.8			
50th %ile Actuated Cycle: 84.2			
30th %ile Actuated Cycle: 79.4			
10th %ile Actuated Cycle: 61.8			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road





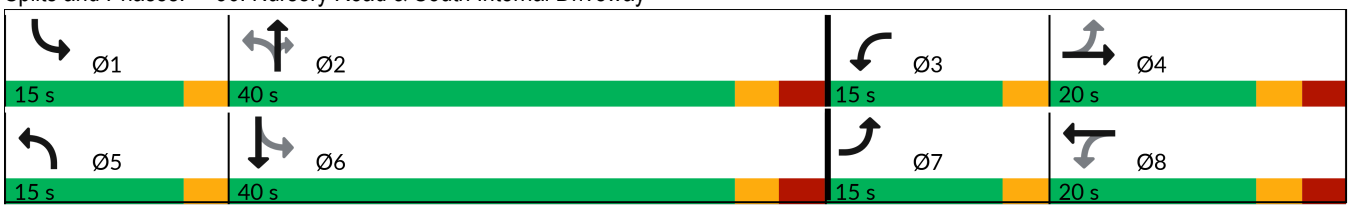
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	5	88	117	13	0	47	61	211	1	72	0
Future Volume (vph)	1	5	88	117	13	0	47	61	211	1	72	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.857							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1628	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted				0.597			0.654			0.714		
Satd. Flow (perm)	1900	1628	0	1134	1900	0	1243	1900	1615	1357	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96							229			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	5	96	127	14	0	51	66	229	1	78	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	101	0	127	14	0	51	66	229	1	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	10.0	6.0		12.5	9.8		19.1	18.5	18.5	18.0	16.9	
Actuated g/C Ratio	0.30	0.18		0.37	0.29		0.57	0.55	0.55	0.54	0.50	
v/c Ratio	0.00	0.27		0.23	0.03		0.06	0.06	0.23	0.00	0.08	
Control Delay (s/veh)	8.0	8.0		8.0	12.1		7.7	12.2	3.7	8.0	14.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	8.0	8.0		8.0	12.1		7.7	12.2	3.7	8.0	14.8	
LOS	A	A		A	B		A	B	A	A	B	
Approach Delay (s/veh)		8.0			8.4			5.9			14.7	
Approach LOS		A			A			A			B	
90th %ile Green (s)	5.0	7.1		8.1	10.2		6.5	9.8	9.8	5.0	8.3	
90th %ile Term Code	Min	Gap		Gap	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.5		6.9	15.4		6.0	15.8	15.8	0.0	6.8	
70th %ile Term Code	Skip	Gap		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		5.6	13.6		0.0	6.1	6.1	0.0	6.1	
50th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	12.5	12.5	0.0	12.5	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	20.0	20.0	0.0	20.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	28		59	12		27	44	36	2	57	
Fuel Used(gal)	0	1		1	0		1	1	2	0	1	
CO Emissions (g/hr)	1	42		73	12		37	56	108	1	63	
NOx Emissions (g/hr)	0	8		14	2		7	11	21	0	12	
VOC Emissions (g/hr)	0	10		17	3		9	13	25	0	15	
Dilemma Vehicles (#)	0	9		0	1		0	5	0	0	6	
Queue Length 50th (ft)	0	1		9	1		6	9	0	0	11	
Queue Length 95th (ft)	2	33		44	14		22	40	43	2	48	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	915	816		837	906		964	1708	1475	986	1708	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.12		0.15	0.02		0.05	0.04	0.16	0.00	0.05	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 33.5		
Natural Cycle: 40		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.27		
Intersection Signal Delay (s/veh): 7.8		Intersection LOS: A
Intersection Capacity Utilization 36.3%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 48		
70th %ile Actuated Cycle: 43.2		
50th %ile Actuated Cycle: 31.7		
30th %ile Actuated Cycle: 18.5		
10th %ile Actuated Cycle: 26		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	33.4

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	150	556	0	596	20	144	735
Future Vol, veh/h	150	556	0	596	20	144	735
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91	91
Heavy Vehicles, %	0	1	0	2	11	1	1
Mvmt Flow	165	611	0	655	22	158	808

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	1386	338	808	0	0	677	0
Stage 1	666	-	-	-	-	-	-
Stage 2	720	-	-	-	-	-	-
Critical Hdwy	6.8	6.92	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.31	2.5	-	-	2.21	-
Pot Cap-1 Maneuver	~ 137	660	448	-	-	917	-
Stage 1	478	-	-	-	-	-	-
Stage 2	448	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 113	660	448	-	-	917	-
Mov Cap-2 Maneuver	~ 113	-	-	-	-	-	-
Stage 1	478	-	-	-	-	-	-
Stage 2	371	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	102.29	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	448	-	-	113	660	917	-
HCM Lane V/C Ratio	-	-	-	1.459	0.925	0.172	-
HCM Ctrl Dly (s/v)	0	-	-	$ 317.7	44.2	9.7	-
HCM Lane LOS	A	-	-	F	E	A	-
HCM 95th %tile Q(veh)	0	-	-	11.7	12.4	0.6	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection												
Int Delay, s/veh	2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	899	9	13	534	23	7	0	6	22	0	46
Future Vol, veh/h	27	899	9	13	534	23	7	0	6	22	0	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	29	977	10	14	580	25	8	0	7	24	0	50

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	605	0	0	987	0	0	1649	1674	982	1645	1654	580
Stage 1	-	-	-	-	-	-	1041	1041	-	609	609	-
Stage 2	-	-	-	-	-	-	609	634	-	1036	1046	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	982	-	-	708	-	-	80	96	305	80	99	518
Stage 1	-	-	-	-	-	-	280	310	-	486	489	-
Stage 2	-	-	-	-	-	-	486	476	-	282	308	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	982	-	-	708	-	-	69	92	305	75	94	518
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	92	-	75	94	-
Stage 1	-	-	-	-	-	-	272	300	-	476	479	-
Stage 2	-	-	-	-	-	-	430	467	-	268	299	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.25	0.23	43.8	32.6
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	107	982	-	-	708	-	-	75	518
HCM Lane V/C Ratio	0.132	0.03	-	-	0.02	-	-	0.319	0.097
HCM Ctrl Dly (s/v)	43.8	8.8	-	-	10.2	-	-	74.2	12.7
HCM Lane LOS	E	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	1.2	0.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	20	20	0	0	19	23	19	1	31	0
Future Vol, veh/h	0	0	20	20	0	0	19	23	19	1	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	22	22	0	0	21	25	21	1	34	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	102	123	34	112	112	35	34	0	0	46	0	0
Stage 1	36	36	-	77	77	-	-	-	-	-	-	-
Stage 2	66	87	-	36	36	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	883	771	1045	870	781	1043	1591	-	-	1575	-	-
Stage 1	985	869	-	937	835	-	-	-	-	-	-	-
Stage 2	949	827	-	985	869	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	871	760	1045	840	770	1043	1591	-	-	1575	-	-
Mov Cap-2 Maneuver	871	760	-	840	770	-	-	-	-	-	-	-
Stage 1	984	868	-	925	824	-	-	-	-	-	-	-
Stage 2	937	816	-	964	868	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.52	9.4	2.27	0.23
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	514	-	-	1045	840	56	-	-
HCM Lane V/C Ratio	0.013	-	-	0.021	0.026	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	9.4	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	2.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	17	17	26	0
Demand Flow Rate, veh/h	17	17	26	0
Vehicles Circulating, veh/h	17	13	0	30
Vehicles Exiting, veh/h	13	13	34	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.7	2.8	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	17	17	26	0
Cap Entry Lane, veh/h	1356	1362	1380	1338
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	17	17	26	0
Cap Entry, veh/h	1356	1362	1380	1338
V/C Ratio	0.013	0.012	0.019	0.000
Control Delay, s/veh	2.8	2.7	2.8	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

PM BUILD WITH BUILDINGS E1 & E2

WITH IMPROVEMENTS

PRE-COVID CONDITION

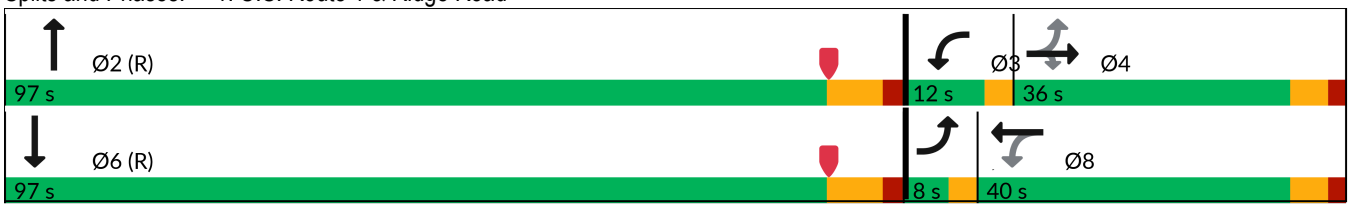
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	350	77	155	292	84	0	3065	0	0	1989	0
Future Volume (vph)	119	350	77	155	292	84	0	3065	0	0	1989	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850		0.966							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1787	1881	1615	1805	1795	0	0	5219	0	0	5119	0
Flt Permitted	0.150			0.123								
Satd. Flow (perm)	282	1881	1615	234	1795	0	0	5219	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83		6							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		157			159			333			343	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	2%	3%	0%	2%	0%	0%	4%	0%
Adj. Flow (vph)	124	365	80	161	304	88	0	3193	0	0	2072	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	365	80	161	392	0	0	3193	0	0	2072	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

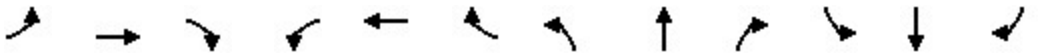
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	36.0	36.0	12.0	40.0			97.0			97.0	
Total Split (%)	5.5%	24.8%	24.8%	8.3%	27.6%			66.9%			66.9%	
Maximum Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	37.4	29.4	29.4	44.4	33.4			92.6			92.6	
Actuated g/C Ratio	0.26	0.20	0.20	0.31	0.23			0.64			0.64	
v/c Ratio	1.00	0.96	0.20	0.95	0.94			0.96			0.63	
Control Delay (s/veh)	125.7	93.5	9.3	99.0	84.8			18.2			17.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	125.7	93.5	9.3	99.0	84.8			18.2			17.1	
LOS	F	F	A	F	F			B			B	
Approach Delay (s/veh)		88.7			89.0			18.2			17.1	
Approach LOS		F			F			B			B	
90th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
70th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
50th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
30th %ile Green (s)	5.0	30.0	30.0	9.0	34.0			89.0			89.0	
30th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
10th %ile Green (s)	5.0	26.9	26.9	9.0	30.9			92.1			92.1	
10th %ile Term Code	Max	Gap	Gap	Max	Hold			Coord			Coord	
Stops (vph)	90	316	11	103	336			2391			1156	
Fuel Used(gal)	4	10	0	5	12			62			33	
CO Emissions (g/hr)	284	709	24	340	841			4349			2287	
NOx Emissions (g/hr)	55	138	5	66	164			846			445	
VOC Emissions (g/hr)	66	164	5	79	195			1008			530	
Dilemma Vehicles (#)	0	11	0	0	12			102			68	
Queue Length 50th (ft)	87	345	0	115	360			591			416	
Queue Length 95th (ft)	#215	#551	38	#245	#558			767			462	
Internal Link Dist (ft)		77			79			253			263	
Turn Bay Length (ft)												
Base Capacity (vph)	124	389	399	169	425			3333			3269	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	1.00	0.94	0.20	0.95	0.92			0.96			0.63	

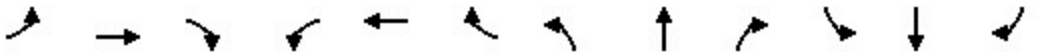
Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 16 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 30.2		Intersection LOS: C	
Intersection Capacity Utilization 97.3%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	17	0	182	0	59	0	3290	32	0	2146	0
Future Volume (vph)	27	17	0	182	0	59	0	3290	32	0	2146	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850		0.999				
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5210	0	0	5119	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5210	0	0	5119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						128		2				
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		399			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	11%	0%	4%	0%
Adj. Flow (vph)	29	18	0	196	0	63	0	3538	34	0	2308	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	18	0	196	0	63	0	3572	0	0	2308	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	34.0	13.0		21.0				111.0			111.0	
Total Split (%)	23.4%	9.0%		14.5%				76.6%			76.6%	
Maximum Green (s)	28.0	7.0		15.0				103.0			103.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	18.8	7.0		18.5		145.0		107.7			107.7	
Actuated g/C Ratio	0.13	0.05		0.13		1.00		0.74			0.74	
v/c Ratio	0.06	0.20		0.86		0.04		0.92			0.61	
Control Delay (s/veh)	39.1	60.4		92.8		0.1		20.9			8.1	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	39.1	60.4		92.8		0.1		20.9			8.1	
LOS	D	E		F		A		C			A	
Approach Delay (s/veh)		47.2			70.2			20.9			8.1	
Approach LOS		D			E			C			A	
90th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
90th %ile Term Code	Hold	Max		Max				Coord			Coord	
70th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
70th %ile Term Code	Hold	Max		Max				Coord			Coord	
50th %ile Green (s)	28.0	7.0		15.0				103.0			103.0	
50th %ile Term Code	Hold	Max		Max				Coord			Coord	
30th %ile Green (s)	0.0	0.0		23.7				107.3			107.3	
30th %ile Term Code	Skip	Skip		Max				Coord			Coord	
10th %ile Green (s)	0.0	0.0		23.6				107.4			107.4	
10th %ile Term Code	Skip	Skip		Gap				Coord			Coord	
Stops (vph)	22	18		146		0		2531			732	
Fuel Used(gal)	0	0		6		0		83			25	
CO Emissions (g/hr)	32	28		387		23		5823			1732	
NOx Emissions (g/hr)	6	5		75		4		1133			337	
VOC Emissions (g/hr)	7	6		90		5		1350			401	
Dilemma Vehicles (#)	0	1		0		0		114			72	
Queue Length 50th (ft)	11	17		~201		0		955			272	
Queue Length 95th (ft)	m17	m29		#366		0		1030			m287	
Internal Link Dist (ft)		319			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	676	91		229		1615		3871			3803	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.04	0.20		0.86		0.04		0.92			0.61	

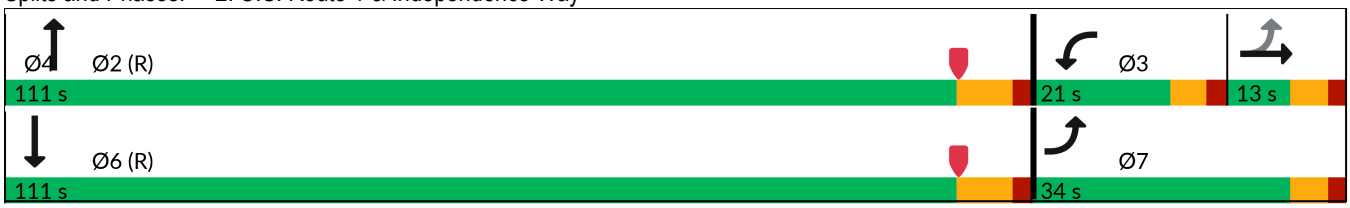
Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 18.4		Intersection LOS: B	
Intersection Capacity Utilization 86.9%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	392	445	0	0	1062	448	0	0	316	0	0	0
Future Volume (vph)	392	445	0	0	1062	448	0	0	316	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3467	3574	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.146											
Satd. Flow (perm)	533	3574	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						365			625			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			558			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	440	500	0	0	1193	503	0	0	355	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	440	500	0	0	1193	503	0	0	355	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

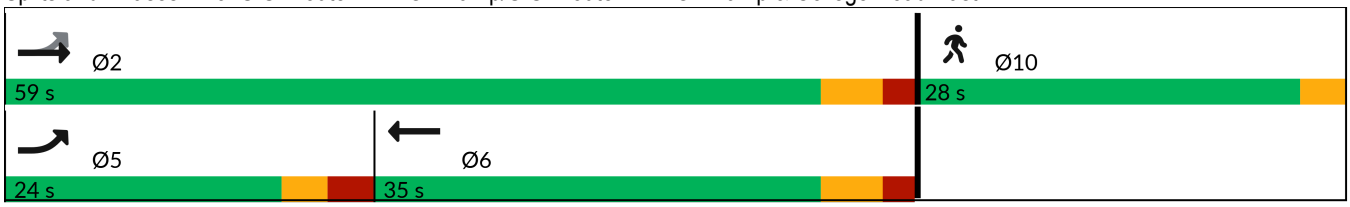
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	39.7	45.8			24.1	45.8			45.8			
Actuated g/C Ratio	0.87	1.00			0.53	1.00			1.00			
v/c Ratio	0.41	0.14			0.63	0.31			0.22			
Control Delay (s/veh)	2.6	0.1			9.7	0.5			0.3			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	2.6	0.1			9.7	0.5			0.3			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		1.2			7.0			0.3				
Approach LOS		A			A			A				
90th %ile Green (s)	13.0	47.4			28.4							
90th %ile Term Code	Gap	Hold			Gap							
70th %ile Green (s)	10.8	41.7			24.9							
70th %ile Term Code	Gap	Hold			Gap							
50th %ile Green (s)	9.4	39.4			24.0							
50th %ile Term Code	Gap	Hold			Gap							
30th %ile Green (s)	8.3	36.9			22.6							
30th %ile Term Code	Gap	Hold			Gap							
10th %ile Green (s)	7.1	33.8			20.7							
10th %ile Term Code	Gap	Hold			Gap							
Stops (vph)	49	0			667	0			0			
Fuel Used(gal)	2	1			37	12			3			
CO Emissions (g/hr)	115	77			2619	853			202			
NOx Emissions (g/hr)	22	15			510	166			39			
VOC Emissions (g/hr)	27	18			607	198			47			
Dilemma Vehicles (#)	0	0			87	0			0			
Queue Length 50th (ft)	0	0			100	0			0			
Queue Length 95th (ft)	16	0			174	0			0			
Internal Link Dist (ft)		282			478			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	1626	3569			2306	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.27	0.14			0.52	0.31			0.22			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 45.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 4.4		Intersection LOS: A	
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 53.4			
70th %ile Actuated Cycle: 47.7			
50th %ile Actuated Cycle: 45.4			
30th %ile Actuated Cycle: 42.9			
10th %ile Actuated Cycle: 39.8			

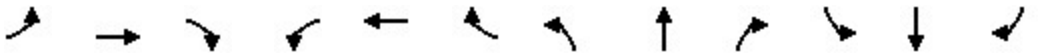
Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	912	18	0	1101	0	25	0	219	11	257	0
Future Volume (vph)	0	912	18	0	1101	0	25	0	219	11	257	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.998	
Satd. Flow (prot)	0	3564	0	0	3610	0	1805	0	1599	0	3569	0
Flt Permitted							0.566				0.998	
Satd. Flow (perm)	0	3564	0	0	3610	0	1075	0	1599	0	3569	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							89			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Adj. Flow (vph)	0	1036	20	0	1251	0	28	0	249	13	292	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1056	0	0	1251	0	28	0	249	0	305	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

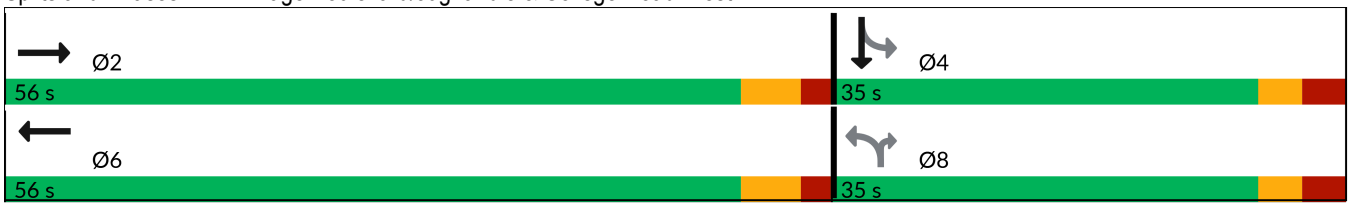


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		22.7			22.7		10.6		10.6		10.6	
Actuated g/C Ratio		0.49			0.49		0.23		0.23		0.23	
v/c Ratio		0.60			0.70		0.11		0.57		0.37	
Control Delay (s/veh)		10.1			11.6		17.3		16.9		17.3	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		10.1			11.6		17.3		16.9		17.3	
LOS		B			B		B		B		B	
Approach Delay (s/veh)		10.1			11.6			17.0			17.3	
Approach LOS		B			B			B			B	
90th %ile Green (s)		34.7			34.7		17.6		17.6	17.6	17.6	
90th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
70th %ile Green (s)		26.5			26.5		12.5		12.5	12.5	12.5	
70th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
50th %ile Green (s)		21.6			21.6		9.8		9.8	9.8	9.8	
50th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
30th %ile Green (s)		17.4			17.4		7.6		7.6	7.6	7.6	
30th %ile Term Code		Hold			Gap		Gap		Gap	Hold	Hold	
10th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
10th %ile Term Code		Min			Min		Min		Min	Min	Min	
Stops (vph)		573			738		21		117		205	
Fuel Used(gal)		10			12		0		2		3	
CO Emissions (g/hr)		680			824		21		157		175	
NOx Emissions (g/hr)		132			160		4		30		34	
VOC Emissions (g/hr)		158			191		5		36		41	
Dilemma Vehicles (#)		77			92		0		0		0	
Queue Length 50th (ft)		86			111		6		34		34	
Queue Length 95th (ft)		172			217		25		108		82	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3392			3435		714		1092		2373	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

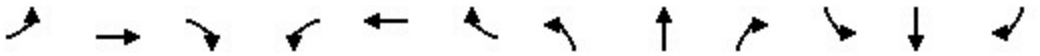
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31			0.36		0.04		0.23		0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 45.9			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 61.8%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 64.3			
70th %ile Actuated Cycle: 51			
50th %ile Actuated Cycle: 43.4			
30th %ile Actuated Cycle: 37			
10th %ile Actuated Cycle: 34			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	228	115	176	782	419	118	21	185	471	30	56
Future Volume (vph)	45	228	115	176	782	419	118	21	185	471	30	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.950				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3407	0	1805	3610	1615	3502	1900	1599	3502	1900	1615
Flt Permitted	0.258			0.498			0.950			0.950		
Satd. Flow (perm)	490	3407	0	946	3610	1615	3502	1900	1599	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91				310			201			109
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	49	248	125	191	850	455	128	23	201	512	33	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	373	0	191	850	455	128	23	201	512	33	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

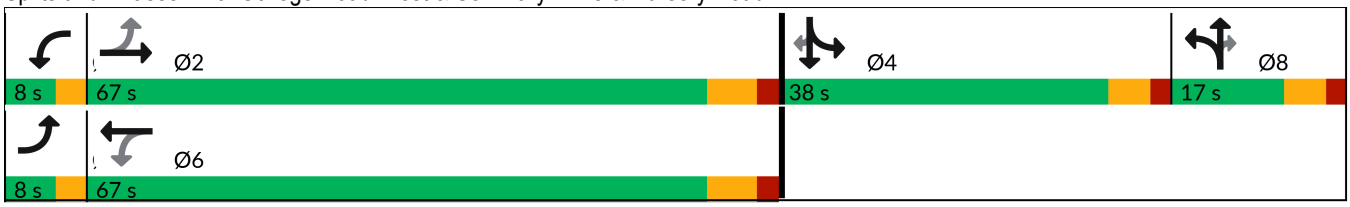


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	40.1	31.0		41.4	34.5	82.9	7.8	7.8	7.8	16.9	16.9	16.9
Actuated g/C Ratio	0.48	0.37		0.50	0.42	1.00	0.09	0.09	0.09	0.20	0.20	0.20
v/c Ratio	0.16	0.28		0.36	0.57	0.28	0.39	0.13	0.61	0.72	0.09	0.15
Control Delay (s/veh)	12.7	14.9		14.8	22.1	0.4	40.1	38.0	14.3	37.2	27.7	1.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	14.9		14.8	22.1	0.4	40.1	38.0	14.3	37.2	27.7	1.9
LOS	B	B		B	C	A	D	D	B	D	C	A
Approach Delay (s/veh)		14.7			14.6			25.3			33.1	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	34.8		5.0	34.8		11.0	11.0	11.0	23.4	23.4	23.4
90th %ile Term Code	Max	Hold		Max	Gap		Max	Max	Max	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		8.6	8.6	8.6	19.5	19.5	19.5
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		7.5	7.5	7.5	16.2	16.2	16.2
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		5.0	38.0		6.7	6.7	6.7	14.4	14.4	14.4
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.6	5.6	5.6	12.0	12.0	12.0
10th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
Stops (vph)	23	172		99	577	0	105	21	29	417	25	2
Fuel Used(gal)	1	4		2	12	2	3	0	2	9	1	0
CO Emissions (g/hr)	40	314		149	839	108	188	35	134	643	36	23
NOx Emissions (g/hr)	8	61		29	163	21	37	7	26	125	7	5
VOC Emissions (g/hr)	9	73		35	194	25	44	8	31	149	8	5
Dilemma Vehicles (#)	0	16		0	35	0	0	1	0	0	1	0
Queue Length 50th (ft)	11	50		48	180	0	31	11	0	125	14	0
Queue Length 95th (ft)	34	97		106	287	0	65	36	64	196	40	8
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	316	2508		524	2631	1615	468	253	387	1361	738	694
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.16	0.15		0.36	0.32	0.28	0.27	0.09	0.52	0.38	0.04	0.09

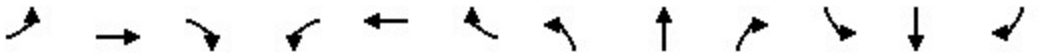
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 82.9			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 19.8		Intersection LOS: B	
Intersection Capacity Utilization 69.0%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 96.2			
70th %ile Actuated Cycle: 85.1			
50th %ile Actuated Cycle: 80.7			
30th %ile Actuated Cycle: 78.1			
10th %ile Actuated Cycle: 74.6			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	689	414	223	562	12	419	276	206	0	0	0
Future Volume (vph)	15	689	414	223	562	12	419	276	206	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.969				
Flt Protected		0.999		0.950				0.977				
Satd. Flow (prot)	0	1929	1658	1834	1940	0	0	1791	0	0	0	0
Flt Permitted		0.983		0.175				0.977				
Satd. Flow (perm)	0	1898	1658	338	1940	0	0	1791	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			431		2							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	1%	0%	9%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	16	718	431	232	585	13	436	288	215	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	734	431	232	598	0	0	939	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6



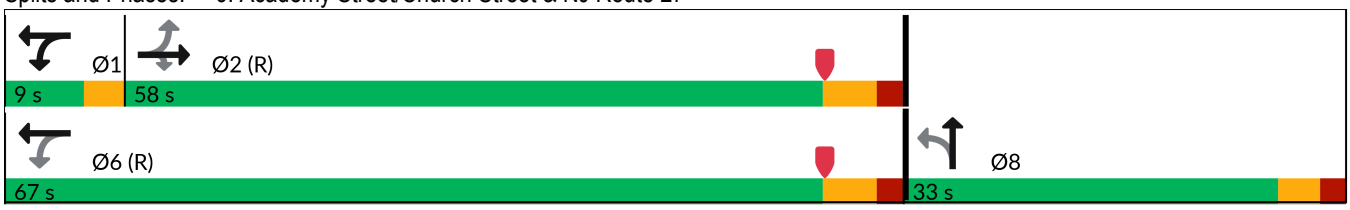
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	52.0	52.0	52.0	6.0			7.0	7.0				
Minimum Split (s)	58.0	58.0	58.0	9.0			12.0	12.0				
Total Split (s)	58.0	58.0	58.0	9.0			33.0	33.0				
Total Split (%)	58.0%	58.0%	58.0%	9.0%			33.0%	33.0%				
Maximum Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	38.0	38.0	38.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		52.0	52.0	64.0	64.0			28.0				
Actuated g/C Ratio		0.52	0.52	0.64	0.64			0.28				
v/c Ratio		0.74	0.40	0.76	0.48			1.87				
Control Delay (s/veh)		24.6	2.5	17.6	6.4			426.1				
Queue Delay		0.0	0.0	0.0	0.4			0.0				
Total Delay (s/veh)		24.6	2.5	17.6	6.9			426.1				
LOS		C	A	B	A			F				
Approach Delay (s/veh)		16.4			9.9			426.1				
Approach LOS		B			A			F				
90th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	52.0	52.0	52.0	6.0			28.0	28.0				
10th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
Stops (vph)		542	24	79	191			627				
Fuel Used(gal)		10	2	2	4			121				
CO Emissions (g/hr)		713	133	155	305			8470				
NOx Emissions (g/hr)		139	26	30	59			1648				
VOC Emissions (g/hr)		165	31	36	71			1963				
Dilemma Vehicles (#)		35	0	0	0			0				
Queue Length 50th (ft)		349	0	36	117			~918				
Queue Length 95th (ft)		500	45	m61	m143			#1156				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		986	1069	306	1242			501				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	52.0
Minimum Split (s)	58.0
Total Split (s)	67.0
Total Split (%)	67%
Maximum Green (s)	61.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	38.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	61.0
90th %ile Term Code	Coord
70th %ile Green (s)	61.0
70th %ile Term Code	Coord
50th %ile Green (s)	61.0
50th %ile Term Code	Coord
30th %ile Green (s)	61.0
30th %ile Term Code	Coord
10th %ile Green (s)	61.0
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	247			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.74	0.40	0.76	0.60			1.87				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.87			
Intersection Signal Delay (s/veh): 145.7		Intersection LOS: F	
Intersection Capacity Utilization 135.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	825	16	86	582	63	49	290	93	79	325	170
Future Volume (vph)	49	825	16	86	582	63	49	290	93	79	325	170
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.988			0.971			0.960	
Flt Protected		0.997			0.994			0.994			0.993	
Satd. Flow (prot)	0	2170	0	0	2163	0	0	1834	0	0	1778	0
Flt Permitted		0.928			0.800			0.758			0.733	
Satd. Flow (perm)	0	2020	0	0	1741	0	0	1398	0	0	1313	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1372			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	7%	1%	0%	0%	0%	4%	0%	0%	0%	3%	2%	1%
Adj. Flow (vph)	50	842	16	88	594	64	50	296	95	81	332	173
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	908	0	0	746	0	0	441	0	0	586	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.0			60.0			29.0			29.0	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.75			0.71			1.09			1.54	
Control Delay (s/veh)		9.5			18.9			106.2			285.3	
Queue Delay		0.4			0.0			0.0			0.0	
Total Delay (s/veh)		9.9			18.9			106.2			285.3	
LOS		A			B			F			F	
Approach Delay (s/veh)		9.9			18.9			106.2			285.3	
Approach LOS		A			B			F			F	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
10th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Max	Max	
Stops (vph)		354			499			358			425	
Fuel Used(gal)		8			14			33			41	
CO Emissions (g/hr)		528			965			2297			2831	
NOx Emissions (g/hr)		103			188			447			551	
VOC Emissions (g/hr)		122			224			532			656	
Dilemma Vehicles (#)		0			37			0			19	
Queue Length 50th (ft)		223			309			~318			~528	
Queue Length 95th (ft)		m291			455			#507			#737	
Internal Link Dist (ft)		509			1292			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1212			1044			405			380	
Starvation Cap Reductn		55			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.78			0.71			1.09			1.54	

Intersection Summary

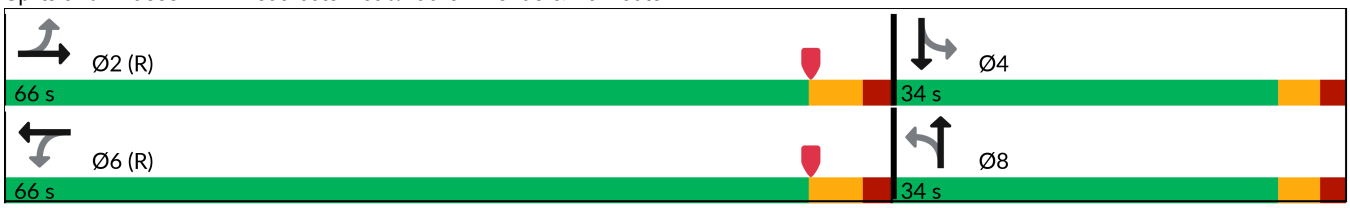
Area Type:	Other	
Cycle Length: 100		
Actuated Cycle Length: 100		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.54		
Intersection Signal Delay (s/veh): 88.4	Intersection LOS: F	
Intersection Capacity Utilization 116.5%	ICU Level of Service H	
Analysis Period (min) 15		

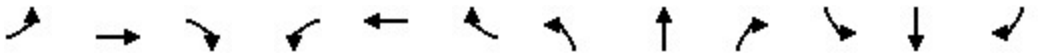
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

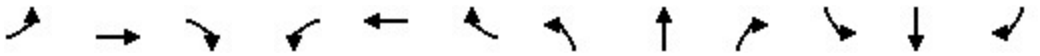
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	0	20	29	7	6	40	882	60	22	393	148
Future Volume (vph)	41	0	20	29	7	6	40	882	60	22	393	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.981			0.990			0.959	
Flt Protected		0.968			0.966		0.950			0.950		
Satd. Flow (prot)	0	1756	0	0	1705	0	1805	1864	0	1805	1799	0
Flt Permitted		0.775			0.790		0.406			0.174		
Satd. Flow (perm)	0	1406	0	0	1395	0	771	1864	0	331	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			6			6			34	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			416			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	8%	0%	0%	0%	1%	0%	0%	1%	2%
Adj. Flow (vph)	42	0	21	30	7	6	41	909	62	23	405	153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	43	0	41	971	0	23	558	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

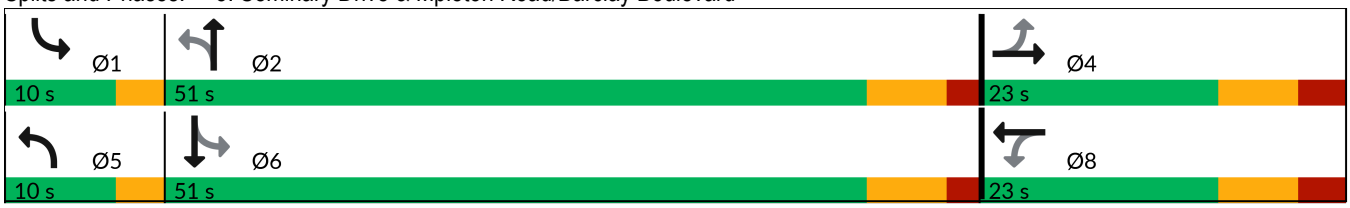


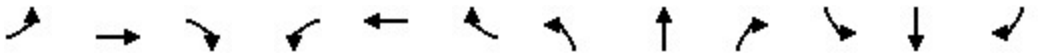
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		7.9			7.9		53.2	50.8		52.5	49.3	
Actuated g/C Ratio		0.12			0.12		0.81	0.77		0.80	0.75	
v/c Ratio		0.25			0.25		0.06	0.67		0.06	0.41	
Control Delay (s/veh)		6.5			31.1		2.7	13.1		3.0	8.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		6.5			31.1		2.7	13.1		3.0	8.1	
LOS		A			C		A	B		A	A	
Approach Delay (s/veh)		6.5			31.1			12.7			7.9	
Approach LOS		A			C			B			A	
90th %ile Green (s)	9.7	9.7		9.7	9.7		5.6	44.4		5.2	44.0	
90th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Gap	Max	
70th %ile Green (s)	7.8	7.8		7.8	7.8		5.1	44.1		5.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Min	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		5.1	52.1		0.0	44.0	
50th %ile Term Code	Min	Min		Min	Min		Gap	Hold		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Max		Skip	Max	
Stops (vph)		7			35		10	478		6	219	
Fuel Used(gal)		1			0		0	16		1	24	
CO Emissions (g/hr)		36			34		33	1086		64	1657	
NOx Emissions (g/hr)		7			7		6	211		12	322	
VOC Emissions (g/hr)		8			8		8	252		15	384	
Dilemma Vehicles (#)		3			0		0	31		0	26	
Queue Length 50th (ft)		0			16		4	224		2	125	
Queue Length 95th (ft)		20			46		11	#666		7	226	
Internal Link Dist (ft)		797			156			336			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		402			335		745	1442		432	1358	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.16			0.13		0.06	0.67		0.05	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 65.7			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 77.3			
70th %ile Actuated Cycle: 74.9			
50th %ile Actuated Cycle: 74.1			
30th %ile Actuated Cycle: 51			
10th %ile Actuated Cycle: 51			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard





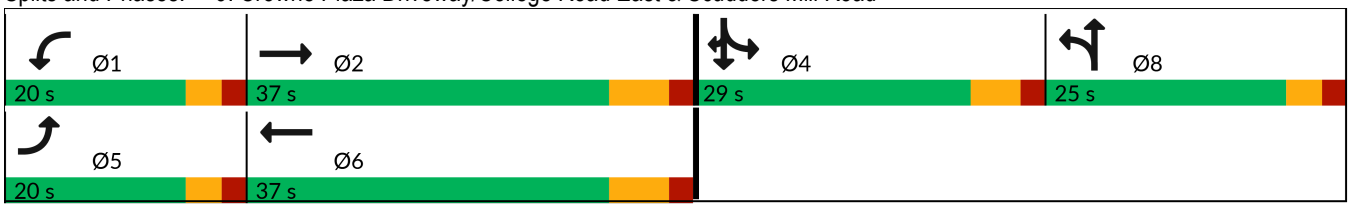
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	1230	16	8	642	263	25	13	14	756	5	131
Future Volume (vph)	87	1230	16	8	642	263	25	13	14	756	5	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		2	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850			0.850		0.964				0.850
Flt Protected	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (prot)	1805	3574	1553	1805	5036	1583	0	1737	0	1715	1720	1583
Flt Permitted	0.950			0.950				0.976		0.950	0.953	
Satd. Flow (perm)	1805	3574	1553	1805	5036	1583	0	1737	0	1715	1720	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			286		14				142
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		611			1998			443			663	
Travel Time (s)		8.3			27.2			8.6			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	4%	0%	3%	2%	6%	0%	0%	0%	0%	2%
Adj. Flow (vph)	95	1337	17	9	698	286	27	14	15	822	5	142
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	95	1337	17	9	698	286	0	56	0	411	416	142
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	Right	L NA	Left	R NA	L NA	L NA	R NA	L NA	Left	R NA
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Free	Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4

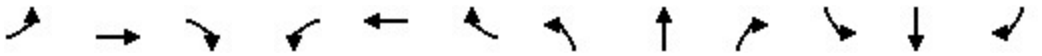
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			Free			Free						
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0		11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0		25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%		22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0		20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0			5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Act Effct Green (s)	9.3	40.1	88.3	6.1	30.6	88.3		7.3		23.5	23.5	23.5
Actuated g/C Ratio	0.11	0.45	1.00	0.07	0.35	1.00		0.08		0.27	0.27	0.27
v/c Ratio	0.50	0.82	0.01	0.07	0.40	0.18		0.36		0.90	0.91	0.27
Control Delay (s/veh)	49.2	27.8	0.0	44.3	24.7	0.3		39.6		59.5	60.6	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay (s/veh)	49.2	27.8	0.0	44.3	24.7	0.3		39.6		59.5	60.6	7.0
LOS	D	C	A	D	C	A		D		E	E	A
Approach Delay (s/veh)		28.9			17.8			39.6			52.3	
Approach LOS		C			B			D			D	
90th %ile Green (s)	13.4	37.3		6.1	30.0		10.0	10.0		23.0	23.0	23.0
90th %ile Term Code	Gap	Hold		Gap	Max		Gap	Gap		Max	Max	Max
70th %ile Green (s)	10.8	45.8		0.0	30.0		7.9	7.9		23.0	23.0	23.0
70th %ile Term Code	Gap	Hold		Skip	Max		Gap	Gap		Max	Max	Max
50th %ile Green (s)	9.2	44.2		0.0	30.0		6.7	6.7		23.0	23.0	23.0
50th %ile Term Code	Gap	Hold		Skip	Max		Gap	Gap		Max	Max	Max
30th %ile Green (s)	7.7	42.7		0.0	30.0		6.0	6.0		23.0	23.0	23.0
30th %ile Term Code	Gap	Hold		Skip	Max		Min	Min		Max	Max	Max
10th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0		23.0	23.0	23.0
10th %ile Term Code	Skip	Max		Skip	Max		Skip	Skip		Max	Max	Max
Stops (vph)	77	942	0	10	468	0		39		304	308	19
Fuel Used(gal)	3	35	0	0	19	3		1		22	22	5
CO Emissions (g/hr)	212	2468	13	23	1296	234		61		1546	1573	379
NOx Emissions (g/hr)	41	480	2	4	252	46		12		301	306	74
VOC Emissions (g/hr)	49	572	3	5	300	54		14		358	364	88
Dilemma Vehicles (#)	0	57	0	0	36	0		2		0	19	0
Queue Length 50th (ft)	53	326	0	5	115	0		24		248	252	0
Queue Length 95th (ft)	106	#598	0	22	168	0		63		#491	#497	48
Internal Link Dist (ft)		531			1918			363			583	
Turn Bay Length (ft)	165		170	75		270				350		
Base Capacity (vph)	312	1622	1553	312	1746	1583		412		455	457	525
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.30	0.82	0.01	0.03	0.40	0.18		0.14		0.90	0.91	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 111			
Actuated Cycle Length: 88.3			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 32.4		Intersection LOS: C	
Intersection Capacity Utilization 81.7%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 99.4			
70th %ile Actuated Cycle: 94.7			
50th %ile Actuated Cycle: 91.9			
30th %ile Actuated Cycle: 89.7			
10th %ile Actuated Cycle: 66			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



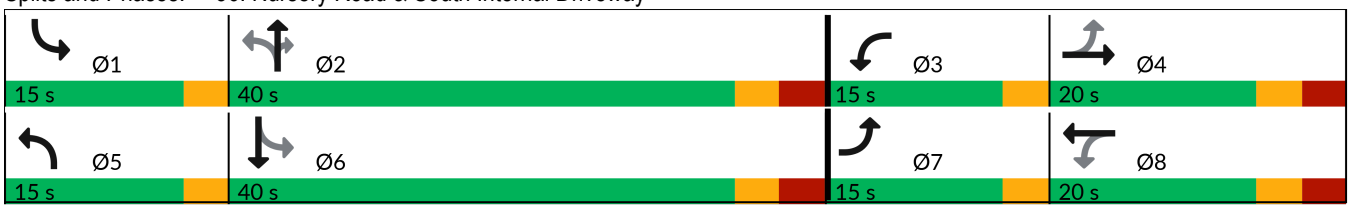


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	8	91	335	6	0	74	138	272	1	126	0
Future Volume (vph)	1	8	91	335	6	0	74	138	272	1	126	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.862							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1638	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.800			0.500			0.526			0.662		
Satd. Flow (perm)	1520	1638	0	950	1900	0	999	1900	1615	1258	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		99							296			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			734			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	9	99	364	7	0	80	150	296	1	137	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	108	0	364	7	0	80	150	296	1	137	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.1	6.1		19.6	15.0		17.1	12.6	12.6	14.7	8.9	
Actuated g/C Ratio	0.28	0.14		0.45	0.35		0.39	0.29	0.29	0.34	0.21	
v/c Ratio	0.00	0.34		0.57	0.01		0.15	0.27	0.44	0.00	0.35	
Control Delay (s/veh)	9.0	10.4		13.0	13.0		10.0	15.5	4.9	9.0	21.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	9.0	10.4		13.0	13.0		10.0	15.5	4.9	9.0	21.6	
LOS	A	B		B	B		A	B	A	A	C	
Approach Delay (s/veh)		10.4			13.0			8.7			21.5	
Approach LOS		B			B			A			C	
90th %ile Green (s)	5.0	7.9		12.0	14.9		7.8	14.2	14.2	5.0	11.4	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	5.9		12.0	20.9		7.2	19.4	19.4	0.0	9.2	
70th %ile Term Code	Skip	Gap		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		11.5	19.5		6.3	17.1	17.1	0.0	7.8	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		8.1	16.1		0.0	6.7	6.7	0.0	6.7	
30th %ile Term Code	Skip	Min		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	7.0	7.0	0.0	7.0	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	2	29		200	7		43	95	38	2	102	
Fuel Used(gal)	0	1		4	0		1	2	2	0	2	
CO Emissions (g/hr)	1	47		249	6		61	131	140	1	123	
NOx Emissions (g/hr)	0	9		48	1		12	26	27	0	24	
VOC Emissions (g/hr)	0	11		58	1		14	30	32	0	29	
Dilemma Vehicles (#)	0	7		0	0		0	10	0	0	9	
Queue Length 50th (ft)	0	2		64	1		13	29	0	0	36	
Queue Length 95th (ft)	2	39		139	10		35	84	50	2	84	
Internal Link Dist (ft)		266			404			654			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	774	648		722	801		672	1490	1330	703	1490	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.17		0.50	0.01		0.12	0.10	0.22	0.00	0.09	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 43.4		
Natural Cycle: 50		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.57		
Intersection Signal Delay (s/veh): 11.8		Intersection LOS: B
Intersection Capacity Utilization 50.0%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 57.1		
70th %ile Actuated Cycle: 52.3		
50th %ile Actuated Cycle: 48.6		
30th %ile Actuated Cycle: 34.8		
10th %ile Actuated Cycle: 24		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	10.4

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	18	207	0	714	193	369	420
Future Vol, veh/h	18	207	0	714	193	369	420
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	1	0	0
Mvmt Flow	21	238	0	821	222	424	483

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	2021	521	483	0	0	1043	0
Stage 1	932	-	-	-	-	-	-
Stage 2	1090	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	52	505	718	-	-	675	-
Stage 1	349	-	-	-	-	-	-
Stage 2	288	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	~ 19	505	718	-	-	675	-
Mov Cap-2 Maneuver	~ 19	-	-	-	-	-	-
Stage 1	349	-	-	-	-	-	-
Stage 2	107	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	57.82	0	8.85
HCM LOS	F		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	718	-	-	19	505	675	-
HCM Lane V/C Ratio	-	-	-	1.078	0.471	0.628	-
HCM Ctrl Dly (s/v)	0	-	-	$ 512.3	18.3	18.9	-
HCM Lane LOS	A	-	-	F	C	C	-
HCM 95th %tile Q(veh)	0	-	-	2.9	2.5	4.4	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	364	8	5	911	40	13	0	15	9	0	45
Future Vol, veh/h	50	364	8	5	911	40	13	0	15	9	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	58	423	9	6	1059	47	15	0	17	10	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1106	0	0	433	0	0	1615	1662	428	1610	1620	1059
Stage 1	-	-	-	-	-	-	544	544	-	1071	1071	-
Stage 2	-	-	-	-	-	-	1071	1117	-	540	549	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	639	-	-	1138	-	-	84	98	631	85	104	275
Stage 1	-	-	-	-	-	-	527	522	-	270	300	-
Stage 2	-	-	-	-	-	-	270	285	-	530	520	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	639	-	-	1138	-	-	62	89	631	75	94	275
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	89	-	75	94	-
Stage 1	-	-	-	-	-	-	479	475	-	268	298	-
Stage 2	-	-	-	-	-	-	217	284	-	468	472	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.33	0.04	46.02	27.76
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	120	639	-	-	1138	-	-	75	275
HCM Lane V/C Ratio	0.272	0.091	-	-	0.005	-	-	0.14	0.19
HCM Ctrl Dly (s/v)	46	11.2	-	-	8.2	-	-	60.9	21.1
HCM Lane LOS	E	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	1	0.3	-	-	0	-	-	0.5	0.7

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	44	39	0	0	48	48	42	1	44	0
Future Vol, veh/h	0	0	44	39	0	0	48	48	42	1	44	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	48	42	0	0	52	52	46	1	48	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	207	252	48	229	229	75	48	0	0	98	0	0
Stage 1	50	50	-	179	179	-	-	-	-	-	-	-
Stage 2	157	202	-	50	50	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	755	655	1027	730	674	992	1572	-	-	1508	-	-
Stage 1	968	857	-	827	755	-	-	-	-	-	-	-
Stage 2	851	738	-	968	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	728	631	1027	671	650	992	1572	-	-	1508	-	-
Mov Cap-2 Maneuver	728	631	-	671	650	-	-	-	-	-	-	-
Stage 1	967	857	-	798	728	-	-	-	-	-	-	-
Stage 2	821	712	-	922	857	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.68	10.73	2.56	0.16
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	573	-	-	1027	671	40	-	-
HCM Lane V/C Ratio	0.033	-	-	0.047	0.063	0.001	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	8.7	10.7	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Intersection	
Intersection Delay, s/veh	2.9
Intersection LOS	A

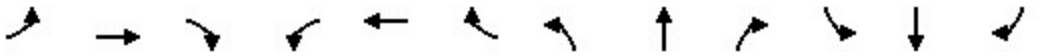
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	21	27	52	0
Demand Flow Rate, veh/h	21	27	52	0
Vehicles Circulating, veh/h	27	23	0	50
Vehicles Exiting, veh/h	23	29	48	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.8	2.8	2.9	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	21	27	52	0
Cap Entry Lane, veh/h	1342	1348	1380	1311
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	21	27	52	0
Cap Entry, veh/h	1342	1348	1380	1311
V/C Ratio	0.016	0.020	0.038	0.000
Control Delay, s/veh	2.8	2.8	2.9	2.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

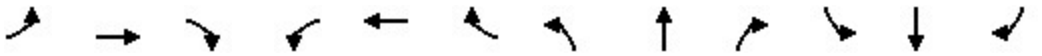
SATURDAY BUILD WITH BUILDINGS E1 & E2

WITH IMPROVEMENTS

PRE-COVID CONDITION



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	196	64	145	197	113	0	1966	0	0	2066	0
Future Volume (vph)	48	196	64	145	197	113	0	1966	0	0	2066	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		150	0		0	0		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.945							
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	1881	1615	1805	1784	0	0	3632	0	0	3597	0
Flt Permitted	0.220			0.326								
Satd. Flow (perm)	410	1881	1615	619	1784	0	0	3632	0	0	3597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89		19							
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		156			160			333			344	
Travel Time (s)		2.7			2.2			4.1			4.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	1%	0%	0%	1%	0%	0%	2%	0%	0%	3%	0%
Adj. Flow (vph)	50	204	67	151	205	118	0	2048	0	0	2152	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	204	67	151	323	0	0	2048	0	0	2152	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			30			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2			2			2	
Detector Template	Left	Thru	Right	Left	Thru			Thru			Thru	
Leading Detector (ft)	20	100	20	20	100			100			100	
Trailing Detector (ft)	0	0	0	0	0			0			0	
Detector 1 Position(ft)	0	0	0	0	0			0			0	
Detector 1 Size(ft)	20	6	20	20	6			6			6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA			NA			NA	
Protected Phases	7	4		3	8			2			6	

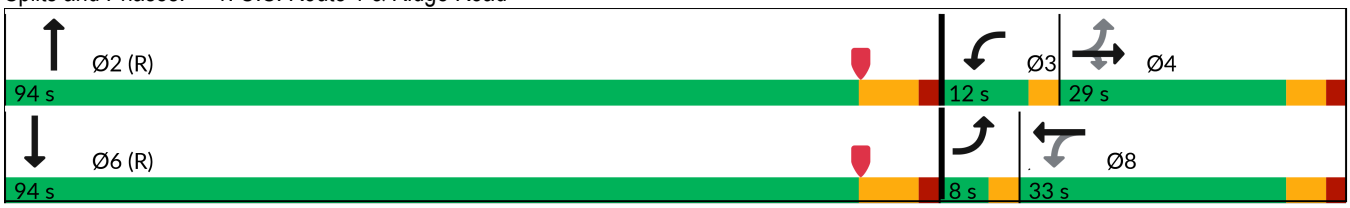


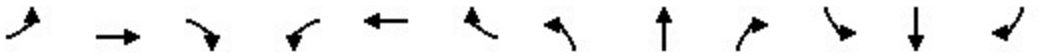
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8			2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0			31.0			31.0	
Minimum Split (s)	8.0	13.0	13.0	8.0	13.0			39.0			39.0	
Total Split (s)	8.0	29.0	29.0	12.0	33.0			94.0			94.0	
Total Split (%)	5.9%	21.5%	21.5%	8.9%	24.4%			69.6%			69.6%	
Maximum Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0			6.0			6.0	
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0			2.0			2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			-3.0			-3.0	
Total Lost Time (s)	3.0	6.0	6.0	3.0	6.0			5.0			5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0			2.0			2.0	
Recall Mode	None	None	None	None	None			C-Min			C-Min	
Walk Time (s)								7.0			7.0	
Flash Don't Walk (s)								24.0			24.0	
Pedestrian Calls (#/hr)								0			0	
Act Effct Green (s)	28.6	20.4	20.4	35.7	26.0			91.3			91.3	
Actuated g/C Ratio	0.21	0.15	0.15	0.26	0.19			0.68			0.68	
v/c Ratio	0.36	0.72	0.21	0.62	0.90			0.83			0.88	
Control Delay (s/veh)	44.1	68.8	5.8	51.3	78.0			18.3			24.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay (s/veh)	44.1	68.8	5.8	51.3	78.0			18.3			24.0	
LOS	D	E	A	D	E			B			C	
Approach Delay (s/veh)		51.8			69.5			18.3			24.0	
Approach LOS		D			E			B			C	
90th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
90th %ile Term Code	Max	Max	Max	Max	Max			Coord			Coord	
70th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
70th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
50th %ile Green (s)	5.0	23.0	23.0	9.0	27.0			86.0			86.0	
50th %ile Term Code	Max	Hold	Hold	Max	Max			Coord			Coord	
30th %ile Green (s)	6.3	20.6	20.6	11.2	25.5			86.2			86.2	
30th %ile Term Code	Gap	Hold	Hold	Gap	Gap			Coord			Coord	
10th %ile Green (s)	0.0	12.2	12.2	8.3	23.5			97.5			97.5	
10th %ile Term Code	Skip	Gap	Gap	Gap	Hold			Coord			Coord	
Stops (vph)	38	182	5	114	268			1275			1593	
Fuel Used(gal)	1	5	0	3	9			35			44	
CO Emissions (g/hr)	60	331	13	238	654			2456			3090	
NOx Emissions (g/hr)	12	64	3	46	127			478			601	
VOC Emissions (g/hr)	14	77	3	55	152			569			716	
Dilemma Vehicles (#)	0	6	0	0	10			73			76	
Queue Length 50th (ft)	33	167	0	104	262			687			784	
Queue Length 95th (ft)	69	249	23	167	#428			399			923	
Internal Link Dist (ft)		76			80			253			264	
Turn Bay Length (ft)												
Base Capacity (vph)	139	320	348	246	372			2457			2433	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.36	0.64	0.19	0.61	0.87			0.83			0.88	

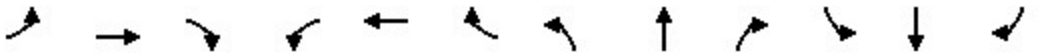
Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 76 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 27.8		Intersection LOS: C	
Intersection Capacity Utilization 89.6%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: U.S. Route 1 & Ridge Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1	0	9	0	5	0	2214	3	0	2342	0
Future Volume (vph)	19	1	0	9	0	5	0	2214	3	0	2342	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1950	1950	1950	1950	1950	1950
Storage Length (ft)	0		0	0		300	0		0	0		0
Storage Lanes	2		0	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Frt						0.850						
Flt Protected	0.950			0.950								
Satd. Flow (prot)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	3502	1900	0	1805	0	1615	0	5219	0	0	5219	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						137						
Link Speed (mph)		35			35			55			55	
Link Distance (ft)		400			764			531			362	
Travel Time (s)		7.8			14.9			6.6			4.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	20	1	0	9	0	5	0	2306	3	0	2440	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1	0	9	0	5	0	2309	0	0	2440	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	L NA	Left	R NA	L NA	Left	R NA	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			36			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			50			80	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1		1		2			2	
Detector Template	Left	Thru		Left		Right		Thru			Thru	
Leading Detector (ft)	20	100		20		20		100			100	
Trailing Detector (ft)	0	0		0		0		0			0	
Detector 1 Position(ft)	0	0		0		0		0			0	
Detector 1 Size(ft)	20	6		20		20		6			6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex		Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	pm+pt	NA		Prot		Free		NA			NA	
Protected Phases	7	4		3				2			6	



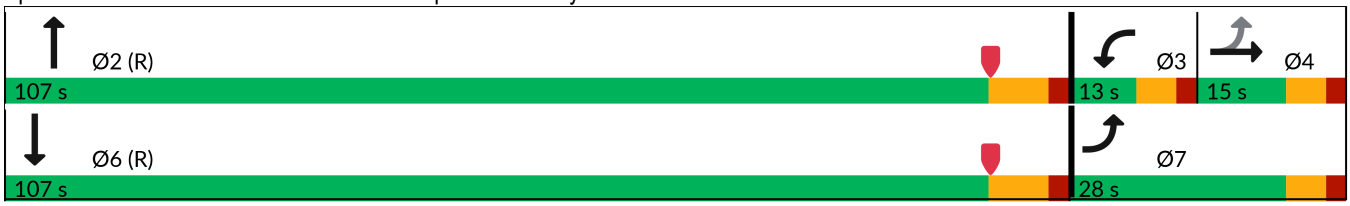
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4					Free						
Detector Phase	7	4		3				2			6	
Switch Phase												
Minimum Initial (s)	5.0	7.0		5.0				20.0			20.0	
Minimum Split (s)	11.0	13.0		11.0				28.0			28.0	
Total Split (s)	28.0	15.0		13.0				107.0			107.0	
Total Split (%)	20.7%	11.1%		9.6%				79.3%			79.3%	
Maximum Green (s)	22.0	9.0		7.0				99.0			99.0	
Yellow Time (s)	4.0	4.0		4.0				6.0			6.0	
All-Red Time (s)	2.0	2.0		2.0				2.0			2.0	
Lost Time Adjust (s)	0.0	0.0		0.0				-3.0			-3.0	
Total Lost Time (s)	6.0	6.0		6.0				5.0			5.0	
Lead/Lag		Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0				2.0			2.0	
Recall Mode	None	None		None				C-Min			C-Min	
Act Effct Green (s)	8.7	7.0		5.5		135.0		121.7			121.7	
Actuated g/C Ratio	0.06	0.05		0.04		1.00		0.90			0.90	
v/c Ratio	0.09	0.01		0.12		0.00		0.49			0.52	
Control Delay (s/veh)	49.4	55.0		65.8		0.0		2.9			3.0	
Queue Delay	0.0	0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)	49.4	55.0		65.8		0.0		2.9			3.0	
LOS	D	D		E		A		A			A	
Approach Delay (s/veh)		49.6			42.3			2.9			3.0	
Approach LOS		D			D			A			A	
90th %ile Green (s)	19.6	7.0		6.6				101.4			101.4	
90th %ile Term Code	Hold	Min		Gap				Coord			Coord	
70th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
70th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
50th %ile Green (s)	7.0	7.0		0.0				114.0			114.0	
50th %ile Term Code	Hold	Hold		Skip				Coord			Coord	
30th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
30th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
10th %ile Green (s)	0.0	0.0		0.0				127.0			127.0	
10th %ile Term Code	Skip	Skip		Skip				Coord			Coord	
Stops (vph)	18	2		10		0		395			413	
Fuel Used(gal)	0	0		0		0		23			17	
CO Emissions (g/hr)	27	2		17		2		1636			1218	
NOx Emissions (g/hr)	5	0		3		0		318			237	
VOC Emissions (g/hr)	6	0		4		0		379			282	
Dilemma Vehicles (#)	0	0		0		0		52			79	
Queue Length 50th (ft)	8	1		8		0		126			278	
Queue Length 95th (ft)	m9	m2		27		0		288			152	
Internal Link Dist (ft)		320			684			451			282	
Turn Bay Length (ft)						300						
Base Capacity (vph)	570	126		93		1615		4704			4704	
Starvation Cap Reductn	0	0		0		0		0			0	
Spillback Cap Reductn	0	0		0		0		0			0	
Storage Cap Reductn	0	0		0		0		0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.04	0.01		0.10		0.00		0.49			0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 3.2		Intersection LOS: A	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: U.S. Route 1 & Independence Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	277	323	0	0	327	18	0	0	60	0	0	0
Future Volume (vph)	277	323	0	0	327	18	0	0	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.865			
Flt Protected	0.950											
Satd. Flow (prot)	3502	3539	0	0	3610	1615	0	0	1644	0	0	0
Flt Permitted	0.399											
Satd. Flow (perm)	1471	3539	0	0	3610	1615	0	0	1644	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						150			719			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		362			557			523			621	
Travel Time (s)		6.2			9.5			11.9			14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	301	351	0	0	355	20	0	0	65	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	301	351	0	0	355	20	0	0	65	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	Left	Right	Left	Left	R NA	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		50			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1			1			
Detector Template	Left	Thru			Thru	Right			Right			
Leading Detector (ft)	20	100			100	20			20			
Trailing Detector (ft)	0	0			0	0			0			
Detector 1 Position(ft)	0	0			0	0			0			
Detector 1 Size(ft)	20	6			6	20			20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	pm+pt	NA			NA	Free			Free			
Protected Phases	5	2			6							
Permitted Phases	2					Free			Free			
Detector Phase	5	2			6							
Switch Phase												

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	

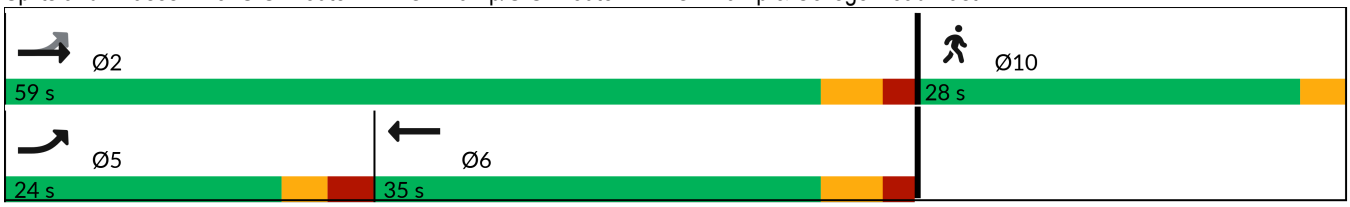
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	7.0	17.0			17.0							
Minimum Split (s)	13.0	23.0			23.0							
Total Split (s)	24.0	59.0			35.0							
Total Split (%)	27.6%	67.8%			40.2%							
Maximum Green (s)	18.0	53.0			29.0							
Yellow Time (s)	3.0	4.0			4.0							
All-Red Time (s)	3.0	2.0			2.0							
Lost Time Adjust (s)	0.0	0.0			0.0							
Total Lost Time (s)	6.0	6.0			6.0							
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0							
Recall Mode	None	Min			Min							
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	30.1	36.1			17.0	36.1			36.1			
Actuated g/C Ratio	0.83	1.00			0.47	1.00			1.00			
v/c Ratio	0.19	0.10			0.21	0.01			0.04			
Control Delay (s/veh)	0.8	0.1			6.0	0.0			0.1			
Queue Delay	0.0	0.0			0.0	0.0			0.0			
Total Delay (s/veh)	0.8	0.1			6.0	0.0			0.1			
LOS	A	A			A	A			A			
Approach Delay (s/veh)		0.4			5.7			0.1				
Approach LOS		A			A			A				
90th %ile Green (s)	7.6	30.6			17.0							
90th %ile Term Code	Gap	Hold			Min							
70th %ile Green (s)	7.0	30.0			17.0							
70th %ile Term Code	Min	Hold			Min							
50th %ile Green (s)	7.0	30.0			17.0							
50th %ile Term Code	Min	Hold			Min							
30th %ile Green (s)	7.0	30.0			17.0							
30th %ile Term Code	Min	Hold			Min							
10th %ile Green (s)	7.0	30.0			17.0							
10th %ile Term Code	Min	Hold			Min							
Stops (vph)	29	0			167	0			0			
Fuel Used(gal)	1	1			11	0			1			
CO Emissions (g/hr)	71	56			763	34			38			
NOx Emissions (g/hr)	14	11			148	7			7			
VOC Emissions (g/hr)	16	13			177	8			9			
Dilemma Vehicles (#)	0	0			34	0			0			
Queue Length 50th (ft)	0	0			18	0			0			
Queue Length 95th (ft)	0	0			34	0			0			
Internal Link Dist (ft)		282			477			443			541	
Turn Bay Length (ft)												
Base Capacity (vph)	2238	3539			2898	1615			1644			
Starvation Cap Reductn	0	0			0	0			0			
Spillback Cap Reductn	0	0			0	0			0			
Storage Cap Reductn	0	0			0	0			0			

Lane Group	Ø10
Minimum Initial (s)	16.0
Minimum Split (s)	28.0
Total Split (s)	28.0
Total Split (%)	32%
Maximum Green (s)	25.0
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	None
Walk Time (s)	16.0
Flash Don't Walk (s)	9.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	0.0
90th %ile Term Code	Skip
70th %ile Green (s)	0.0
70th %ile Term Code	Skip
50th %ile Green (s)	0.0
50th %ile Term Code	Skip
30th %ile Green (s)	0.0
30th %ile Term Code	Skip
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Reduced v/c Ratio	0.13	0.10			0.12	0.01			0.04			

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 36.1			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.21			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 33.4%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 36.6			
70th %ile Actuated Cycle: 36			
50th %ile Actuated Cycle: 36			
30th %ile Actuated Cycle: 36			
10th %ile Actuated Cycle: 36			

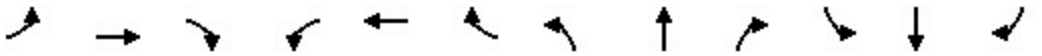
Splits and Phases: 3: U.S. Route 1 NB Off Ramp/U.S. Route 1 NB On Ramp & College Road East



Lane Group	Ø10
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	826	15	0	655	0	9	0	90	3	151	0
Future Volume (vph)	0	826	15	0	655	0	9	0	90	3	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		125	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.997							0.850			
Flt Protected							0.950				0.999	
Satd. Flow (prot)	0	3530	0	0	3539	0	1805	0	1615	0	3606	0
Flt Permitted							0.702				0.999	
Satd. Flow (perm)	0	3530	0	0	3539	0	1334	0	1615	0	3606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3							100			
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		349			260			324			204	
Travel Time (s)		5.9			4.4			7.4			4.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	918	17	0	728	0	10	0	100	3	168	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	935	0	0	728	0	10	0	100	0	171	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	L NA	Left	Left	Right	L NA	Left	Right	L NA	Left	Right
Median Width(ft)		24			24			32			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2			2		1		1	1	2	
Detector Template		Thru			Thru		Left		Right	Left	Thru	
Leading Detector (ft)		100			100		20		20	20	100	
Trailing Detector (ft)		0			0		0		0	0	0	
Detector 1 Position(ft)		0			0		0		0	0	0	
Detector 1 Size(ft)		6			6		20		20	20	6	
Detector 1 Type		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Queue (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 1 Delay (s)		0.0			0.0		0.0		0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA			NA		Perm		Perm	Perm	NA	
Protected Phases		2			6						4	

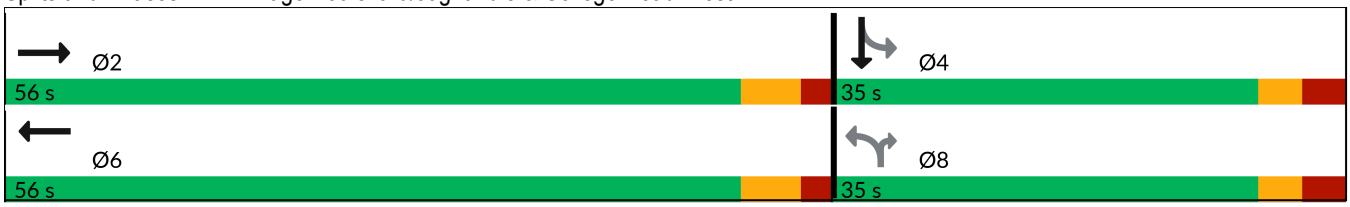


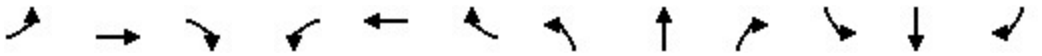
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							8		8	4		
Detector Phase		2			6		8		8	4	4	
Switch Phase												
Minimum Initial (s)		15.0			15.0		7.0		7.0	7.0	7.0	
Minimum Split (s)		21.0			21.0		13.0		13.0	13.0	13.0	
Total Split (s)		56.0			56.0		35.0		35.0	35.0	35.0	
Total Split (%)		61.5%			61.5%		38.5%		38.5%	38.5%	38.5%	
Maximum Green (s)		50.0			50.0		29.0		29.0	29.0	29.0	
Yellow Time (s)		4.0			4.0		3.0		3.0	3.0	3.0	
All-Red Time (s)		2.0			2.0		3.0		3.0	3.0	3.0	
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	
Total Lost Time (s)		6.0			6.0		6.0		6.0		6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		2.0			2.0		2.0		2.0	2.0	2.0	
Recall Mode		Min			Min		None		None	None	None	
Act Effct Green (s)		20.0			20.0		7.2		7.2		7.2	
Actuated g/C Ratio		0.57			0.57		0.20		0.20		0.20	
v/c Ratio		0.47			0.36		0.04		0.24		0.23	
Control Delay (s/veh)		7.3			6.6		12.6		5.7		13.2	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay (s/veh)		7.3			6.6		12.6		5.7		13.2	
LOS		A			A		B		A		B	
Approach Delay (s/veh)		7.3			6.6			6.3			13.2	
Approach LOS		A			A			A			B	
90th %ile Green (s)		19.7			19.7		8.1		8.1	8.1	8.1	
90th %ile Term Code		Gap			Hold		Hold		Hold	Gap	Gap	
70th %ile Green (s)		16.0			16.0		7.0		7.0	7.0	7.0	
70th %ile Term Code		Gap			Hold		Min		Min	Min	Min	
50th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
50th %ile Term Code		Min			Min		Min		Min	Min	Min	
30th %ile Green (s)		15.0			15.0		7.0		7.0	7.0	7.0	
30th %ile Term Code		Min			Min		Hold		Hold	Min	Min	
10th %ile Green (s)		27.3			27.3		0.0		0.0	0.0	0.0	
10th %ile Term Code		Dwell			Dwell		Skip		Skip	Skip	Skip	
Stops (vph)		484			351		11		23		121	
Fuel Used(gal)		8			5		0		1		1	
CO Emissions (g/hr)		559			383		8		40		93	
NOx Emissions (g/hr)		109			75		2		8		18	
VOC Emissions (g/hr)		130			89		2		9		21	
Dilemma Vehicles (#)		78			62		0		0		0	
Queue Length 50th (ft)		60			43		2		0		14	
Queue Length 95th (ft)		102			75		10		25		36	
Internal Link Dist (ft)		269			180			244			124	
Turn Bay Length (ft)									125			
Base Capacity (vph)		3530			3539		1148		1404		3105	
Starvation Cap Reductn		0			0		0		0		0	
Spillback Cap Reductn		0			0		0		0		0	
Storage Cap Reductn		0			0		0		0		0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.26			0.21		0.01		0.07		0.06	

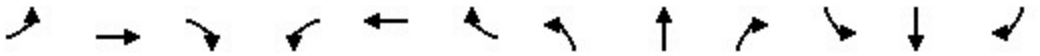
Intersection Summary			
Area Type:	Other		
Cycle Length: 91			
Actuated Cycle Length: 35.2			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 7.5		Intersection LOS: A	
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 39.8			
70th %ile Actuated Cycle: 35			
50th %ile Actuated Cycle: 34			
30th %ile Actuated Cycle: 34			
10th %ile Actuated Cycle: 33.3			

Splits and Phases: 4: Village Boulevard/Jughandle & College Road West





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	162	55	94	195	612	64	30	88	575	36	60
Future Volume (vph)	69	162	55	94	195	612	64	30	88	575	36	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.962				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3372	0	1752	3574	1615	3502	1900	1615	3502	1900	1615
Flt Permitted	0.604			0.570			0.950			0.950		
Satd. Flow (perm)	1148	3372	0	1051	3574	1615	3502	1900	1615	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		52				746			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	4%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	84	198	67	115	238	746	78	37	107	701	44	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	265	0	115	238	746	78	37	107	701	44	73
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

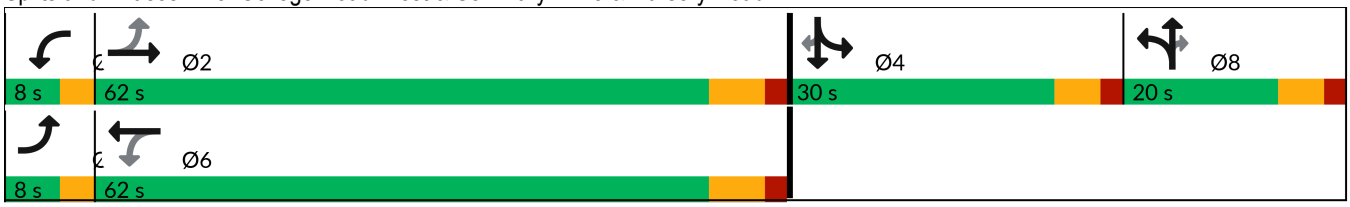


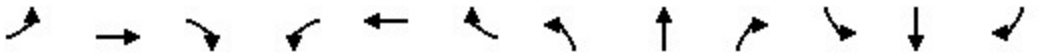
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.0	30.0		39.6	31.7	87.3	6.4	6.4	6.4	23.8	23.8	23.8
Actuated g/C Ratio	0.45	0.34		0.45	0.36	1.00	0.07	0.07	0.07	0.27	0.27	0.27
v/c Ratio	0.15	0.22		0.22	0.18	0.46	0.30	0.27	0.47	0.73	0.08	0.14
Control Delay (s/veh)	13.5	17.0		14.3	20.4	1.0	41.4	43.0	13.8	34.3	24.6	2.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.5	17.0		14.3	20.4	1.0	41.4	43.0	13.8	34.3	24.6	2.2
LOS	B	B		B	C	A	D	D	B	C	C	A
Approach Delay (s/veh)		16.2			6.6			28.4			30.9	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.1	8.1	8.1	24.0	24.0	24.0
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.0	7.0	7.0	24.0	24.0	24.0
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.4	6.4	6.4	24.0	24.0	24.0
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.7	5.7	5.7	24.0	24.0	24.0
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.0	5.0	5.0	23.2	23.2	23.2
10th %ile Term Code	Skip	Min		Max	Hold		Min	Min	Min	Gap	Gap	Gap
Stops (vph)	37	120		51	129	0	58	29	15	506	26	3
Fuel Used(gal)	1	3		1	3	2	1	1	1	11	1	0
CO Emissions (g/hr)	64	213		78	194	162	104	51	64	760	40	26
NOx Emissions (g/hr)	12	41		15	38	31	20	10	12	148	8	5
VOC Emissions (g/hr)	15	49		18	45	38	24	12	15	176	9	6
Dilemma Vehicles (#)	0	10		0	8	0	0	1	0	0	2	0
Queue Length 50th (ft)	24	42		34	47	0	21	20	0	179	18	0
Queue Length 95th (ft)	46	65		59	69	0	38	45	31	220	40	6
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	550	2144		517	2252	1615	561	304	358	963	522	529
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.15	0.12		0.22	0.11	0.46	0.14	0.12	0.30	0.73	0.08	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 87.3			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 89.1			
70th %ile Actuated Cycle: 88			
50th %ile Actuated Cycle: 87.4			
30th %ile Actuated Cycle: 86.7			
10th %ile Actuated Cycle: 85.2			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	463	226	260	549	12	176	59	95	0	0	0
Future Volume (vph)	15	463	226	260	549	12	176	59	95	0	0	0
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		145	0		0	0		0
Storage Lanes	0		1	1		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.961				
Flt Protected		0.998		0.950				0.974				
Satd. Flow (prot)	0	1909	1658	1834	1925	0	0	1778	0	0	0	0
Flt Permitted		0.977		0.379				0.974				
Satd. Flow (perm)	0	1869	1658	732	1925	0	0	1778	0	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)			238		3							
Link Speed (mph)		35			25			30			30	
Link Distance (ft)		508			589			1050			583	
Travel Time (s)		9.9			16.1			23.9			13.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	487	238	274	578	13	185	62	100	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	503	238	274	591	0	0	347	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2				
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru				
Leading Detector (ft)	20	100	20	20	100		20	100				
Trailing Detector (ft)	0	0	0	0	0		0	0				
Detector 1 Position(ft)	0	0	0	0	0		0	0				
Detector 1 Size(ft)	20	6	20	20	6		20	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0				
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA	Perm	custom	NA		Perm	NA				
Protected Phases		2		1	1 6			8				

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	
Protected Phases	6

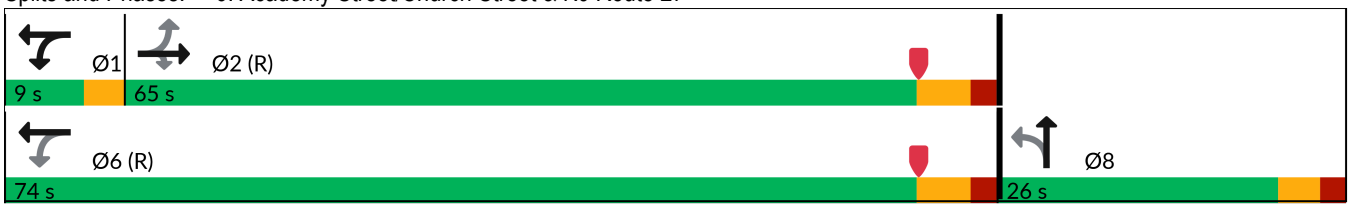
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8					
Detector Phase	2	2	2	1	1 6		8	8				
Switch Phase												
Minimum Initial (s)	59.0	59.0	59.0	6.0			7.0	7.0				
Minimum Split (s)	65.0	65.0	65.0	9.0			12.0	12.0				
Total Split (s)	65.0	65.0	65.0	9.0			26.0	26.0				
Total Split (%)	65.0%	65.0%	65.0%	9.0%			26.0%	26.0%				
Maximum Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
Yellow Time (s)	4.0	4.0	4.0	3.0			3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	0.0			2.0	2.0				
Lost Time Adjust (s)		0.0	0.0	0.0				0.0				
Total Lost Time (s)		6.0	6.0	3.0				5.0				
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0	2.0	2.0			2.0	2.0				
Recall Mode	C-Min	C-Min	C-Min	None			None	None				
Walk Time (s)	45.0	45.0	45.0									
Flash Don't Walk (s)	14.0	14.0	14.0									
Pedestrian Calls (#/hr)	0	0	0									
Act Effct Green (s)		59.0	59.0	71.4	71.4			20.6				
Actuated g/C Ratio		0.59	0.59	0.71	0.71			0.21				
v/c Ratio		0.46	0.22	0.46	0.43			0.95				
Control Delay (s/veh)		13.2	1.7	5.0	4.4			75.7				
Queue Delay		0.0	0.0	0.0	0.3			0.0				
Total Delay (s/veh)		13.2	1.7	5.0	4.6			75.7				
LOS		B	A	A	A			E				
Approach Delay (s/veh)		9.5			4.8			75.7				
Approach LOS		A			A			E				
90th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
90th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
70th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
70th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
50th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
50th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
30th %ile Green (s)	59.0	59.0	59.0	6.0			21.0	21.0				
30th %ile Term Code	Coord	Coord	Coord	Max			Max	Max				
10th %ile Green (s)	59.0	59.0	59.0	7.8			19.2	19.2				
10th %ile Term Code	Coord	Coord	Coord	Max			Gap	Gap				
Stops (vph)		256	13	53	142			289				
Fuel Used(gal)		5	1	2	4			21				
CO Emissions (g/hr)		347	70	124	270			1479				
NOx Emissions (g/hr)		67	14	24	53			288				
VOC Emissions (g/hr)		80	16	29	63			343				
Dilemma Vehicles (#)		24	0	0	0			0				
Queue Length 50th (ft)		167	0	32	85			219				
Queue Length 95th (ft)		243	30	m43	m103			#389				
Internal Link Dist (ft)		428			509			970			503	
Turn Bay Length (ft)												
Base Capacity (vph)		1102	1075	592	1374			373				

Lane Group	Ø6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	59.0
Minimum Split (s)	65.0
Total Split (s)	74.0
Total Split (%)	74%
Maximum Green (s)	68.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	2.0
Recall Mode	C-Min
Walk Time (s)	45.0
Flash Don't Walk (s)	14.0
Pedestrian Calls (#/hr)	0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
90th %ile Green (s)	68.0
90th %ile Term Code	Coord
70th %ile Green (s)	68.0
70th %ile Term Code	Coord
50th %ile Green (s)	68.0
50th %ile Term Code	Coord
30th %ile Green (s)	68.0
30th %ile Term Code	Coord
10th %ile Green (s)	69.8
10th %ile Term Code	Coord
Stops (vph)	
Fuel Used(gal)	
CO Emissions (g/hr)	
NOx Emissions (g/hr)	
VOC Emissions (g/hr)	
Dilemma Vehicles (#)	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0	0	264			0				
Spillback Cap Reductn		0	0	0	0			0				
Storage Cap Reductn		0	0	0	0			0				
Reduced v/c Ratio		0.46	0.22	0.46	0.53			0.93				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 19.2		Intersection LOS: B	
Intersection Capacity Utilization 109.2%		ICU Level of Service H	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

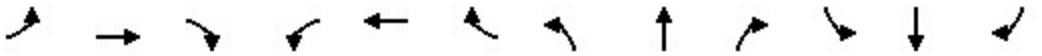
Splits and Phases: 6: Academy Street/Church Street & NJ Route 27



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	496	23	63	600	61	42	110	72	85	140	156
Future Volume (vph)	38	496	23	63	600	61	42	110	72	85	140	156
Ideal Flow (vphpl)	1950	1950	1950	1950	1950	1950	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.989			0.957			0.945	
Flt Protected		0.997			0.996			0.991			0.989	
Satd. Flow (prot)	0	2152	0	0	2148	0	0	1793	0	0	1768	0
Flt Permitted		0.917			0.906			0.814			0.812	
Satd. Flow (perm)	0	1979	0	0	1954	0	0	1473	0	0	1452	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			35			25			35	
Link Distance (ft)		589			1371			1877			956	
Travel Time (s)		16.1			26.7			51.2			18.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	2%	0%	2%	1%	4%	0%	1%	0%	0%	0%	1%
Adj. Flow (vph)	40	522	24	66	632	64	44	116	76	89	147	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	586	0	0	762	0	0	236	0	0	400	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.97	0.82	0.97	0.97	0.82	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	



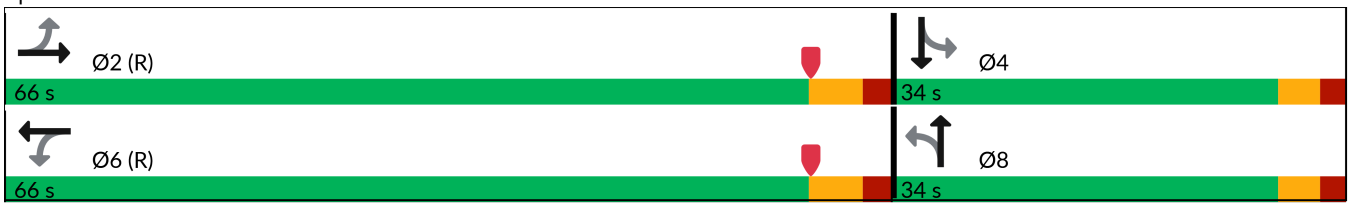
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	60.0	60.0		60.0	60.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	66.0	66.0		66.0	66.0		13.0	13.0		13.0	13.0	
Total Split (s)	66.0	66.0		66.0	66.0		34.0	34.0		34.0	34.0	
Total Split (%)	66.0%	66.0%		66.0%	66.0%		34.0%	34.0%		34.0%	34.0%	
Maximum Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.0			6.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Act Effct Green (s)		60.4			60.4			28.6			28.6	
Actuated g/C Ratio		0.60			0.60			0.29			0.29	
v/c Ratio		0.49			0.65			0.56			0.96	
Control Delay (s/veh)		8.3			16.2			36.3			72.5	
Queue Delay		0.1			0.0			0.0			0.0	
Total Delay (s/veh)		8.4			16.2			36.3			72.5	
LOS		A			B			D			E	
Approach Delay (s/veh)		8.4			16.2			36.3			72.5	
Approach LOS		A			B			D			E	
90th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
70th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
70th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
50th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
30th %ile Green (s)	60.0	60.0		60.0	60.0		29.0	29.0		29.0	29.0	
30th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Max	Max	
10th %ile Green (s)	62.0	62.0		62.0	62.0		27.0	27.0		27.0	27.0	
10th %ile Term Code	Coord	Coord		Coord	Coord		Hold	Hold		Gap	Gap	
Stops (vph)		169			456			187			327	
Fuel Used(gal)		4			13			14			11	
CO Emissions (g/hr)		307			908			969			747	
NOx Emissions (g/hr)		60			177			189			145	
VOC Emissions (g/hr)		71			210			225			173	
Dilemma Vehicles (#)		0			36			0			17	
Queue Length 50th (ft)		124			295			127			249	
Queue Length 95th (ft)		m153			421			207			#436	
Internal Link Dist (ft)		509			1291			1797			876	
Turn Bay Length (ft)												
Base Capacity (vph)		1195			1180			427			421	
Starvation Cap Reductn		80			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.53			0.65			0.55			0.95	

Intersection Summary

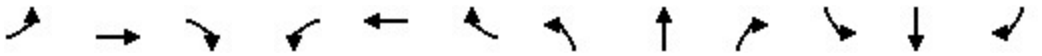
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 92.3%		ICU Level of Service F	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Heathcote Road/Laurel Avenue & NJ Route 27



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	3	43	8	18	5	294	54	15	331	190
Future Volume (vph)	24	0	3	43	8	18	5	294	54	15	331	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	75		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.965			0.977			0.945	
Flt Protected		0.957			0.970		0.950			0.950		
Satd. Flow (prot)	0	1793	0	0	1715	0	1805	1856	0	1687	1789	0
Flt Permitted		0.696			0.794		0.415			0.540		
Satd. Flow (perm)	0	1304	0	0	1403	0	788	1856	0	959	1789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			18			16			52	
Link Speed (mph)		45			25			40			40	
Link Distance (ft)		877			236			415			369	
Travel Time (s)		13.3			6.4			7.1			6.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	6%	0%	0%	0%	0%	0%	7%	0%	1%
Adj. Flow (vph)	26	0	3	46	9	19	5	313	57	16	352	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	74	0	5	370	0	16	554	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

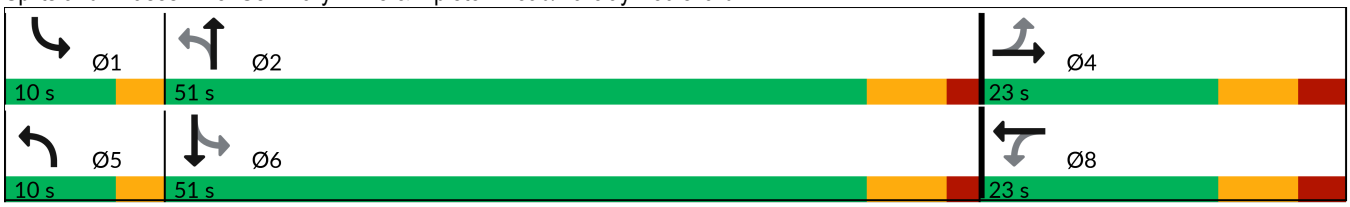


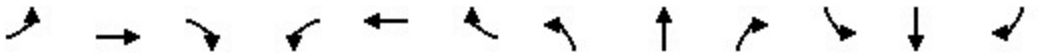
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	44.0		5.0	44.0	
Minimum Split (s)	15.0	15.0		15.0	15.0		8.0	51.0		8.0	51.0	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	51.0		10.0	51.0	
Total Split (%)	27.4%	27.4%		27.4%	27.4%		11.9%	60.7%		11.9%	60.7%	
Maximum Green (s)	15.0	15.0		15.0	15.0		7.0	44.0		7.0	44.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		3.0	5.0		3.0	5.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		8.0			8.0		3.0	7.0		3.0	7.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)		8.2			8.2		49.8	46.7		49.8	46.7	
Actuated g/C Ratio		0.12			0.12		0.76	0.71		0.76	0.71	
v/c Ratio		0.12			0.39		0.01	0.28		0.02	0.43	
Control Delay (s/veh)		1.0			29.5		3.0	6.4		3.1	7.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		1.0			29.5		3.0	6.4		3.1	7.4	
LOS		A			C		A	A		A	A	
Approach Delay (s/veh)		1.0			29.5			6.4			7.3	
Approach LOS		A			C			A			A	
90th %ile Green (s)	11.5	11.5		11.5	11.5		5.0	44.0		5.1	44.1	
90th %ile Term Code	Hold	Hold		Gap	Gap		Min	Max		Gap	Hold	
70th %ile Green (s)	8.5	8.5		8.5	8.5		0.0	44.0		0.0	44.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Skip	Max		Skip	Max	
50th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
50th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
30th %ile Green (s)	7.0	7.0		7.0	7.0		0.0	44.0		0.0	44.0	
30th %ile Term Code	Hold	Hold		Min	Min		Skip	Max		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	44.0		0.0	44.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Hold		Skip	Max	
Stops (vph)		0			51		2	129		6	213	
Fuel Used(gal)		0			1		0	5		1	23	
CO Emissions (g/hr)		11			53		5	335		45	1592	
NOx Emissions (g/hr)		2			10		1	65		9	310	
VOC Emissions (g/hr)		3			12		1	78		10	369	
Dilemma Vehicles (#)		1			0		0	23		0	31	
Queue Length 50th (ft)		0			21		1	49		1	78	
Queue Length 95th (ft)		0			64		3	141		7	226	
Internal Link Dist (ft)		797			156			335			289	
Turn Bay Length (ft)							75			75		
Base Capacity (vph)		372			339		709	1320		809	1284	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.08			0.22		0.01	0.28		0.02	0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 84			
Actuated Cycle Length: 65.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 8.3		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 78.6			
70th %ile Actuated Cycle: 67.5			
50th %ile Actuated Cycle: 66			
30th %ile Actuated Cycle: 66			
10th %ile Actuated Cycle: 51			

Splits and Phases: 8: Seminary Drive & Mpleton Road/Barclay Boulevard



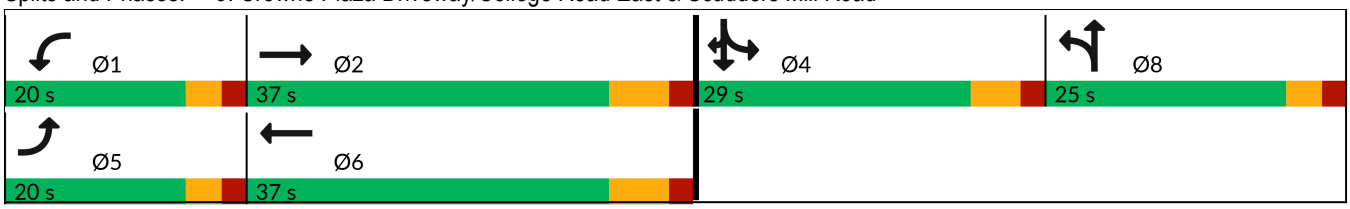


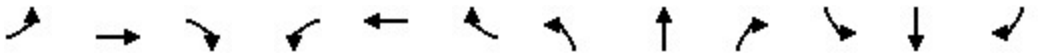
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	61	0	0	28	140	0	0	0	126	0	6
Future Volume (vph)	6	61	0	0	28	140	0	0	0	126	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		170	75		270	0		0	350		0
Storage Lanes	1		1	1		2	0		0	1		1
Taper Length (ft)	100			50			25			50		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt						0.850						0.850
Flt Protected	0.950									0.950	0.950	
Satd. Flow (prot)	1805	3610	1900	1900	5187	1615	0	1900	0	1715	1715	1615
Flt Permitted	0.950									0.950	0.950	
Satd. Flow (perm)	1805	3610	1900	1900	5187	1615	0	1900	0	1715	1715	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						197						138
Link Speed (mph)		50			50			35			40	
Link Distance (ft)		613			1998			442			664	
Travel Time (s)		8.4			27.2			8.6			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	66	0	0	30	152	0	0	0	137	0	7
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	7	66	0	0	30	152	0	0	0	68	69	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			17			11			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Free	Prot	NA	Free				Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4
Permitted Phases			Free			Free	8					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	6.0	30.0		6.0	30.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	11.0	37.0		11.0	37.0		11.0	11.0		12.0	12.0	12.0
Total Split (s)	20.0	37.0		20.0	37.0		25.0	25.0		29.0	29.0	29.0
Total Split (%)	18.0%	33.3%		18.0%	33.3%		22.5%	22.5%		26.1%	26.1%	26.1%
Maximum Green (s)	15.0	30.0		15.0	30.0		20.0	20.0		23.0	23.0	23.0
Yellow Time (s)	3.0	5.0		3.0	5.0		3.0	3.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	7.0		5.0	7.0			5.0		6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Act Effct Green (s)	6.1	36.6			34.7	52.7				6.9	6.9	6.9
Actuated g/C Ratio	0.12	0.69			0.66	1.00				0.13	0.13	0.13
v/c Ratio	0.03	0.03			0.01	0.09				0.30	0.31	0.02
Control Delay (s/veh)	23.5	4.0			6.3	0.1				25.4	25.5	0.2
Queue Delay	0.0	0.0			0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)	23.5	4.0			6.3	0.1				25.4	25.5	0.2
LOS	C	A			A	A				C	C	A
Approach Delay (s/veh)		5.9			1.1						24.2	
Approach LOS		A			A						C	
90th %ile Green (s)	6.0	41.0		0.0	30.0		0.0	0.0		9.1	9.1	9.1
90th %ile Term Code	Min	Hold		Skip	Max		Skip	Skip		Gap	Gap	Gap
70th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0		7.1	7.1	7.1
70th %ile Term Code	Skip	Max		Skip	Max		Skip	Skip		Gap	Gap	Gap
50th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0		6.4	6.4	6.4
50th %ile Term Code	Skip	Max		Skip	Max		Skip	Skip		Gap	Gap	Gap
30th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0		6.0	6.0	6.0
30th %ile Term Code	Skip	Max		Skip	Max		Skip	Skip		Min	Min	Min
10th %ile Green (s)	0.0	45.0		0.0	45.0		0.0	0.0		0.0	0.0	0.0
10th %ile Term Code	Skip	Dwell		Skip	Dwell		Skip	Skip		Skip	Skip	Skip
Stops (vph)	9	20			13	0				56	56	0
Fuel Used(gal)	0	1			1	2				3	3	0
CO Emissions (g/hr)	16	73			41	124				231	231	16
NOx Emissions (g/hr)	3	14			8	24				45	45	3
VOC Emissions (g/hr)	4	17			10	29				53	54	4
Dilemma Vehicles (#)	0	5			3	0				0	4	0
Queue Length 50th (ft)	2	3			1	0				18	18	0
Queue Length 95th (ft)	13	9			6	0				58	60	0
Internal Link Dist (ft)		533			1918			362			584	
Turn Bay Length (ft)	165					270				350		
Base Capacity (vph)	518	2504			3417	1615				755	755	788
Starvation Cap Reductn	0	0			0	0				0	0	0
Spillback Cap Reductn	0	0			0	0				0	0	0
Storage Cap Reductn	0	0			0	0				0	0	0
Reduced v/c Ratio	0.01	0.03			0.01	0.09				0.09	0.09	0.01

Intersection Summary		
Area Type:	Other	
Cycle Length: 111		
Actuated Cycle Length: 52.7		
Natural Cycle: 75		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.31		
Intersection Signal Delay (s/veh): 10.3		Intersection LOS: B
Intersection Capacity Utilization 40.8%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 63.1		
70th %ile Actuated Cycle: 50.1		
50th %ile Actuated Cycle: 49.4		
30th %ile Actuated Cycle: 49		
10th %ile Actuated Cycle: 52		

Splits and Phases: 9: Crowne Plaza Driveway/College Road East & Scudders Mill Road



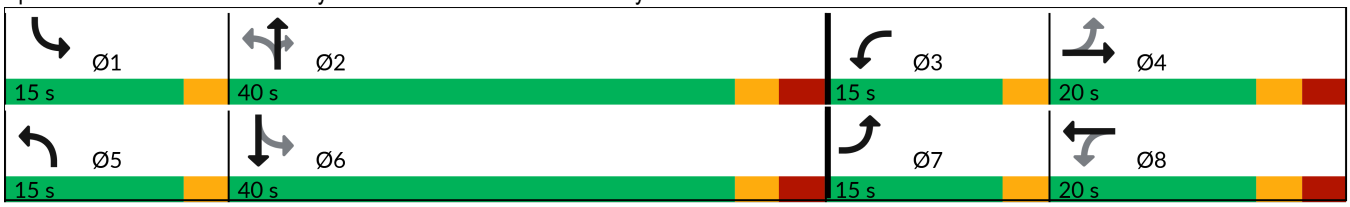


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	9	137	357	9	0	126	192	392	1	175	0
Future Volume (vph)	1	9	137	357	9	0	126	192	392	1	175	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.859							0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1632	0	1805	1900	0	1805	1900	1615	1805	1900	0
Flt Permitted	0.816			0.506			0.510			0.627		
Satd. Flow (perm)	1550	1632	0	961	1900	0	969	1900	1615	1191	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		149							426			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	10	149	388	10	0	137	209	426	1	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	159	0	388	10	0	137	209	426	1	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	12.3	6.5		20.9	16.2		21.7	17.1	17.1	17.2	10.2	
Actuated g/C Ratio	0.25	0.13		0.42	0.33		0.44	0.35	0.35	0.35	0.21	
v/c Ratio	0.00	0.46		0.63	0.02		0.24	0.32	0.51	0.00	0.48	
Control Delay (s/veh)	11.0	11.0		17.3	14.9		10.3	14.9	4.4	9.0	25.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	11.0	11.0		17.3	14.9		10.3	14.9	4.4	9.0	25.0	
LOS	B	B		B	B		B	B	A	A	C	
Approach Delay (s/veh)		11.0			17.2			8.3			24.9	
Approach LOS		B			B			A			C	
90th %ile Green (s)	5.0	9.2		12.0	16.2		10.2	19.8	19.8	5.0	14.6	
90th %ile Term Code	Min	Gap		Max	Hold		Gap	Hold	Hold	Min	Gap	
70th %ile Green (s)	0.0	6.4		12.0	21.4		9.2	23.5	23.5	0.0	11.3	
70th %ile Term Code	Skip	Gap		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		12.0	20.0		7.9	20.4	20.4	0.0	9.5	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	5.0		12.0	20.0		6.8	17.9	17.9	0.0	8.1	
30th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.5	5.5		0.0	6.2	6.2	0.0	6.2	
10th %ile Term Code	Skip	Skip		Gap	Hold		Skip	Hold	Hold	Skip	Gap	
Stops (vph)	2	35		233	9		65	125	43	2	145	
Fuel Used(gal)	0	1		4	0		1	3	3	0	3	
CO Emissions (g/hr)	1	67		297	9		99	177	192	1	181	
NOx Emissions (g/hr)	0	13		58	2		19	35	37	0	35	
VOC Emissions (g/hr)	0	15		69	2		23	41	45	0	42	
Dilemma Vehicles (#)	0	9		0	0		0	13	0	0	11	
Queue Length 50th (ft)	0	3		80	2		24	43	0	0	54	
Queue Length 95th (ft)	3	50		#178	13		56	113	56	2	118	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	703	624		666	760		679	1314	1248	715	1314	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.25		0.58	0.01		0.20	0.16	0.34	0.00	0.14	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 49.4	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay (s/veh): 13.0	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 64	
70th %ile Actuated Cycle: 56.9	
50th %ile Actuated Cycle: 52.4	
30th %ile Actuated Cycle: 49.9	
10th %ile Actuated Cycle: 23.7	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	8	75	0	201	11	73	221
Future Vol, veh/h	8	75	0	201	11	73	221
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	100	-	-	125	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0	1
Mvmt Flow	10	90	0	242	13	88	266

Major/Minor	Minor1		Major1			Major2	
Conflicting Flow All	558	128	266	0	0	255	0
Stage 1	249	-	-	-	-	-	-
Stage 2	309	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2	-
Pot Cap-1 Maneuver	465	905	982	-	-	1321	-
Stage 1	776	-	-	-	-	-	-
Stage 2	724	-	-	-	-	-	-
Platoon blocked, %				-	-		-
Mov Cap-1 Maneuver	434	905	982	-	-	1321	-
Mov Cap-2 Maneuver	434	-	-	-	-	-	-
Stage 1	776	-	-	-	-	-	-
Stage 2	676	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.81	0	1.97
HCM LOS	A		

Minor Lane/Major Mvmt	NBU	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	982	-	-	434	905	1321	-
HCM Lane V/C Ratio	-	-	-	0.022	0.1	0.067	-
HCM Ctrl Dly (s/v)	0	-	-	13.5	9.4	7.9	-
HCM Lane LOS	A	-	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.2	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	260	16	14	258	47	17	0	8	16	0	64
Future Vol, veh/h	66	260	16	14	258	47	17	0	8	16	0	64
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	0	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	80	317	20	17	315	57	21	0	10	20	0	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	372	0	0	337	0	0	837	894	327	827	846	315
Stage 1	-	-	-	-	-	-	488	488	-	349	349	-
Stage 2	-	-	-	-	-	-	349	406	-	478	498	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1198	-	-	1234	-	-	289	283	719	293	301	730
Stage 1	-	-	-	-	-	-	565	553	-	672	637	-
Stage 2	-	-	-	-	-	-	672	601	-	572	548	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1198	-	-	1234	-	-	237	260	719	266	277	730
Mov Cap-2 Maneuver	-	-	-	-	-	-	237	260	-	266	277	-
Stage 1	-	-	-	-	-	-	527	516	-	662	628	-
Stage 2	-	-	-	-	-	-	592	593	-	526	511	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.59	0.35	18.26	12.34
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	302	1198	-	-	1234	-	-	266	730
HCM Lane V/C Ratio	0.101	0.067	-	-	0.014	-	-	0.073	0.107
HCM Ctrl Dly (s/v)	18.3	8.2	-	-	8	-	-	19.6	10.5
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	0.2	0.4

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	62	53	0	0	68	66	58	1	61	0
Future Vol, veh/h	0	0	62	53	0	0	68	66	58	1	61	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	67	58	0	0	74	72	63	1	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	288	351	66	320	320	103	66	0	0	135	0	0
Stage 1	68	68	-	251	251	-	-	-	-	-	-	-
Stage 2	220	283	-	68	68	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	668	577	1003	637	600	957	1548	-	-	1462	-	-
Stage 1	947	842	-	758	703	-	-	-	-	-	-	-
Stage 2	787	681	-	947	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	633	546	1003	563	569	957	1548	-	-	1462	-	-
Mov Cap-2 Maneuver	633	546	-	563	569	-	-	-	-	-	-	-
Stage 1	946	841	-	718	666	-	-	-	-	-	-	-
Stage 2	746	646	-	882	841	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.85	12.12	2.64	0.12
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	583	-	-	1003	563	29	-	-
HCM Lane V/C Ratio	0.048	-	-	0.067	0.102	0.001	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	8.8	12.1	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	3.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	29	38	73	0
Demand Flow Rate, veh/h	29	38	73	0
Vehicles Circulating, veh/h	38	32	0	70
Vehicles Exiting, veh/h	32	41	67	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.9	2.9	3.0	0.0
Approach LOS	A	A	A	-

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	29	38	73	0
Cap Entry Lane, veh/h	1327	1336	1380	1285
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	29	38	73	0
Cap Entry, veh/h	1327	1336	1380	1285
V/C Ratio	0.022	0.028	0.053	0.000
Control Delay, s/veh	2.9	2.9	3.0	2.8
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

APPENDIX H
SUPPLEMENTARY ANALYSIS
FULL BUILD ANALYSIS
PLAINSBORO (INCLUDING BUILDINGS E1 & E2) AND SOUTH BRUNSWICK

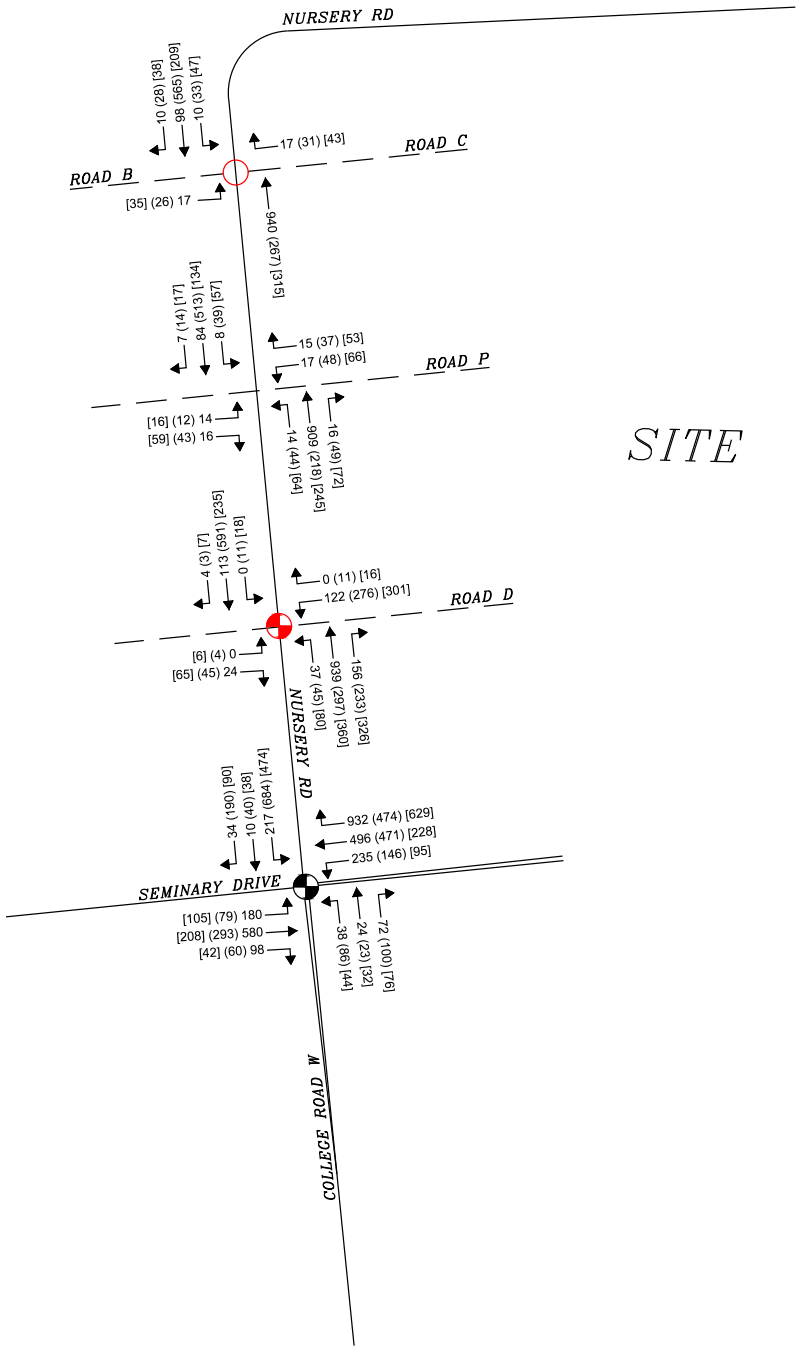
H1 – SUPPLEMENTARY ANALYSIS – FULL BUILD ANALYSIS

Table H1 – Intersection Capacity Analysis Summary (Full Build From College Rd E to S Brunswick Municipal Line)

Intersection (Plainsboro Only)	LANE USE Existing	LANE USE GDP	LANE USE W/ GDP Mit	2029 Full Build Plainsboro (including E1&E2) & South Brunswick (2024 Existing Base Condition)						2029 Full Build Plainsboro (including E1&E2) & South Brunswick (Pre-COVID Condition)					
				AM		PM		SAT		AM		PM		SAT	
				LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
SIGNALIZED INTERSECTIONS															
College Rd W and Seminary Dr and Nursey Rd	**Overall**	**Overall**	**Overall**	**B**	**14.4**	**C**	**20.6**	**B**	**15.4**	**B**	**16.3**	**C**	**22.7**	**B**	**16.6**
	EB-L	EB-L	EB-L	A	9.4	B	15.4	B	11.9	A	8.8	B	18.8	B	13.0
	EB-TTR	EB-TTR	EB-TTR	C	21.2	C	21.4	B	16.2	C	22.6	B	18.3	B	15.6
	WB-L	WB-L	WB-L	B	13.3	B	17.1	B	11.9	C	25.5	B	19.8	B	13.0
	WB-T	WB-TT	WB-TT	B	18.3	C	23.3	B	17.6	B	16.1	C	28.7	B	19.0
	WB-R	WB-R	WB-R	A	2.4	A	0.5	A	0.8	A	1.7	A	0.5	A	1.0
	NB-L	NB-LL	NB-LL	D	37.8	D	43.1	D	37.1	D	40.0	D	45.3	D	39.6
	NB-TR	NB-T	NB-T	D	39.6	D	42.3	D	39.7	D	41.6	D	43.0	D	41.5
	-	NB-R	NB-R	A	8.9	B	15.1	A	7.7	B	14.1	B	15.6	B	13.3
	SB-L	SB-LL	SB-LL	D	37.8	C	34.9	C	33.3	D	40.0	D	36.4	D	35.4
	SB-LTTR	SB-T	SB-T	C	32.1	C	23.8	C	25.9	D	35.1	C	25.1	C	25.6
	-	SB-R	SB-R	A	0.9	A	5.4	A	5.2	A	0.8	A	8.1	A	6.1
PROPOSED SIGNALIZED INTERSECTIONS															
Nursery Road and Road D	-	-	**Overall**	**B**	**16.6**	**B**	**15.8**	**B**	**12.2**	**B**	**16.6**	**B**	**15.8**	**B**	**12.2**
	-	-	EB-L	B	18.0	B	19.2	B	12.7	B	18.0	B	19.2	B	12.7
	-	-	EB-TR	A	0.1	A	0.4	A	0.3	A	0.1	A	0.4	A	0.3
	-	-	WB-L	C	23.5	C	27.5	B	17.6	C	23.5	C	27.5	B	17.6
	-	-	WB-TR	C	23.0	A	0.0	A	0.1	C	23.0	A	0.0	A	0.1
	-	-	NB-L	A	4.8	A	6.3	A	7.7	A	4.8	A	6.3	A	7.7
	-	-	NB-T	B	19.6	B	10.3	B	14.5	B	19.6	B	10.3	B	14.5
	-	-	NB-R	A	3.8	A	2.4	A	3.4	A	3.8	A	2.4	A	3.4
	-	-	SB-L	A	5.0	A	5.9	A	7.6	A	5.0	A	5.9	A	7.6
	-	-	SB-TR	A	9.1	C	20.8	B	19.7	A	9.1	C	20.8	B	19.7
UNSIGNALIZED INTERSECTIONS															
Nursery Road and Road P	-	-	EB-LTR	C	18.6	C	16.1	B	11.6	C	18.6	C	16.1	B	11.6
	-	-	WB-LTR	D	25.0	C	24.7	C	18.5	D	25.0	C	24.7	C	18.5
	-	-	NB-LTR	A	7.4	A	8.7	A	7.7	A	7.4	A	8.7	A	7.7
	-	-	SB-LTR	B	10.2	A	7.9	A	8.1	B	10.2	A	7.9	A	8.1
ROUNDABOUT INTERSECTIONS															
Nursery Road and Road B / Road C	-	-	**Overall**	**B**	**13.1**	**A**	**6.6**	**A**	**4.8**	**B**	**13.1**	**A**	**6.6**	**A**	**4.8**
	-	-	EB-LTR	A	3.1	A	5.5	A	3.8	A	3.1	A	5.5	A	3.8
	-	-	WB-LTR	A	8.0	A	3.9	A	4.3	A	8.0	A	3.9	A	4.3
	-	-	NB-LTR	B	14.5	A	4.7	A	5.3	B	14.5	A	4.7	A	5.3
			SB-LTR	A	3.3	A	7.6	A	4.5	A	3.3	A	7.6	A	4.5

**Based on Synchro Software [Level of Service (Average vehicle delay [seconds per vehicle])]

* Third thru land analyzed during the AM and PM peak hours based on NJDOT congestion relief program



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- PROPOSED DRIVEWAY
- AM (PM) [SATURDAY] PEAK HOUR
- TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- PROPOSED ROUNDABOUT

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Langan CT, Inc.
Langan International LLC
Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

Project

PRINCETON NURSERIES

PLAINSBORO

MIDDLESEX COUNTY NEW JERSEY

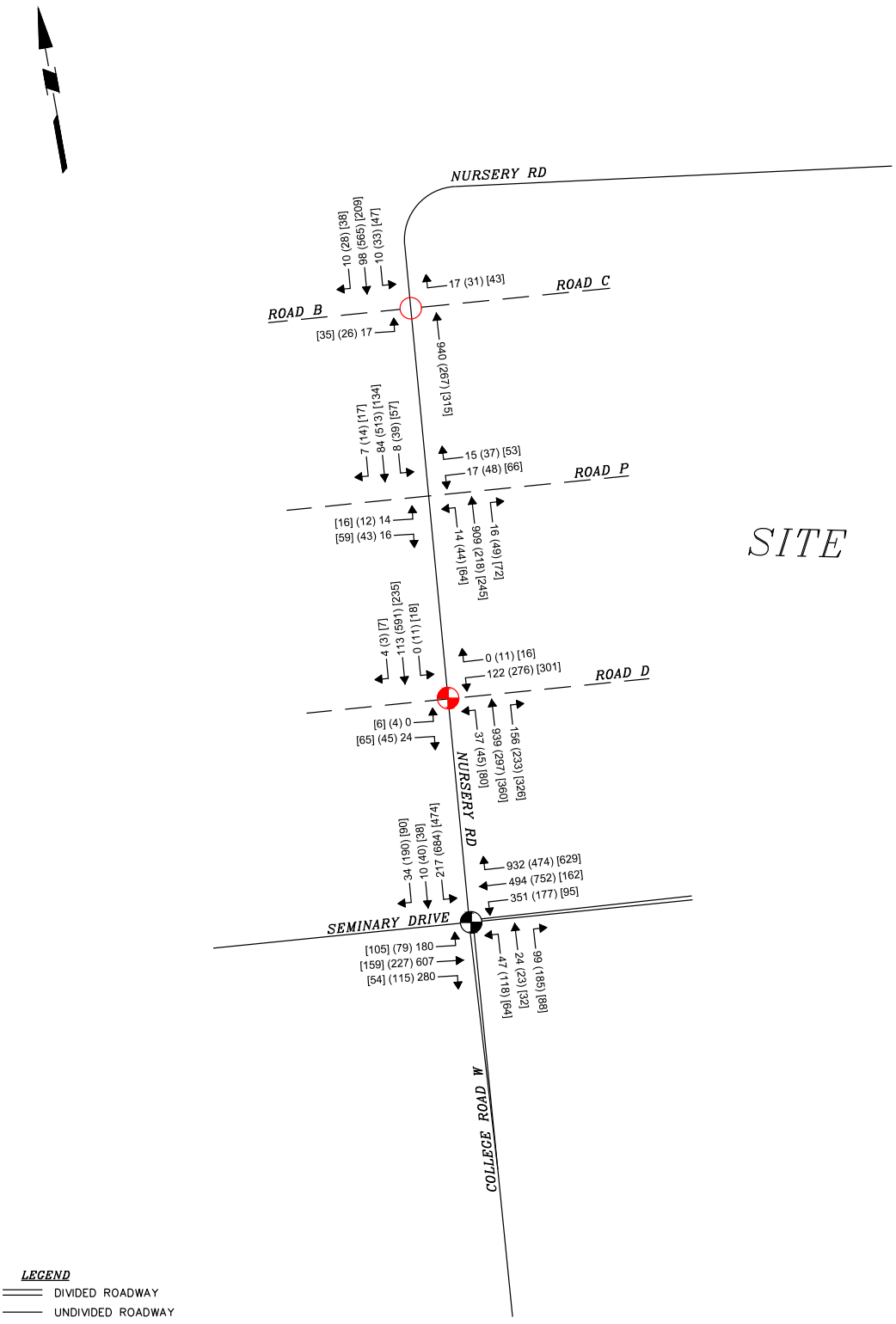
Drawing Title

2029 BUILD TRAFFIC VOLUMES - NURSERY ROAD FROM COLLEGE ROAD EAST TO SOUTH BRUNSWICK MUNICIPAL LINE FULL BUILD ANALYSIS (2024 EXISTING BASE CONDITION) (WITH E1 & E2)

Project No. 130091505	Drawing No. FIGURE 16
Date 5/23/2025	
Scale 1" = 1'	
Drawn By KAMP / Checked By	
Submission Date MAY 2025	Sheet 22 of 23

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Filename: \\langan.com\data\LAW\data5\130091505\Project Data_Discipline\Traffic\Figures & Tables\2025-05 Figures - Revised for E1&E2 changes\2025-05 Princeton Nurseries - Plainsboro TIS - E1&E2 Updates.dwg Date: 5/23/2025 Time: 08:52 User: psabolchick
Style Table: Langan_OCE.stb Layout: 16-BuildFull



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- PROPOSED DRIVEWAY
- AM (PM) [SATURDAY] PEAK HOUR
- TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- PROPOSED ROUNDABOUT

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Project

PRINCETON NURSERIES

PLAINSBORO

MIDDLESEX COUNTY NEW JERSEY

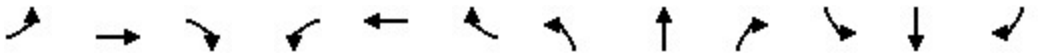
Drawing Title

2029 BUILD TRAFFIC VOLUMES - NURSERY ROAD FROM COLLEGE ROAD EAST TO SOUTH BRUNSWICK MUNICIPAL LINE FULL BUILD ANALYSIS (PRE-COVID CONDITION) (WITH E1 & E2)

Project No. 130091505	Drawing No. FIGURE 16A
Date 5/23/2025	
Scale 1" = 1'	
Drawn By KAMP / Checked By	
Submission Date MAY 2025	Sheet 23 of 23

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Filename: \\langan.com\data\LAW\data5\130091505\Project Data_Discipline\Traffic\Figures & Tables\2025-05 Figures - Revised for E1&E2 changes\2025-05 Princeton Nurseries - Plainsboro TIS - E1&E2 Updates.dwg Date: 5/23/2025 Time: 08:52 User: psabolchick
Style Table: Langan_OCE.stb Layout: 16A-BuildFullPreCOVID



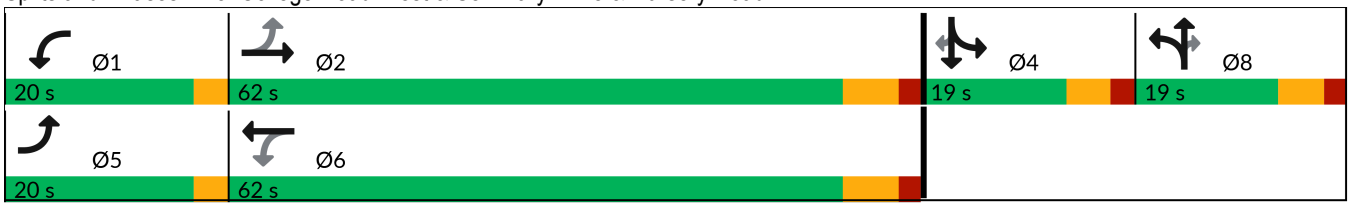
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	580	98	235	496	932	38	24	72	217	10	34
Future Volume (vph)	180	580	98	235	496	932	38	24	72	217	10	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.978				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3496	0	1787	3539	1615	3273	1900	1495	3502	1900	1615
Flt Permitted	0.413			0.250			0.950			0.950		
Satd. Flow (perm)	785	3496	0	470	3539	1615	3273	1900	1495	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				773			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	7%	0%	8%	0%	0%	0%
Adj. Flow (vph)	214	690	117	280	590	1110	45	29	86	258	12	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	214	807	0	280	590	1110	45	29	86	258	12	40
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

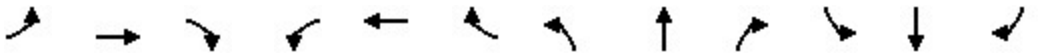
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	43.9	30.7		46.7	32.1	76.8	6.0	6.0	6.0	10.1	10.1	10.1
Actuated g/C Ratio	0.57	0.40		0.61	0.42	1.00	0.08	0.08	0.08	0.13	0.13	0.13
v/c Ratio	0.38	0.57		0.60	0.40	0.69	0.18	0.20	0.38	0.56	0.05	0.13
Control Delay (s/veh)	9.4	21.2		13.3	18.3	2.4	37.8	39.6	8.9	37.8	32.1	0.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.4	21.2		13.3	18.3	2.4	37.8	39.6	8.9	37.8	32.1	0.9
LOS	A	C		B	B	A	D	D	A	D	C	A
Approach Delay (s/veh)		18.7			8.7			22.6			32.8	
Approach LOS		B			A			C			C	
90th %ile Green (s)	13.0	31.1		14.9	33.0		7.6	7.6	7.6	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Gap	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	10.5	30.0		12.3	31.8		6.4	6.4	6.4	11.6	11.6	11.6
70th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	9.2	30.0		10.8	31.6		5.7	5.7	5.7	10.2	10.2	10.2
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	7.9	30.0		9.2	31.3		5.1	5.1	5.1	9.0	9.0	9.0
30th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	5.8	30.0		6.3	30.5		0.0	0.0	0.0	7.0	7.0	7.0
10th %ile Term Code	Gap	Min		Gap	Hold		Skip	Skip	Skip	Min	Min	Min
Stops (vph)	77	495		99	329	2	35	24	7	193	11	0
Fuel Used(gal)	2	11		2	7	4	1	1	1	4	0	0
CO Emissions (g/hr)	142	789		171	479	267	60	40	44	299	14	13
NOx Emissions (g/hr)	28	153		33	93	52	12	8	9	58	3	3
VOC Emissions (g/hr)	33	183		40	111	62	14	9	10	69	3	3
Dilemma Vehicles (#)	0	33		0	24	0	0	1	0	0	1	0
Queue Length 50th (ft)	42	158		57	105	0	10	14	0	62	5	0
Queue Length 95th (ft)	76	232		99	158	0	26	38	19	99	20	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	722	2555		592	2580	1615	564	327	355	603	327	376
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.30	0.32		0.47	0.23	0.69	0.08	0.09	0.24	0.43	0.04	0.11

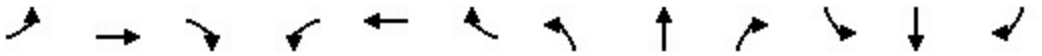
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 76.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 14.4		Intersection LOS: B	
Intersection Capacity Utilization 65.0%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 88.6			
70th %ile Actuated Cycle: 82.3			
50th %ile Actuated Cycle: 78.7			
30th %ile Actuated Cycle: 75.3			
10th %ile Actuated Cycle: 59.3			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	293	60	146	471	474	86	23	100	684	40	190
Future Volume (vph)	79	293	60	146	471	474	86	23	100	684	40	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.974				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3470	0	1736	3574	1615	3502	1900	1583	3502	1900	1615
Flt Permitted	0.457			0.516			0.950			0.950		
Satd. Flow (perm)	868	3470	0	943	3574	1615	3502	1900	1583	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				489			109			196
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	3%	4%	1%	0%	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	81	302	62	151	486	489	89	24	103	705	41	196
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	364	0	151	486	489	89	24	103	705	41	196
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

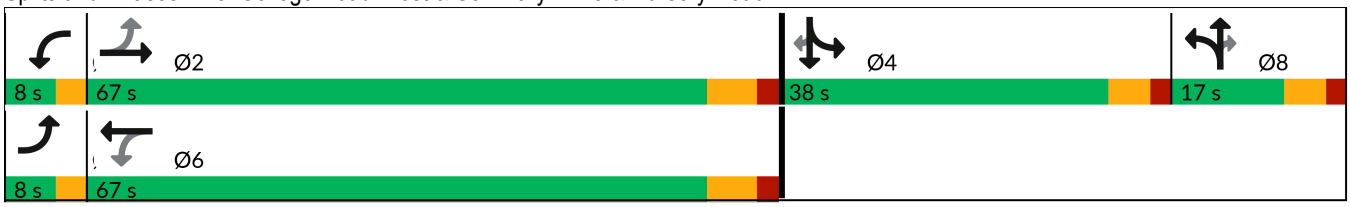


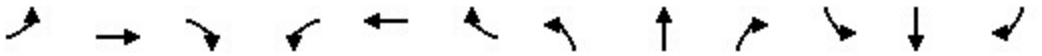
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.2	30.2		39.9	32.0	87.4	6.7	6.7	6.7	23.3	23.3	23.3
Actuated g/C Ratio	0.45	0.35		0.46	0.37	1.00	0.08	0.08	0.08	0.27	0.27	0.27
v/c Ratio	0.18	0.30		0.32	0.37	0.30	0.33	0.16	0.46	0.75	0.08	0.34
Control Delay (s/veh)	15.4	21.4		17.1	23.3	0.5	43.1	42.3	15.1	34.9	23.8	5.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.4	21.4		17.1	23.3	0.5	43.1	42.3	15.1	34.9	23.8	5.4
LOS	B	C		B	C	A	D	D	B	C	C	A
Approach Delay (s/veh)		20.3			12.6			29.7			28.3	
Approach LOS		C			B			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.6	8.6	8.6	31.9	31.9	31.9
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.6	7.6	7.6	26.2	26.2	26.2
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.8	6.8	6.8	23.6	23.6	23.6
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		6.0	6.0	6.0	20.3	20.3	20.3
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.0	5.0	5.0	16.1	16.1	16.1
10th %ile Term Code	Skip	Min		Max	Hold		Min	Min	Min	Gap	Gap	Gap
Stops (vph)	42	231		87	336	0	76	22	18	594	29	22
Fuel Used(gal)	1	6		2	7	2	2	1	1	13	1	1
CO Emissions (g/hr)	75	393		132	505	122	141	38	75	906	44	97
NOx Emissions (g/hr)	14	76		26	98	24	27	7	15	176	8	19
VOC Emissions (g/hr)	17	91		31	117	28	33	9	17	210	10	22
Dilemma Vehicles (#)	0	15		0	20	0	0	1	0	0	2	0
Queue Length 50th (ft)	23	70		45	105	0	24	13	0	182	17	0
Queue Length 95th (ft)	58	124		99	173	0	51	39	45	247	41	47
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	443	2402		475	2466	1615	443	240	295	1289	699	718
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.18	0.15		0.32	0.20	0.30	0.20	0.10	0.35	0.55	0.06	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 87.4			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 20.6		Intersection LOS: C	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 97.5			
70th %ile Actuated Cycle: 90.8			
50th %ile Actuated Cycle: 87.4			
30th %ile Actuated Cycle: 83.3			
10th %ile Actuated Cycle: 78.1			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





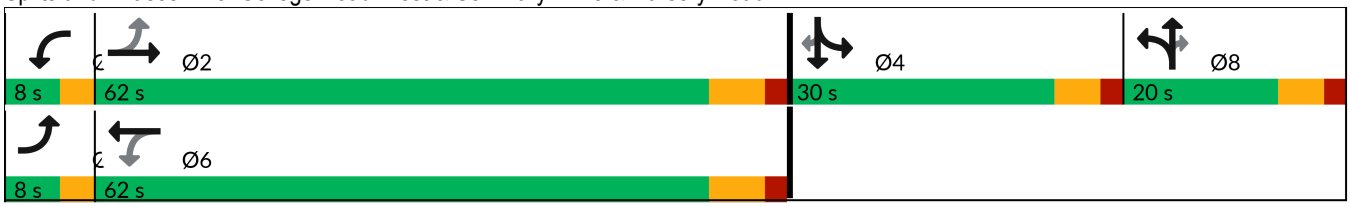
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	208	42	95	228	629	44	32	76	474	38	90
Future Volume (vph)	105	208	42	95	228	629	44	32	76	474	38	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.975				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3491	0	1752	3610	1615	3502	1900	1568	3502	1900	1615
Flt Permitted	0.598			0.584			0.950			0.950		
Satd. Flow (perm)	1136	3491	0	1077	3610	1615	3502	1900	1568	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26				684			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	3%	0%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	114	226	46	103	248	684	48	35	83	515	41	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	272	0	103	248	684	48	35	83	515	41	98
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

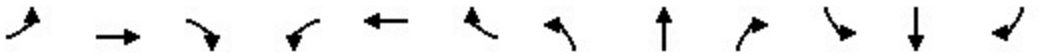
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	38.8	30.9		38.8	30.9	76.0	6.2	6.2	6.2	16.4	16.4	16.4
Actuated g/C Ratio	0.51	0.41		0.51	0.41	1.00	0.08	0.08	0.08	0.22	0.22	0.22
v/c Ratio	0.18	0.19		0.17	0.17	0.42	0.17	0.23	0.35	0.68	0.10	0.22
Control Delay (s/veh)	11.9	16.2		11.9	17.6	0.8	37.1	39.7	7.7	33.3	25.9	5.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.9	16.2		11.9	17.6	0.8	37.1	39.7	7.7	33.3	25.9	5.2
LOS	B	B		B	B	A	D	D	A	C	C	A
Approach Delay (s/veh)		14.9			5.9			23.0			28.6	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.0	8.0	8.0	22.8	22.8	22.8
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
70th %ile Green (s)	5.0	30.0		5.0	30.0		6.8	6.8	6.8	18.7	18.7	18.7
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.0	6.0	6.0	16.8	16.8	16.8
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.2	5.2	5.2	14.0	14.0	14.0
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		0.0	30.0		0.0	0.0	0.0	10.5	10.5	10.5
10th %ile Term Code	Skip	Min		Skip	Min		Skip	Skip	Skip	Gap	Gap	Gap
Stops (vph)	53	141		47	140	0	41	31	6	410	31	10
Fuel Used(gal)	1	3		1	3	2	1	1	1	9	1	1
CO Emissions (g/hr)	92	244		72	211	165	70	53	44	616	44	45
NOx Emissions (g/hr)	18	48		14	41	32	14	10	9	120	9	9
VOC Emissions (g/hr)	21	57		17	49	38	16	12	10	143	10	10
Dilemma Vehicles (#)	0	12		0	11	0	0	2	0	0	2	0
Queue Length 50th (ft)	27	42		24	42	0	11	17	0	123	17	0
Queue Length 95th (ft)	63	79		59	78	0	29	47	23	177	42	27
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	625	2593		595	2674	1615	665	361	393	1140	618	605
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.18	0.10		0.17	0.09	0.42	0.07	0.10	0.21	0.45	0.07	0.16

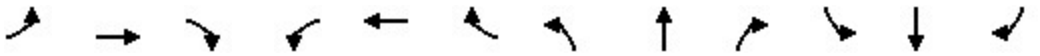
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 76			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 15.4		Intersection LOS: B	
Intersection Capacity Utilization 65.2%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 87.8			
70th %ile Actuated Cycle: 82.5			
50th %ile Actuated Cycle: 79.8			
30th %ile Actuated Cycle: 76.2			
10th %ile Actuated Cycle: 53.5			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	607	280	351	494	932	47	24	99	217	10	34
Future Volume (vph)	180	607	280	351	494	932	47	24	99	217	10	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.953				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3440	0	1787	3574	1615	3502	1900	1455	3502	1900	1615
Flt Permitted	0.462			0.178			0.950			0.950		
Satd. Flow (perm)	878	3440	0	335	3574	1615	3502	1900	1455	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		83				804			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	11%	0%	0%	0%
Adj. Flow (vph)	188	632	292	366	515	971	49	25	103	226	10	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	188	924	0	366	515	971	49	25	103	226	10	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

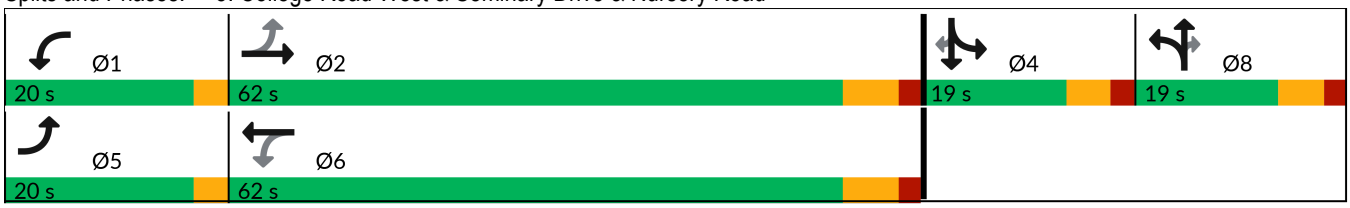


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	20.0	62.0		20.0	62.0		19.0	19.0	19.0	19.0	19.0	19.0
Total Split (%)	16.7%	51.7%		16.7%	51.7%		15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Maximum Green (s)	17.0	55.0		17.0	55.0		13.0	13.0	13.0	13.0	13.0	13.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	44.2	31.6		52.5	36.7	80.8	6.1	6.1	6.1	9.8	9.8	9.8
Actuated g/C Ratio	0.55	0.39		0.65	0.45	1.00	0.08	0.08	0.08	0.12	0.12	0.12
v/c Ratio	0.32	0.66		0.79	0.32	0.60	0.19	0.18	0.47	0.53	0.04	0.12
Control Delay (s/veh)	8.9	22.6		25.5	16.1	1.7	40.0	41.6	14.1	40.0	35.1	0.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.9	22.6		25.5	16.1	1.7	40.0	41.6	14.1	40.0	35.1	0.8
LOS	A	C		C	B	A	D	D	B	D	D	A
Approach Delay (s/veh)		20.3			10.4			25.2			34.8	
Approach LOS		C			B			C			C	
90th %ile Green (s)	11.7	35.6		17.0	40.9		8.5	8.5	8.5	13.0	13.0	13.0
90th %ile Term Code	Gap	Gap		Max	Hold		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	9.8	30.0		16.9	37.1		6.3	6.3	6.3	11.1	11.1	11.1
70th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	8.5	30.0		14.0	35.5		5.6	5.6	5.6	9.7	9.7	9.7
50th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	7.4	30.0		12.0	34.6		5.1	5.1	5.1	8.5	8.5	8.5
30th %ile Term Code	Gap	Min		Gap	Hold		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	6.1	30.0		9.6	33.5		0.0	0.0	0.0	7.0	7.0	7.0
10th %ile Term Code	Gap	Min		Gap	Hold		Skip	Skip	Skip	Min	Min	Min
Stops (vph)	80	643		169	297	1	43	25	14	193	12	0
Fuel Used(gal)	2	15		5	6	4	1	1	1	4	0	0
CO Emissions (g/hr)	142	1047		332	441	257	76	41	71	305	15	13
NOx Emissions (g/hr)	28	204		65	86	50	15	8	14	59	3	3
VOC Emissions (g/hr)	33	243		77	102	59	18	10	16	71	3	3
Dilemma Vehicles (#)	0	41		0	23	0	0	1	0	0	0	0
Queue Length 50th (ft)	35	187		87	86	0	12	12	0	56	5	0
Queue Length 95th (ft)	74	298		#241	146	0	32	40	40	103	21	0
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	758	2415		529	2482	1615	574	312	337	574	312	363
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

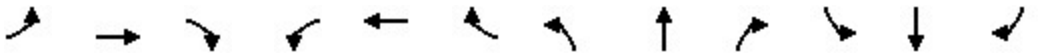
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.25	0.38		0.69	0.21	0.60	0.09	0.08	0.31	0.39	0.03	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 80.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 16.3		Intersection LOS: B	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 96.1			
70th %ile Actuated Cycle: 86.3			
50th %ile Actuated Cycle: 81.3			
30th %ile Actuated Cycle: 77.6			
10th %ile Actuated Cycle: 62.6			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	227	115	177	752	474	118	23	185	684	40	190
Future Volume (vph)	79	227	115	177	752	474	118	23	185	684	40	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.950				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3407	0	1805	3610	1615	3502	1900	1599	3502	1900	1615
Flt Permitted	0.230			0.507			0.950			0.950		
Satd. Flow (perm)	437	3407	0	963	3610	1615	3502	1900	1599	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91				365			201			176
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		758			424			875			734	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	86	247	125	192	817	515	128	25	201	743	43	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	372	0	192	817	515	128	25	201	743	43	207
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

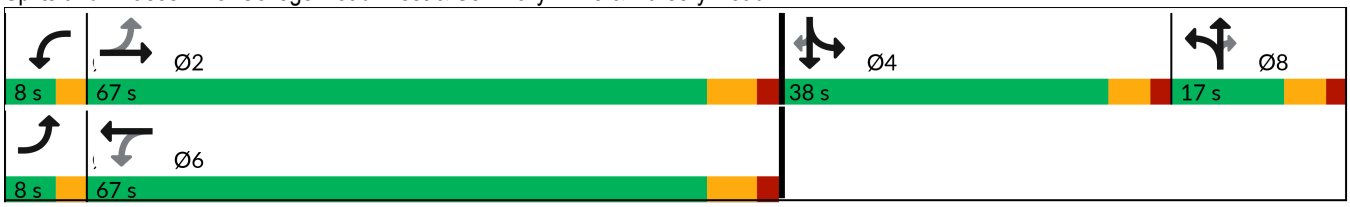


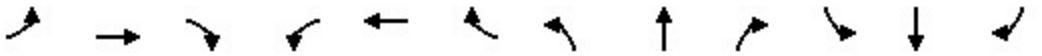
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	67.0		8.0	67.0		17.0	17.0	17.0	38.0	38.0	38.0
Total Split (%)	6.2%	51.5%		6.2%	51.5%		13.1%	13.1%	13.1%	29.2%	29.2%	29.2%
Maximum Green (s)	5.0	60.0		5.0	60.0		11.0	11.0	11.0	32.0	32.0	32.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	40.1	31.0		40.8	32.8	91.6	8.0	8.0	8.0	25.4	25.4	25.4
Actuated g/C Ratio	0.44	0.34		0.45	0.36	1.00	0.09	0.09	0.09	0.28	0.28	0.28
v/c Ratio	0.32	0.31		0.40	0.63	0.32	0.42	0.15	0.62	0.77	0.08	0.36
Control Delay (s/veh)	18.8	18.3		19.8	28.7	0.5	45.3	43.0	15.6	36.4	25.1	8.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	18.3		19.8	28.7	0.5	45.3	43.0	15.6	36.4	25.1	8.1
LOS	B	B		B	C	A	D	D	B	D	C	A
Approach Delay (s/veh)		18.4			18.0			28.2			30.0	
Approach LOS		B			B			C			C	
90th %ile Green (s)	5.0	34.6		5.0	34.6		11.0	11.0	11.0	32.0	32.0	32.0
90th %ile Term Code	Max	Hold		Max	Gap		Max	Max	Max	Max	Max	Max
70th %ile Green (s)	5.0	30.0		5.0	30.0		8.8	8.8	8.8	29.5	29.5	29.5
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		7.9	7.9	7.9	25.7	25.7	25.7
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		7.0	7.0	7.0	22.1	22.1	22.1
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	30.0		5.0	38.0		5.7	5.7	5.7	18.7	18.7	18.7
10th %ile Term Code	Skip	Min		Max	Hold		Gap	Gap	Gap	Gap	Gap	Gap
Stops (vph)	44	182		112	606	0	105	21	29	597	29	34
Fuel Used(gal)	1	5		2	13	2	3	1	2	13	1	2
CO Emissions (g/hr)	80	337		171	912	122	197	38	138	921	44	110
NOx Emissions (g/hr)	16	66		33	177	24	38	7	27	179	9	21
VOC Emissions (g/hr)	18	78		40	211	28	46	9	32	214	10	26
Dilemma Vehicles (#)	0	14		0	31	0	0	1	0	0	2	0
Queue Length 50th (ft)	27	61		64	210	0	36	14	0	198	18	13
Queue Length 95th (ft)	63	110		126	315	0	71	42	67	291	46	68
Internal Link Dist (ft)		678			344			795			654	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	266	2279		475	2381	1615	423	229	370	1232	668	682
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.32	0.16		0.40	0.34	0.32	0.30	0.11	0.54	0.60	0.06	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 91.6			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 22.7		Intersection LOS: C	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 104.6			
70th %ile Actuated Cycle: 95.3			
50th %ile Actuated Cycle: 90.6			
30th %ile Actuated Cycle: 86.1			
10th %ile Actuated Cycle: 81.4			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





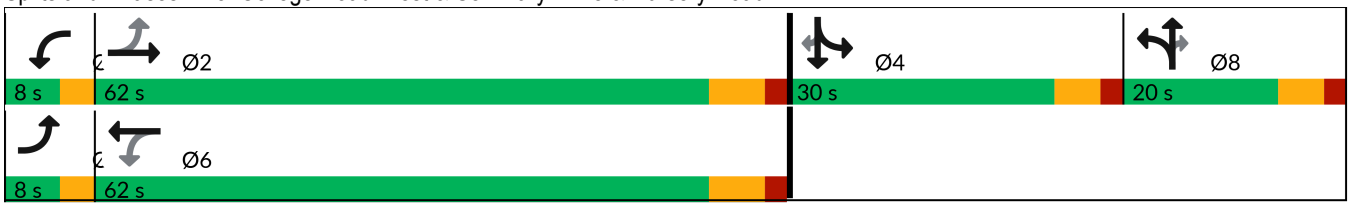
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	159	54	95	162	629	64	32	88	474	38	90
Future Volume (vph)	105	159	54	95	162	629	64	32	88	474	38	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		120	0		0	150		150	400		200
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt		0.962				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3372	0	1752	3574	1615	3502	1900	1615	3502	1900	1615
Flt Permitted	0.627			0.591			0.950			0.950		
Satd. Flow (perm)	1191	3372	0	1090	3574	1615	3502	1900	1615	3502	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		51				767			118			118
Link Speed (mph)		40			40			40			35	
Link Distance (ft)		759			424			877			733	
Travel Time (s)		12.9			7.2			14.9			14.3	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	4%	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	128	194	66	116	198	767	78	39	107	578	46	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	260	0	116	198	767	78	39	107	578	46	110
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	L NA	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Free	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	

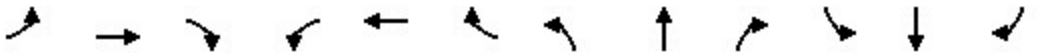
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6		Free			8			4
Detector Phase	5	2		1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	7.0	7.0	7.0
Minimum Split (s)	8.0	37.0		8.0	37.0		11.0	11.0	11.0	13.0	13.0	13.0
Total Split (s)	8.0	62.0		8.0	62.0		20.0	20.0	20.0	30.0	30.0	30.0
Total Split (%)	6.7%	51.7%		6.7%	51.7%		16.7%	16.7%	16.7%	25.0%	25.0%	25.0%
Maximum Green (s)	5.0	55.0		5.0	55.0		14.0	14.0	14.0	24.0	24.0	24.0
Yellow Time (s)	3.0	5.0		3.0	5.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	7.0		3.0	7.0		6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
Act Effct Green (s)	39.1	30.1		39.1	30.1	82.2	6.4	6.4	6.4	18.6	18.6	18.6
Actuated g/C Ratio	0.48	0.37		0.48	0.37	1.00	0.08	0.08	0.08	0.23	0.23	0.23
v/c Ratio	0.21	0.21		0.21	0.15	0.47	0.28	0.26	0.46	0.73	0.11	0.24
Control Delay (s/veh)	13.0	15.6		13.0	19.0	1.0	39.6	41.5	13.3	35.4	25.6	6.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.0	15.6		13.0	19.0	1.0	39.6	41.5	13.3	35.4	25.6	6.1
LOS	B	B		B	B	A	D	D	B	D	C	A
Approach Delay (s/veh)		14.7			5.6			27.4			30.4	
Approach LOS		B			A			C			C	
90th %ile Green (s)	5.0	30.0		5.0	30.0		8.3	8.3	8.3	24.0	24.0	24.0
90th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Max	Max	Max
70th %ile Green (s)	5.0	30.0		5.0	30.0		7.0	7.0	7.0	21.2	21.2	21.2
70th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
50th %ile Green (s)	5.0	30.0		5.0	30.0		6.4	6.4	6.4	19.1	19.1	19.1
50th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
30th %ile Green (s)	5.0	30.0		5.0	30.0		5.7	5.7	5.7	16.1	16.1	16.1
30th %ile Term Code	Max	Min		Max	Min		Gap	Gap	Gap	Gap	Gap	Gap
10th %ile Green (s)	5.0	30.0		5.0	30.0		5.0	5.0	5.0	13.4	13.4	13.4
10th %ile Term Code	Max	Min		Max	Min		Min	Min	Min	Gap	Gap	Gap
Stops (vph)	56	112		51	103	0	57	31	15	419	29	13
Fuel Used(gal)	1	3		1	2	2	1	1	1	9	1	1
CO Emissions (g/hr)	96	201		76	155	167	102	53	64	634	43	48
NOx Emissions (g/hr)	19	39		15	30	32	20	10	12	123	8	9
VOC Emissions (g/hr)	22	47		18	36	39	24	12	15	147	10	11
Dilemma Vehicles (#)	0	10		0	7	0	0	2	0	0	2	0
Queue Length 50th (ft)	33	37		30	35	0	20	19	0	142	19	0
Queue Length 95th (ft)	65	64		60	59	0	38	46	31	179	42	27
Internal Link Dist (ft)		679			344			797			653	
Turn Bay Length (ft)	150						150		150	400		200
Base Capacity (vph)	604	2279		559	2398	1615	598	324	373	1025	556	556
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.21	0.11		0.21	0.08	0.47	0.13	0.12	0.29	0.56	0.08	0.20

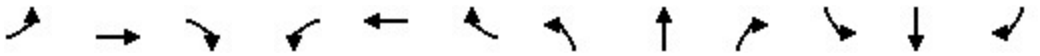
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 82.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 16.6		Intersection LOS: B	
Intersection Capacity Utilization 65.2%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 89.3			
70th %ile Actuated Cycle: 85.2			
50th %ile Actuated Cycle: 82.5			
30th %ile Actuated Cycle: 78.8			
10th %ile Actuated Cycle: 75.4			

Splits and Phases: 5: College Road West & Seminary Drive & Nursery Road





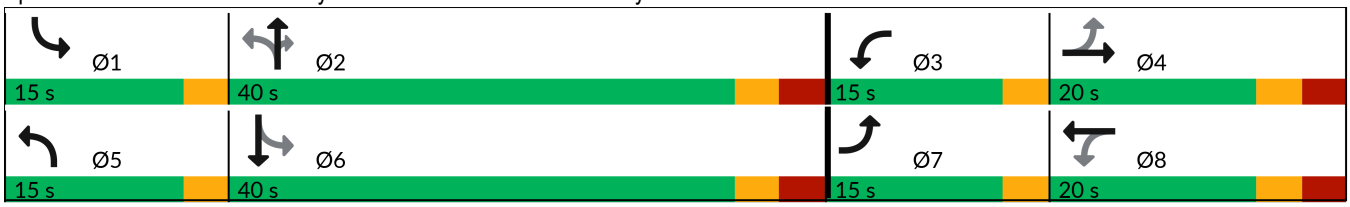
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	24	122	1	0	37	939	156	1	113	4
Future Volume (vph)	1	0	24	122	1	0	37	939	156	1	113	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850							0.850		0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1615	0	1805	1900	0	1805	1900	1615	1805	1890	0
Flt Permitted				0.833			0.654			0.100		
Satd. Flow (perm)	1900	1615	0	1583	1900	0	1243	1900	1615	190	1890	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		775							118		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	0	26	133	1	0	40	1021	170	1	123	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	26	0	133	1	0	40	1021	170	1	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

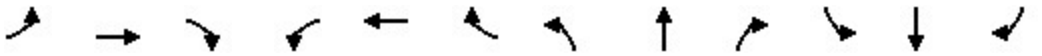


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	8.0	5.1		12.4	8.6		45.2	42.5	42.5	44.2	40.7	
Actuated g/C Ratio	0.13	0.08		0.20	0.14		0.73	0.68	0.68	0.71	0.66	
v/c Ratio	0.00	0.03		0.39	0.00		0.04	0.78	0.15	0.00	0.10	
Control Delay (s/veh)	18.0	0.1		23.5	23.0		4.8	19.6	3.8	5.0	9.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	18.0	0.1		23.5	23.0		4.8	19.6	3.8	5.0	9.1	
LOS	B	A		C	C		A	B	A	A	A	
Approach Delay (s/veh)		0.7			23.5			17.0			9.0	
Approach LOS		A			C			B			A	
90th %ile Green (s)	5.0	5.0		11.8	11.8		6.0	34.0	34.0	5.0	33.0	
90th %ile Term Code	Min	Min		Gap	Hold		Gap	Max	Max	Min	Hold	
70th %ile Green (s)	0.0	5.0		9.0	17.0		5.4	34.0	34.0	0.0	25.6	
70th %ile Term Code	Skip	Min		Gap	Hold		Gap	Max	Max	Skip	Hold	
50th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	38.6	38.6	0.0	38.6	
50th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
30th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	46.2	46.2	0.0	46.2	
30th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	49.0	49.0	0.0	49.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	3	0		92	3		14	496	29	1	53	
Fuel Used(gal)	0	0		2	0		0	12	1	0	1	
CO Emissions (g/hr)	2	4		119	2		24	871	81	1	71	
NOx Emissions (g/hr)	0	1		23	0		5	169	16	0	14	
VOC Emissions (g/hr)	0	1		28	0		5	202	19	0	17	
Dilemma Vehicles (#)	0	1		0	0		0	56	0	0	7	
Queue Length 50th (ft)	0	0		41	0		2	169	4	0	10	
Queue Length 95th (ft)	3	0		86	4		17	#787	45	2	63	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	442	966		439	451		1022	1301	1143	455	1295	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.03		0.30	0.00		0.04	0.78	0.15	0.00	0.10	

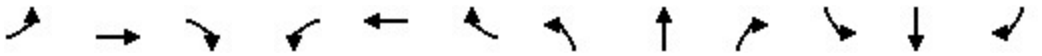
Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 62.1		
Natural Cycle: 80		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.78		
Intersection Signal Delay (s/veh): 16.6		Intersection LOS: B
Intersection Capacity Utilization 72.8%		ICU Level of Service C
Analysis Period (min) 15		
90th %ile Actuated Cycle: 73.8		
70th %ile Actuated Cycle: 63		
50th %ile Actuated Cycle: 55.6		
30th %ile Actuated Cycle: 63.2		
10th %ile Actuated Cycle: 55		
# 95th percentile volume exceeds capacity, queue may be longer.		
Queue shown is maximum after two cycles.		

Splits and Phases: 36: Nursery Road & South Internal Driveway





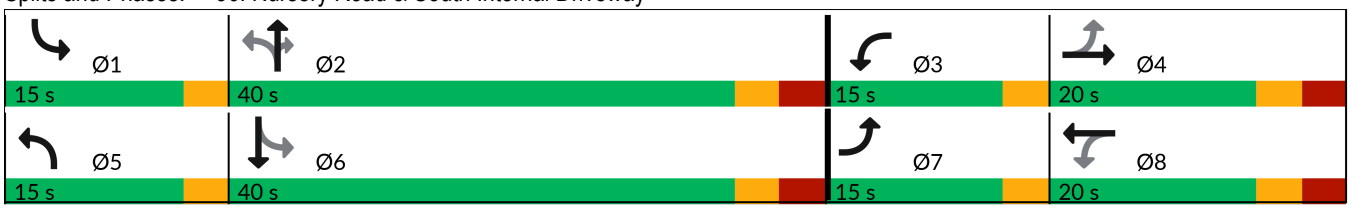
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	45	276	0	11	45	297	233	11	591	3
Future Volume (vph)	4	0	45	276	0	11	45	297	233	11	591	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850				0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1615	0	1805	1615	0	1805	1900	1615	1805	1898	0
Flt Permitted				0.741			0.210			0.565		
Satd. Flow (perm)	1900	1615	0	1408	1615	0	399	1900	1615	1074	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		349			659				253			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			734			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	0	49	300	0	12	49	323	253	12	642	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	49	0	300	12	0	49	323	253	12	645	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



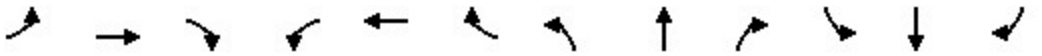
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	9.5	5.7		16.4	11.7		36.1	31.5	31.5	34.0	28.2	
Actuated g/C Ratio	0.16	0.10		0.28	0.20		0.61	0.53	0.53	0.57	0.47	
v/c Ratio	0.01	0.10		0.65	0.01		0.12	0.32	0.26	0.02	0.72	
Control Delay (s/veh)	19.3	0.4		27.5	0.0		6.3	10.3	2.4	5.9	20.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	19.3	0.4		27.5	0.0		6.3	10.3	2.4	5.9	20.8	
LOS	B	A		C	A		A	B	A	A	C	
Approach Delay (s/veh)		1.9			26.5			6.8			20.5	
Approach LOS		A			C			A			C	
90th %ile Green (s)	5.0	5.0		12.0	12.0		7.3	36.2	36.2	5.1	34.0	
90th %ile Term Code	Min	Min		Max	Hold		Gap	Hold	Hold	Gap	Max	
70th %ile Green (s)	0.0	5.0		12.0	20.0		6.9	43.9	43.9	0.0	34.0	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Max	
50th %ile Green (s)	0.0	5.0		12.0	20.0		6.1	40.2	40.2	0.0	31.1	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		8.5	5.5		0.0	17.5	17.5	0.0	17.5	
30th %ile Term Code	Skip	Skip		Gap	Hold		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	20.4	20.4	0.0	20.4	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	6	0		215	0		17	148	19	6	438	
Fuel Used(gal)	0	0		4	0		0	3	1	0	8	
CO Emissions (g/hr)	5	8		289	3		30	231	104	7	550	
NOx Emissions (g/hr)	1	2		56	1		6	45	20	1	107	
VOC Emissions (g/hr)	1	2		67	1		7	54	24	2	127	
Dilemma Vehicles (#)	0	2		0	1		0	20	0	0	49	
Queue Length 50th (ft)	1	0		108	0		8	70	0	2	238	
Queue Length 95th (ft)	8	0		195	0		20	149	35	8	380	
Internal Link Dist (ft)		266			404			654			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	535	687		537	945		565	1326	1203	822	1231	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.01	0.07		0.56	0.01		0.09	0.24	0.21	0.01	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 59.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 15.8		Intersection LOS: B	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 76.3			
70th %ile Actuated Cycle: 75.9			
50th %ile Actuated Cycle: 72.2			
30th %ile Actuated Cycle: 35			
10th %ile Actuated Cycle: 37.4			

Splits and Phases: 36: Nursery Road & South Internal Driveway



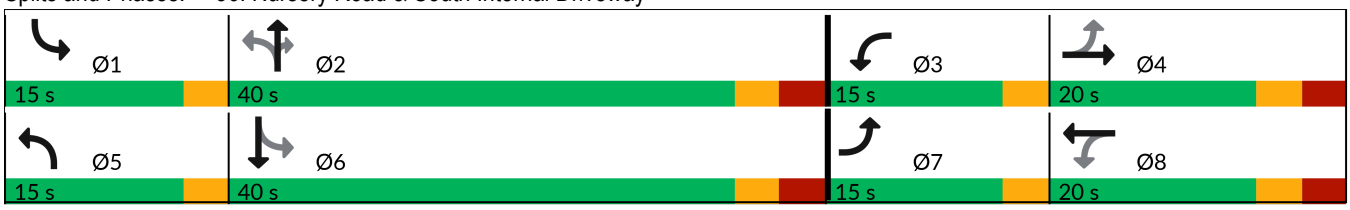
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	0	65	301	0	16	80	360	326	18	235	7
Future Volume (vph)	6	0	65	301	0	16	80	360	326	18	235	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850				0.850		0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1615	0	1805	1615	0	1805	1900	1615	1805	1890	0
Flt Permitted				0.727			0.494			0.531		
Satd. Flow (perm)	1900	1615	0	1381	1615	0	939	1900	1615	1009	1890	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		542			612				354		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	0	71	327	0	17	87	391	354	20	255	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	71	0	327	17	0	87	391	354	20	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	9.5	5.5		16.4	11.9		24.4	20.0	20.0	21.0	13.9	
Actuated g/C Ratio	0.20	0.12		0.35	0.25		0.51	0.42	0.42	0.44	0.29	
v/c Ratio	0.02	0.11		0.57	0.02		0.14	0.49	0.40	0.04	0.48	
Control Delay (s/veh)	12.7	0.3		17.6	0.1		7.7	14.5	3.4	7.6	19.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	12.7	0.3		17.6	0.1		7.7	14.5	3.4	7.6	19.7	
LOS	B	A		B	A		A	B	A	A	B	
Approach Delay (s/veh)		1.4			16.7			9.0			18.8	
Approach LOS		A			B			A			B	
90th %ile Green (s)	5.2	5.0		12.0	11.8		8.0	24.1	24.1	5.4	21.5	
90th %ile Term Code	Gap	Min		Max	Hold		Gap	Gap	Gap	Gap	Hold	
70th %ile Green (s)	0.0	5.0		12.0	20.0		7.4	23.8	23.8	0.0	13.4	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		11.0	19.0		6.3	20.7	20.7	0.0	11.4	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		9.2	6.2		5.6	18.1	18.1	0.0	9.5	
30th %ile Term Code	Skip	Skip		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	11.6	11.6	0.0	11.6	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	7	0		212	0		38	240	33	11	183	
Fuel Used(gal)	0	0		4	0		1	5	2	0	3	
CO Emissions (g/hr)	6	12		260	4		58	334	154	12	223	
NOx Emissions (g/hr)	1	2		51	1		11	65	30	2	43	
VOC Emissions (g/hr)	1	3		60	1		14	77	36	3	52	
Dilemma Vehicles (#)	0	4		0	1		0	28	0	0	18	
Queue Length 50th (ft)	1	0		66	0		14	86	0	3	72	
Queue Length 95th (ft)	9	0		168	0		32	195	46	11	136	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	659	888		654	976		724	1417	1295	741	1410	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.01	0.08		0.50	0.02		0.12	0.28	0.27	0.03	0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 47.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 64.5			
70th %ile Actuated Cycle: 55.8			
50th %ile Actuated Cycle: 51.7			
30th %ile Actuated Cycle: 36.3			
10th %ile Actuated Cycle: 28.6			

Splits and Phases: 36: Nursery Road & South Internal Driveway

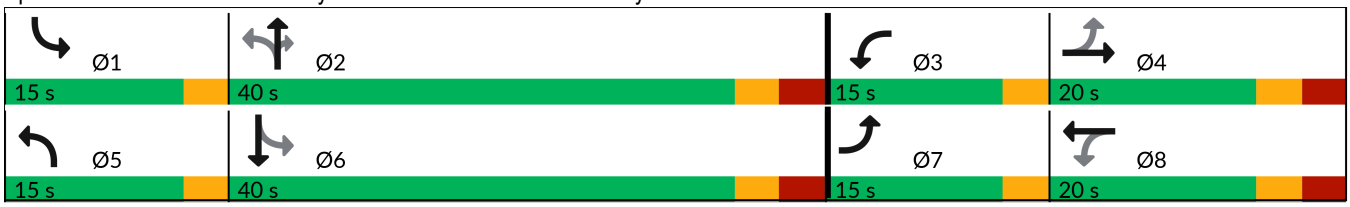


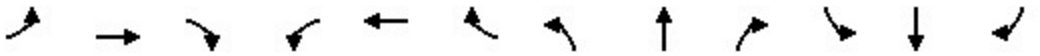
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	24	122	1	0	37	939	156	1	113	4
Future Volume (vph)	1	0	24	122	1	0	37	939	156	1	113	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850							0.850		0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1615	0	1805	1900	0	1805	1900	1615	1805	1890	0
Flt Permitted				0.833			0.654			0.100		
Satd. Flow (perm)	1900	1615	0	1583	1900	0	1243	1900	1615	190	1890	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		775							118		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	0	26	133	1	0	40	1021	170	1	123	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	26	0	133	1	0	40	1021	170	1	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	8.0	5.1		12.4	8.6		45.2	42.5	42.5	44.2	40.7	
Actuated g/C Ratio	0.13	0.08		0.20	0.14		0.73	0.68	0.68	0.71	0.66	
v/c Ratio	0.00	0.03		0.39	0.00		0.04	0.78	0.15	0.00	0.10	
Control Delay (s/veh)	18.0	0.1		23.5	23.0		4.8	19.6	3.8	5.0	9.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	18.0	0.1		23.5	23.0		4.8	19.6	3.8	5.0	9.1	
LOS	B	A		C	C		A	B	A	A	A	
Approach Delay (s/veh)		0.7			23.5			17.0			9.0	
Approach LOS		A			C			B			A	
90th %ile Green (s)	5.0	5.0		11.8	11.8		6.0	34.0	34.0	5.0	33.0	
90th %ile Term Code	Min	Min		Gap	Hold		Gap	Max	Max	Min	Hold	
70th %ile Green (s)	0.0	5.0		9.0	17.0		5.4	34.0	34.0	0.0	25.6	
70th %ile Term Code	Skip	Min		Gap	Hold		Gap	Max	Max	Skip	Hold	
50th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	38.6	38.6	0.0	38.6	
50th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
30th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	46.2	46.2	0.0	46.2	
30th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	49.0	49.0	0.0	49.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	3	0		92	3		14	496	29	1	53	
Fuel Used(gal)	0	0		2	0		0	12	1	0	1	
CO Emissions (g/hr)	2	4		119	2		24	871	81	1	71	
NOx Emissions (g/hr)	0	1		23	0		5	169	16	0	14	
VOC Emissions (g/hr)	0	1		28	0		5	202	19	0	17	
Dilemma Vehicles (#)	0	1		0	0		0	56	0	0	7	
Queue Length 50th (ft)	0	0		41	0		2	169	4	0	10	
Queue Length 95th (ft)	3	0		86	4		17	#787	45	2	63	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	442	966		439	451		1022	1301	1143	455	1295	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.00	0.03		0.30	0.00		0.04	0.78	0.15	0.00	0.10	

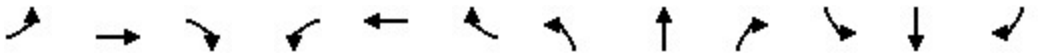
Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 62.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay (s/veh): 16.6	Intersection LOS: B
Intersection Capacity Utilization 72.8%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 73.8	
70th %ile Actuated Cycle: 63	
50th %ile Actuated Cycle: 55.6	
30th %ile Actuated Cycle: 63.2	
10th %ile Actuated Cycle: 55	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 36: Nursery Road & South Internal Driveway





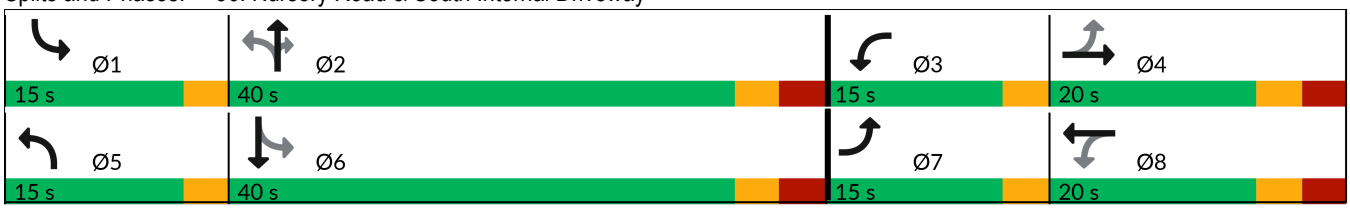
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	0	45	276	0	11	45	297	233	11	591	3
Future Volume (vph)	4	0	45	276	0	11	45	297	233	11	591	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850				0.850		0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1615	0	1805	1615	0	1805	1900	1615	1805	1898	0
Flt Permitted				0.741			0.210			0.565		
Satd. Flow (perm)	1900	1615	0	1408	1615	0	399	1900	1615	1074	1898	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		349			659				253			
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			734			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	0	49	300	0	12	49	323	253	12	642	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	49	0	300	12	0	49	323	253	12	645	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	9.5	5.7		16.4	11.7		36.1	31.5	31.5	34.0	28.2	
Actuated g/C Ratio	0.16	0.10		0.28	0.20		0.61	0.53	0.53	0.57	0.47	
v/c Ratio	0.01	0.10		0.65	0.01		0.12	0.32	0.26	0.02	0.72	
Control Delay (s/veh)	19.3	0.4		27.5	0.0		6.3	10.3	2.4	5.9	20.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	19.3	0.4		27.5	0.0		6.3	10.3	2.4	5.9	20.8	
LOS	B	A		C	A		A	B	A	A	C	
Approach Delay (s/veh)		1.9			26.5			6.8			20.5	
Approach LOS		A			C			A			C	
90th %ile Green (s)	5.0	5.0		12.0	12.0		7.3	36.2	36.2	5.1	34.0	
90th %ile Term Code	Min	Min		Max	Hold		Gap	Hold	Hold	Gap	Max	
70th %ile Green (s)	0.0	5.0		12.0	20.0		6.9	43.9	43.9	0.0	34.0	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Max	
50th %ile Green (s)	0.0	5.0		12.0	20.0		6.1	40.2	40.2	0.0	31.1	
50th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		8.5	5.5		0.0	17.5	17.5	0.0	17.5	
30th %ile Term Code	Skip	Skip		Gap	Hold		Skip	Dwell	Dwell	Skip	Dwell	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	20.4	20.4	0.0	20.4	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	6	0		215	0		17	148	19	6	438	
Fuel Used(gal)	0	0		4	0		0	3	1	0	8	
CO Emissions (g/hr)	5	8		289	3		30	231	104	7	550	
NOx Emissions (g/hr)	1	2		56	1		6	45	20	1	107	
VOC Emissions (g/hr)	1	2		67	1		7	54	24	2	127	
Dilemma Vehicles (#)	0	2		0	1		0	20	0	0	49	
Queue Length 50th (ft)	1	0		108	0		8	70	0	2	238	
Queue Length 95th (ft)	8	0		195	0		20	149	35	8	380	
Internal Link Dist (ft)		266			404			654			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	535	687		537	945		565	1326	1203	822	1231	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.01	0.07		0.56	0.01		0.09	0.24	0.21	0.01	0.52	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 59.4		
Natural Cycle: 60		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.72		
Intersection Signal Delay (s/veh): 15.8		Intersection LOS: B
Intersection Capacity Utilization 69.4%		ICU Level of Service C
Analysis Period (min) 15		
90th %ile Actuated Cycle: 76.3		
70th %ile Actuated Cycle: 75.9		
50th %ile Actuated Cycle: 72.2		
30th %ile Actuated Cycle: 35		
10th %ile Actuated Cycle: 37.4		

Splits and Phases: 36: Nursery Road & South Internal Driveway

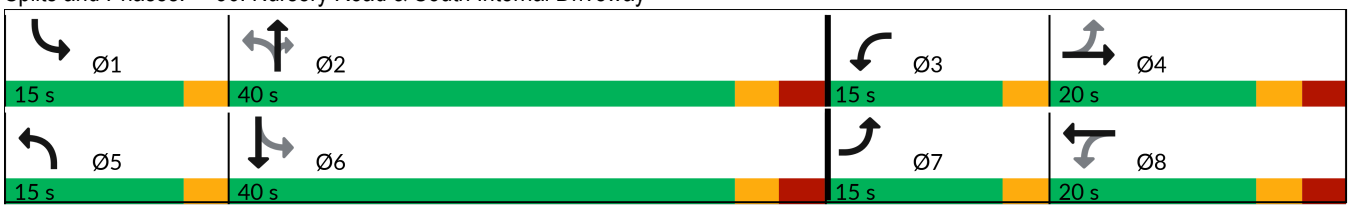


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	0	65	301	0	16	80	360	326	18	235	7
Future Volume (vph)	6	0	65	301	0	16	80	360	326	18	235	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	200		0	75		0	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850				0.850		0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1615	0	1805	1615	0	1805	1900	1615	1805	1890	0
Flt Permitted				0.727			0.494			0.531		
Satd. Flow (perm)	1900	1615	0	1381	1615	0	939	1900	1615	1009	1890	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		542			612				354		2	
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		346			484			733			231	
Travel Time (s)		6.7			9.4			14.3			4.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	0	71	327	0	17	87	391	354	20	255	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	71	0	327	17	0	87	391	354	20	263	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.0	11.0		8.0	11.0		8.0	11.0	11.0	8.0	11.0	
Total Split (s)	15.0	20.0		15.0	20.0		15.0	40.0	40.0	15.0	40.0	
Total Split (%)	16.7%	22.2%		16.7%	22.2%		16.7%	44.4%	44.4%	16.7%	44.4%	
Maximum Green (s)	12.0	14.0		12.0	14.0		12.0	34.0	34.0	12.0	34.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	0.0	3.0		0.0	3.0		0.0	3.0	3.0	0.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0	6.0	3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Act Effct Green (s)	9.5	5.5		16.4	11.9		24.4	20.0	20.0	21.0	13.9	
Actuated g/C Ratio	0.20	0.12		0.35	0.25		0.51	0.42	0.42	0.44	0.29	
v/c Ratio	0.02	0.11		0.57	0.02		0.14	0.49	0.40	0.04	0.48	
Control Delay (s/veh)	12.7	0.3		17.6	0.1		7.7	14.5	3.4	7.6	19.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	12.7	0.3		17.6	0.1		7.7	14.5	3.4	7.6	19.7	
LOS	B	A		B	A		A	B	A	A	B	
Approach Delay (s/veh)		1.4			16.7			9.0			18.8	
Approach LOS		A			B			A			B	
90th %ile Green (s)	5.2	5.0		12.0	11.8		8.0	24.1	24.1	5.4	21.5	
90th %ile Term Code	Gap	Min		Max	Hold		Gap	Gap	Gap	Gap	Hold	
70th %ile Green (s)	0.0	5.0		12.0	20.0		7.4	23.8	23.8	0.0	13.4	
70th %ile Term Code	Skip	Min		Max	Hold		Gap	Hold	Hold	Skip	Gap	
50th %ile Green (s)	0.0	5.0		11.0	19.0		6.3	20.7	20.7	0.0	11.4	
50th %ile Term Code	Skip	Min		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
30th %ile Green (s)	0.0	0.0		9.2	6.2		5.6	18.1	18.1	0.0	9.5	
30th %ile Term Code	Skip	Skip		Gap	Hold		Gap	Hold	Hold	Skip	Gap	
10th %ile Green (s)	0.0	0.0		8.0	5.0		0.0	11.6	11.6	0.0	11.6	
10th %ile Term Code	Skip	Skip		Hold	Hold		Skip	Dwell	Dwell	Skip	Dwell	
Stops (vph)	7	0		212	0		38	240	33	11	183	
Fuel Used(gal)	0	0		4	0		1	5	2	0	3	
CO Emissions (g/hr)	6	12		260	4		58	334	154	12	223	
NOx Emissions (g/hr)	1	2		51	1		11	65	30	2	43	
VOC Emissions (g/hr)	1	3		60	1		14	77	36	3	52	
Dilemma Vehicles (#)	0	4		0	1		0	28	0	0	18	
Queue Length 50th (ft)	1	0		66	0		14	86	0	3	72	
Queue Length 95th (ft)	9	0		168	0		32	195	46	11	136	
Internal Link Dist (ft)		266			404			653			151	
Turn Bay Length (ft)	200			200			75			100		
Base Capacity (vph)	659	888		654	976		724	1417	1295	741	1410	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.01	0.08		0.50	0.02		0.12	0.28	0.27	0.03	0.19	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 47.4		
Natural Cycle: 60		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.57		
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B
Intersection Capacity Utilization 59.8%		ICU Level of Service B
Analysis Period (min) 15		
90th %ile Actuated Cycle: 64.5		
70th %ile Actuated Cycle: 55.8		
50th %ile Actuated Cycle: 51.7		
30th %ile Actuated Cycle: 36.3		
10th %ile Actuated Cycle: 28.6		

Splits and Phases: 36: Nursery Road & South Internal Driveway



Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	0	16	17	0	15	14	909	16	8	84	7
Future Vol, veh/h	14	0	16	17	0	15	14	909	16	8	84	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	0	17	18	0	16	15	988	17	9	91	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1131	1148	95	1136	1143	997	99	0	0	1005	0	0
Stage 1	112	112	-	1027	1027	-	-	-	-	-	-	-
Stage 2	1018	1036	-	109	116	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	182	200	967	181	202	299	1507	-	-	697	-	-
Stage 1	897	806	-	285	314	-	-	-	-	-	-	-
Stage 2	289	311	-	902	803	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	166	193	967	171	194	299	1507	-	-	697	-	-
Mov Cap-2 Maneuver	166	193	-	171	194	-	-	-	-	-	-	-
Stage 1	886	796	-	279	307	-	-	-	-	-	-	-
Stage 2	267	304	-	874	793	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	18.58	25.05	0.11	0.83
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	27	-	-	298	214	143	-	-
HCM Lane V/C Ratio	0.01	-	-	0.11	0.162	0.012	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	18.6	25	10.2	0	-
HCM Lane LOS	A	A	-	C	D	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.6	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	0	43	48	0	37	44	218	49	39	513	14
Future Vol, veh/h	12	0	43	48	0	37	44	218	49	39	513	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	0	47	52	0	40	48	237	53	42	558	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	983	1036	565	1002	1017	264	573	0	0	290	0	0
Stage 1	650	650	-	359	359	-	-	-	-	-	-	-
Stage 2	333	386	-	642	658	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	230	233	528	223	240	780	1010	-	-	1283	-	-
Stage 1	461	468	-	663	630	-	-	-	-	-	-	-
Stage 2	685	614	-	466	464	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	196	209	528	183	215	780	1010	-	-	1283	-	-
Mov Cap-2 Maneuver	196	209	-	183	215	-	-	-	-	-	-	-
Stage 1	439	445	-	625	595	-	-	-	-	-	-	-
Stage 2	613	579	-	404	442	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.05	24.69	1.24	0.54
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	246	-	-	385	274	123	-	-
HCM Lane V/C Ratio	0.047	-	-	0.155	0.337	0.033	-	-
HCM Ctrl Dly (s/v)	8.7	0	-	16.1	24.7	7.9	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	1.4	0.1	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	59	66	0	53	64	245	72	57	134	17
Future Vol, veh/h	16	0	59	66	0	53	64	245	72	57	134	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	17	0	64	72	0	58	70	266	78	62	146	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	684	763	155	714	733	305	164	0	0	345	0	0
Stage 1	279	279	-	445	445	-	-	-	-	-	-	-
Stage 2	405	484	-	270	288	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	365	337	896	349	350	739	1427	-	-	1226	-	-
Stage 1	732	684	-	596	578	-	-	-	-	-	-	-
Stage 2	626	556	-	741	677	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	299	299	896	287	311	739	1427	-	-	1226	-	-
Mov Cap-2 Maneuver	299	299	-	287	311	-	-	-	-	-	-	-
Stage 1	691	645	-	560	543	-	-	-	-	-	-	-
Stage 2	542	522	-	649	640	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.58	18.51	1.29	2.22
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	289	-	-	628	395	482	-	-
HCM Lane V/C Ratio	0.049	-	-	0.13	0.328	0.051	-	-
HCM Ctrl Dly (s/v)	7.7	0	-	11.6	18.5	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	1.4	0.2	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	0	16	17	0	15	14	909	16	8	84	7
Future Vol, veh/h	14	0	16	17	0	15	14	909	16	8	84	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	0	17	18	0	16	15	988	17	9	91	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1131	1148	95	1136	1143	997	99	0	0	1005	0	0
Stage 1	112	112	-	1027	1027	-	-	-	-	-	-	-
Stage 2	1018	1036	-	109	116	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	182	200	967	181	202	299	1507	-	-	697	-	-
Stage 1	897	806	-	285	314	-	-	-	-	-	-	-
Stage 2	289	311	-	902	803	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	166	193	967	171	194	299	1507	-	-	697	-	-
Mov Cap-2 Maneuver	166	193	-	171	194	-	-	-	-	-	-	-
Stage 1	886	796	-	279	307	-	-	-	-	-	-	-
Stage 2	267	304	-	874	793	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	18.58	25.05	0.11	0.83
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	27	-	-	298	214	143	-	-
HCM Lane V/C Ratio	0.01	-	-	0.11	0.162	0.012	-	-
HCM Ctrl Dly (s/v)	7.4	0	-	18.6	25	10.2	0	-
HCM Lane LOS	A	A	-	C	D	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.6	0	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	0	43	48	0	37	44	218	49	39	513	14
Future Vol, veh/h	12	0	43	48	0	37	44	218	49	39	513	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	0	47	52	0	40	48	237	53	42	558	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	983	1036	565	1002	1017	264	573	0	0	290	0	0
Stage 1	650	650	-	359	359	-	-	-	-	-	-	-
Stage 2	333	386	-	642	658	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	230	233	528	223	240	780	1010	-	-	1283	-	-
Stage 1	461	468	-	663	630	-	-	-	-	-	-	-
Stage 2	685	614	-	466	464	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	196	209	528	183	215	780	1010	-	-	1283	-	-
Mov Cap-2 Maneuver	196	209	-	183	215	-	-	-	-	-	-	-
Stage 1	439	445	-	625	595	-	-	-	-	-	-	-
Stage 2	613	579	-	404	442	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.05	24.69	1.24	0.54
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	246	-	-	385	274	123	-	-
HCM Lane V/C Ratio	0.047	-	-	0.155	0.337	0.033	-	-
HCM Ctrl Dly (s/v)	8.7	0	-	16.1	24.7	7.9	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	1.4	0.1	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	59	66	0	53	64	245	72	57	134	17
Future Vol, veh/h	16	0	59	66	0	53	64	245	72	57	134	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	17	0	64	72	0	58	70	266	78	62	146	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	684	763	155	714	733	305	164	0	0	345	0	0
Stage 1	279	279	-	445	445	-	-	-	-	-	-	-
Stage 2	405	484	-	270	288	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	365	337	896	349	350	739	1427	-	-	1226	-	-
Stage 1	732	684	-	596	578	-	-	-	-	-	-	-
Stage 2	626	556	-	741	677	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	299	299	896	287	311	739	1427	-	-	1226	-	-
Mov Cap-2 Maneuver	299	299	-	287	311	-	-	-	-	-	-	-
Stage 1	691	645	-	560	543	-	-	-	-	-	-	-
Stage 2	542	522	-	649	640	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.58	18.51	1.29	2.22
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	289	-	-	628	395	482	-	-
HCM Lane V/C Ratio	0.049	-	-	0.13	0.328	0.051	-	-
HCM Ctrl Dly (s/v)	7.7	0	-	11.6	18.5	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	1.4	0.2	-	-

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	18	18	1022	129
Demand Flow Rate, veh/h	18	18	1022	129
Vehicles Circulating, veh/h	118	1040	29	0
Vehicles Exiting, veh/h	11	11	107	1058
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.1	8.0	14.5	3.3
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	18	18	1022	129
Cap Entry Lane, veh/h	1223	478	1340	1380
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	18	18	1022	129
Cap Entry, veh/h	1223	478	1340	1380
V/C Ratio	0.015	0.038	0.763	0.093
Control Delay, s/veh	3.1	8.0	14.5	3.3
LOS	A	A	B	A
95th %tile Queue, veh	0	0	8	0

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	28	34	290	680
Demand Flow Rate, veh/h	28	34	290	680
Vehicles Circulating, veh/h	650	318	64	0
Vehicles Exiting, veh/h	30	36	614	352
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	3.9	4.7	7.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	28	34	290	680
Cap Entry Lane, veh/h	711	998	1293	1380
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	28	34	290	680
Cap Entry, veh/h	711	998	1293	1380
V/C Ratio	0.039	0.034	0.224	0.493
Control Delay, s/veh	5.5	3.9	4.7	7.6
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	3

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	38	47	342	319
Demand Flow Rate, veh/h	38	47	342	319
Vehicles Circulating, veh/h	278	380	89	0
Vehicles Exiting, veh/h	41	51	227	427
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.8	4.3	5.3	4.5
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	38	47	342	319
Cap Entry Lane, veh/h	1039	937	1260	1380
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	38	47	342	319
Cap Entry, veh/h	1039	937	1260	1380
V/C Ratio	0.037	0.050	0.271	0.231
Control Delay, s/veh	3.8	4.3	5.3	4.5
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	1

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	18	18	1022	129
Demand Flow Rate, veh/h	18	18	1022	129
Vehicles Circulating, veh/h	118	1040	29	0
Vehicles Exiting, veh/h	11	11	107	1058
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.1	8.0	14.5	3.3
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	18	18	1022	129
Cap Entry Lane, veh/h	1223	478	1340	1380
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	18	18	1022	129
Cap Entry, veh/h	1223	478	1340	1380
V/C Ratio	0.015	0.038	0.763	0.093
Control Delay, s/veh	3.1	8.0	14.5	3.3
LOS	A	A	B	A
95th %tile Queue, veh	0	0	8	0

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	28	34	290	680
Demand Flow Rate, veh/h	28	34	290	680
Vehicles Circulating, veh/h	650	318	64	0
Vehicles Exiting, veh/h	30	36	614	352
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	3.9	4.7	7.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	28	34	290	680
Cap Entry Lane, veh/h	711	998	1293	1380
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	28	34	290	680
Cap Entry, veh/h	711	998	1293	1380
V/C Ratio	0.039	0.034	0.224	0.493
Control Delay, s/veh	5.5	3.9	4.7	7.6
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	3

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	38	47	342	319
Demand Flow Rate, veh/h	38	47	342	319
Vehicles Circulating, veh/h	278	380	89	0
Vehicles Exiting, veh/h	41	51	227	427
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.8	4.3	5.3	4.5
Approach LOS	A	A	A	A

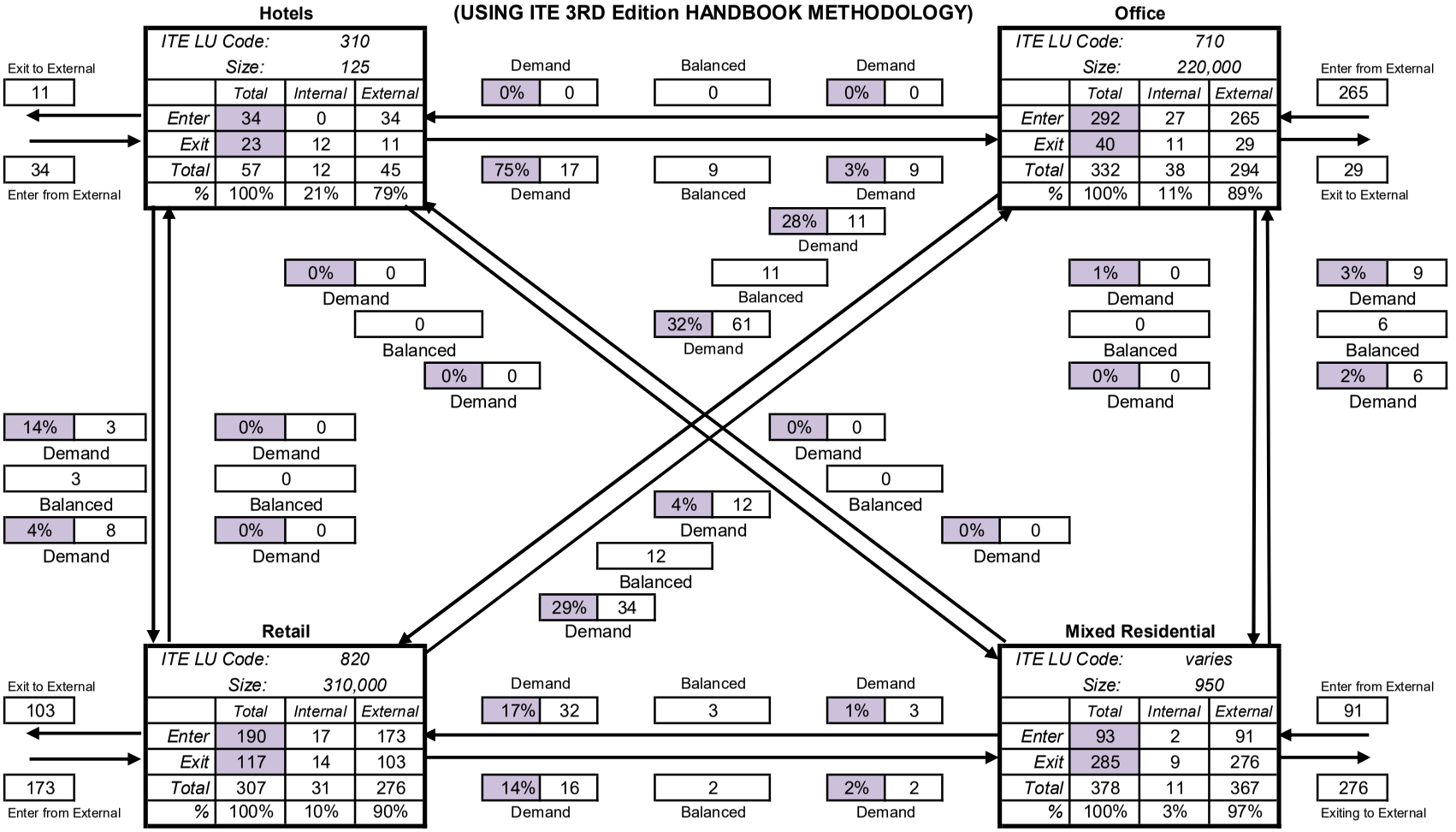
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	38	47	342	319
Cap Entry Lane, veh/h	1039	937	1260	1380
Entry HV Adj Factor	1.000	1.000	1.000	1.000
Flow Entry, veh/h	38	47	342	319
Cap Entry, veh/h	1039	937	1260	1380
V/C Ratio	0.037	0.050	0.271	0.231
Control Delay, s/veh	3.8	4.3	5.3	4.5
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	1

APPENDIX I
INTERNAL CAPTURE WORKSHEETS

Analyst KAMP
Data 4/17/2025

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
(USING ITE 3RD Edition HANDBOOK METHODOLOGY)

Name of Dvlpt GDP
Time Period AM Peak Hour

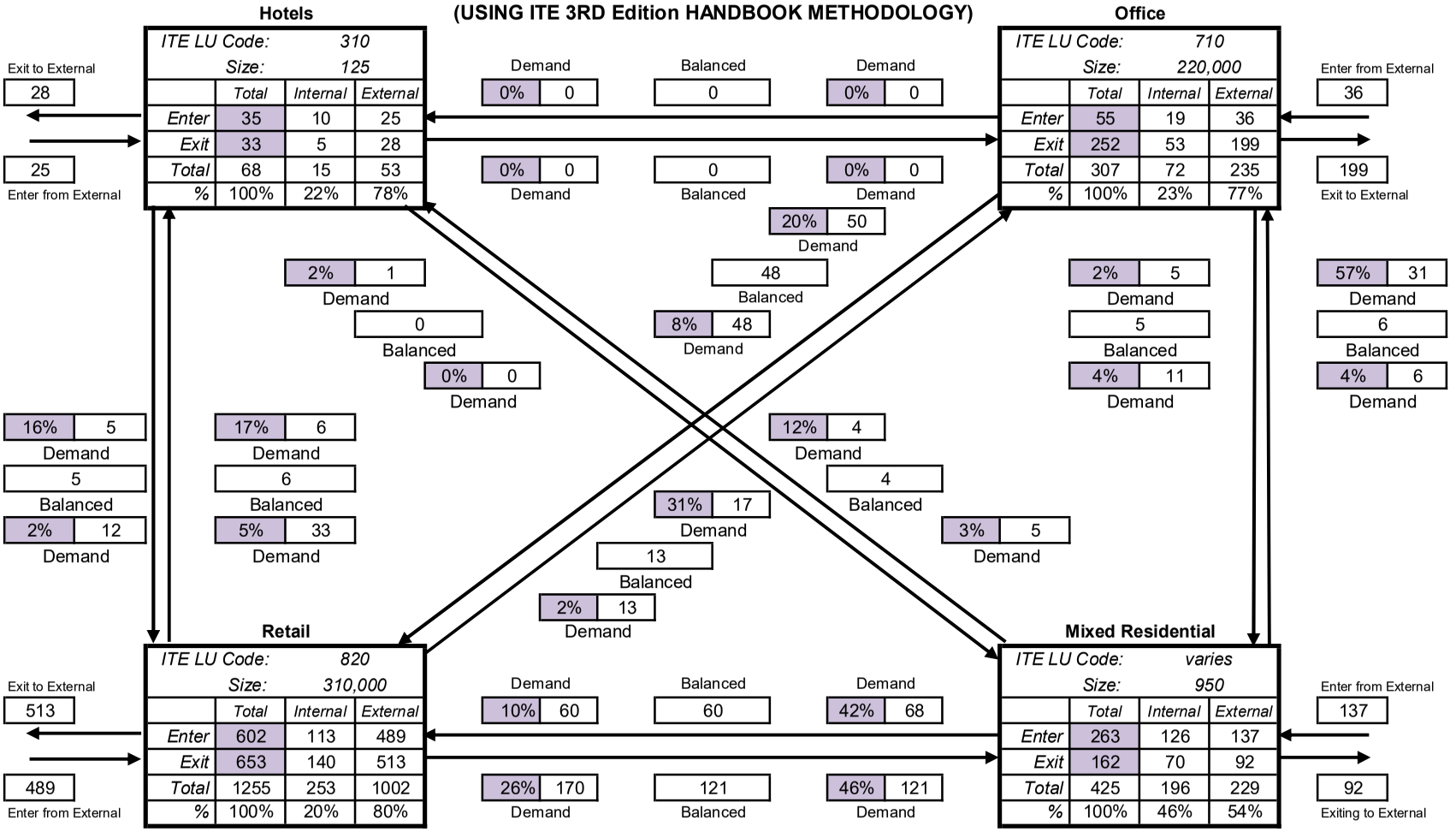


Net External Trips for Multi-Use Development						
	Hotels	Retail	Office	Mixed Residential	TOTAL	
Enter	34	173	265	91	563	
Exit	11	103	29	276	419	
Total	45	276	294	367	982	INTERNAL CAPTURE
Single-Use Trip Gen.Est	57	307	332	378	1074	9%

Analyst KAMP
Data 4/17/2025

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
(USING ITE 3RD Edition HANDBOOK METHODOLOGY)

Name of Dvlpt GDP
Time Period PM Peak Hour



Net External Trips for Multi-Use Development					
	Hotels	Retail	Office	Mixed Residential	TOTAL
Enter	25	489	36	137	687
Exit	28	513	199	92	832
Total	53	1002	235	229	1519
Single-Use Trip Gen.Est	68	1255	307	425	2055

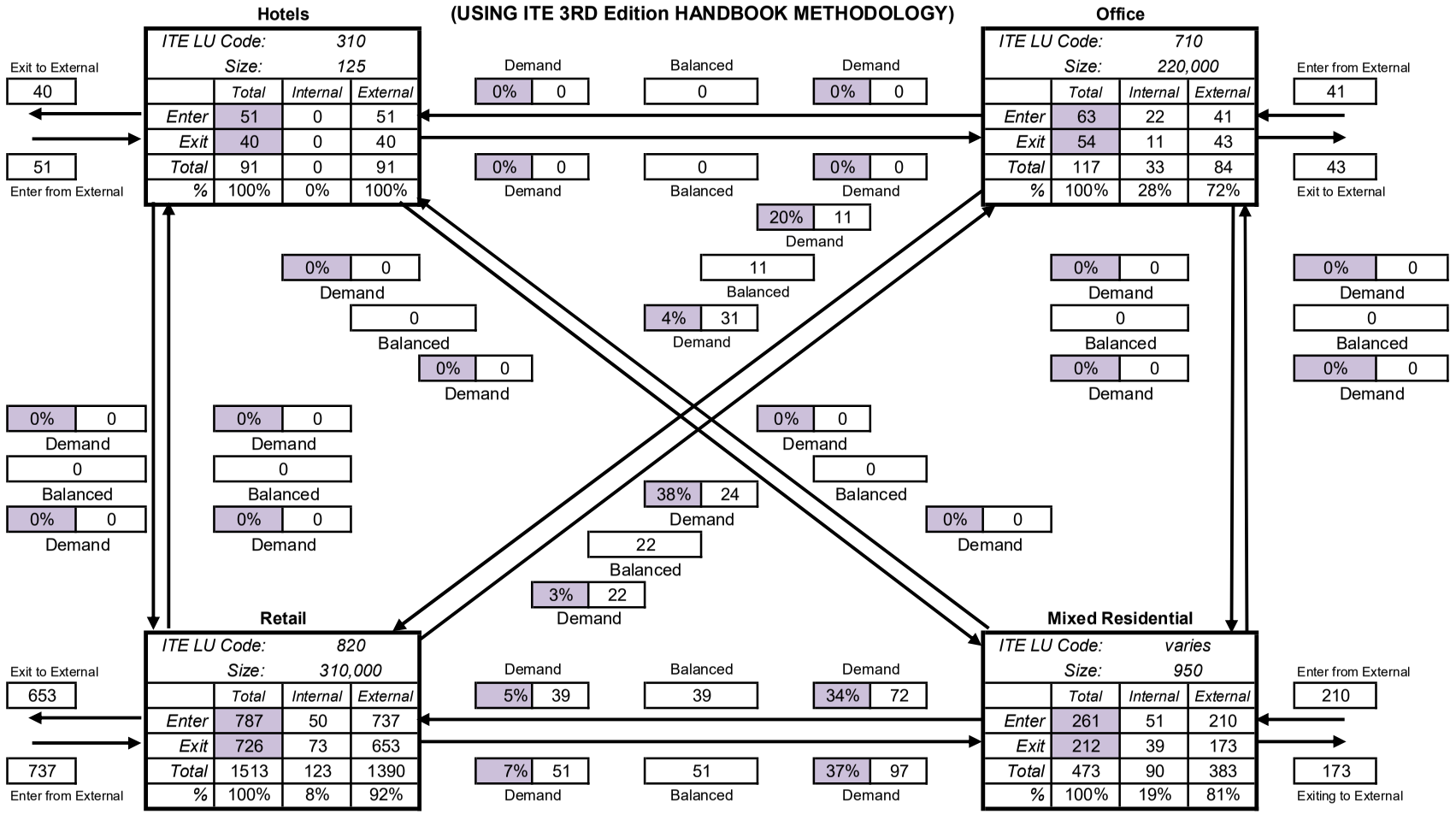
Source: Kaku Associates, Inc.

INTERNAL CAPTURE 26%

Analyst KAMP
Data 4/17/2025

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
(USING ITE 3RD Edition HANDBOOK METHODOLOGY)

Name of Dvlpt GDP
Time Period Saturday Peak Hour



Net External Trips for Multi-Use Development					
	Hotels	Retail	Office	Mixed Residential	TOTAL
Enter	51	737	41	210	1039
Exit	40	653	43	173	909
Total	91	1390	84	383	1948
Single-Use Trip Gen.Est	91	1513	117	473	2194

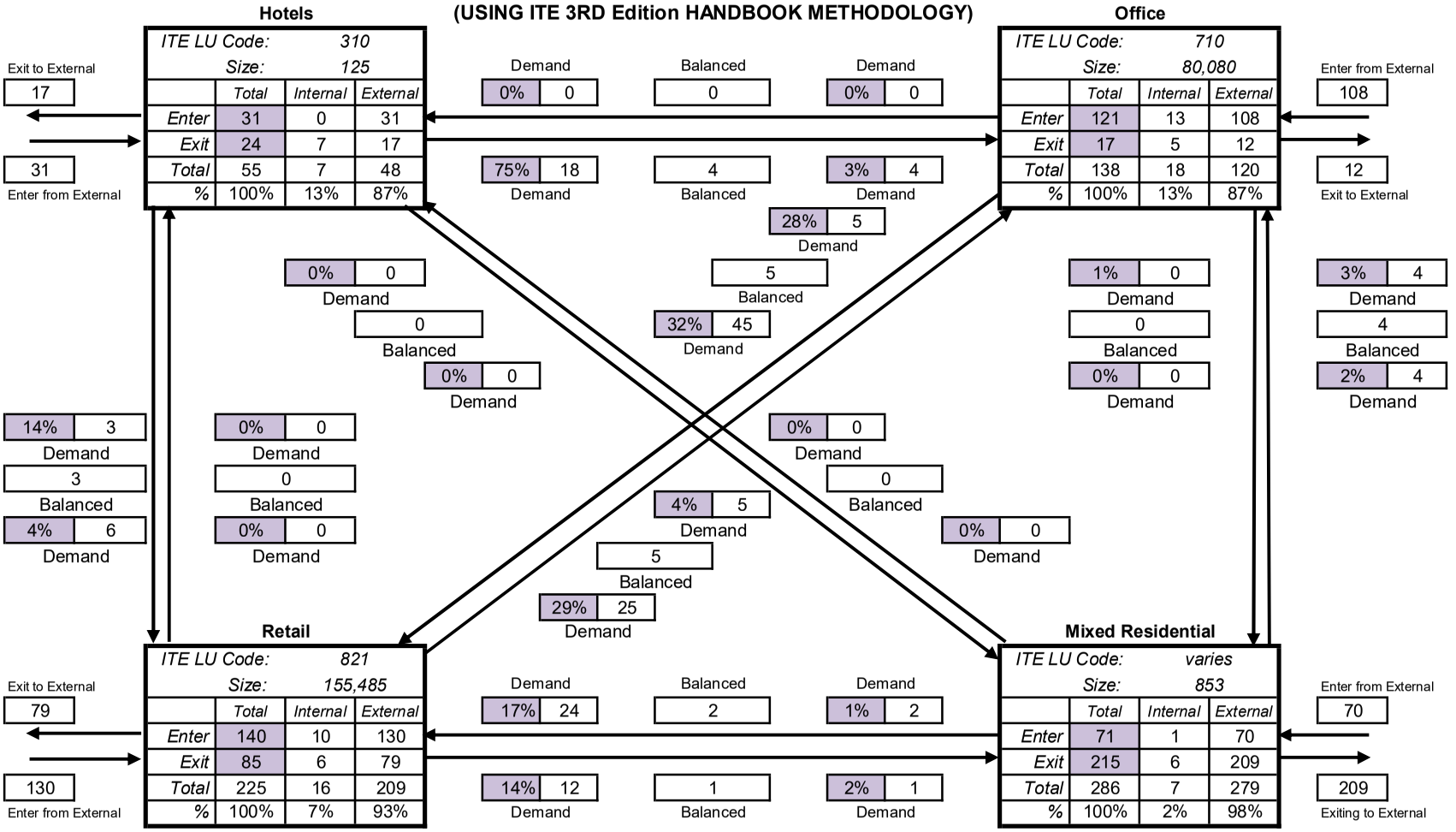
Source: Kaku Associates, Inc.

INTERNAL CAPTURE 11%

Analyst KAMP
Data 4/17/2025

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
(USING ITE 3RD Edition HANDBOOK METHODOLOGY)

Name of Dvlpt Proposed
Time Period AM Peak Hour



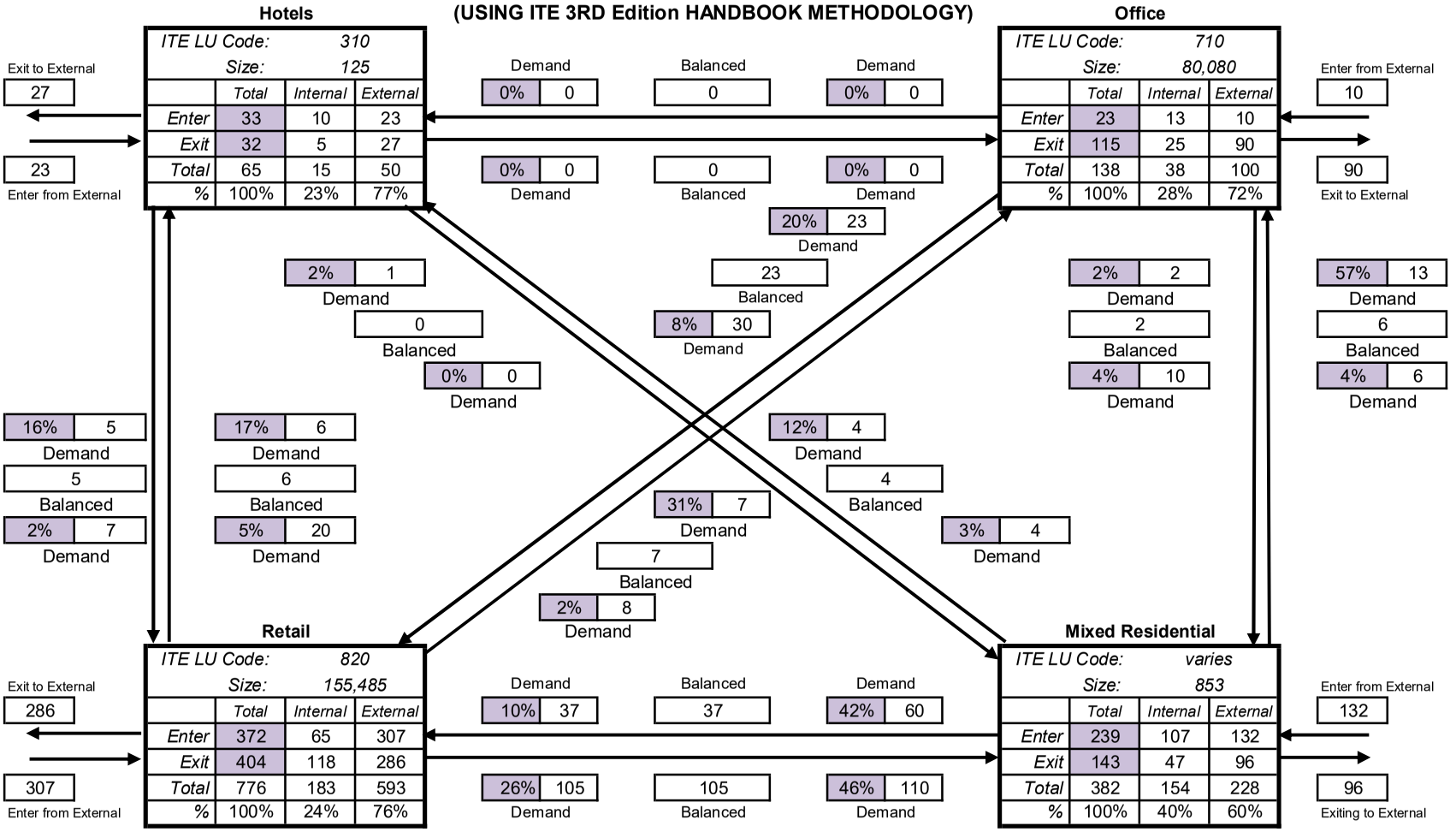
Net External Trips for Multi-Use Development					
	Hotels	Retail	Office	Mixed Residential	TOTAL
Enter	31	130	108	70	339
Exit	17	79	12	209	317
Total	48	209	120	279	656
Single-Use Trip Gen.Est	55	225	138	286	704

INTERNAL CAPTURE 7%

Analyst KAMP
Data 4/17/2025

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
(USING ITE 3RD Edition HANDBOOK METHODOLOGY)

Name of Dvlpt Proposed
Time Period PM Peak Hour



Net External Trips for Multi-Use Development					
	Hotels	Retail	Office	Mixed Residential	TOTAL
Enter	23	307	10	132	472
Exit	27	286	90	96	499
Total	50	593	100	228	971
Single-Use Trip Gen.Est	65	776	138	382	1361

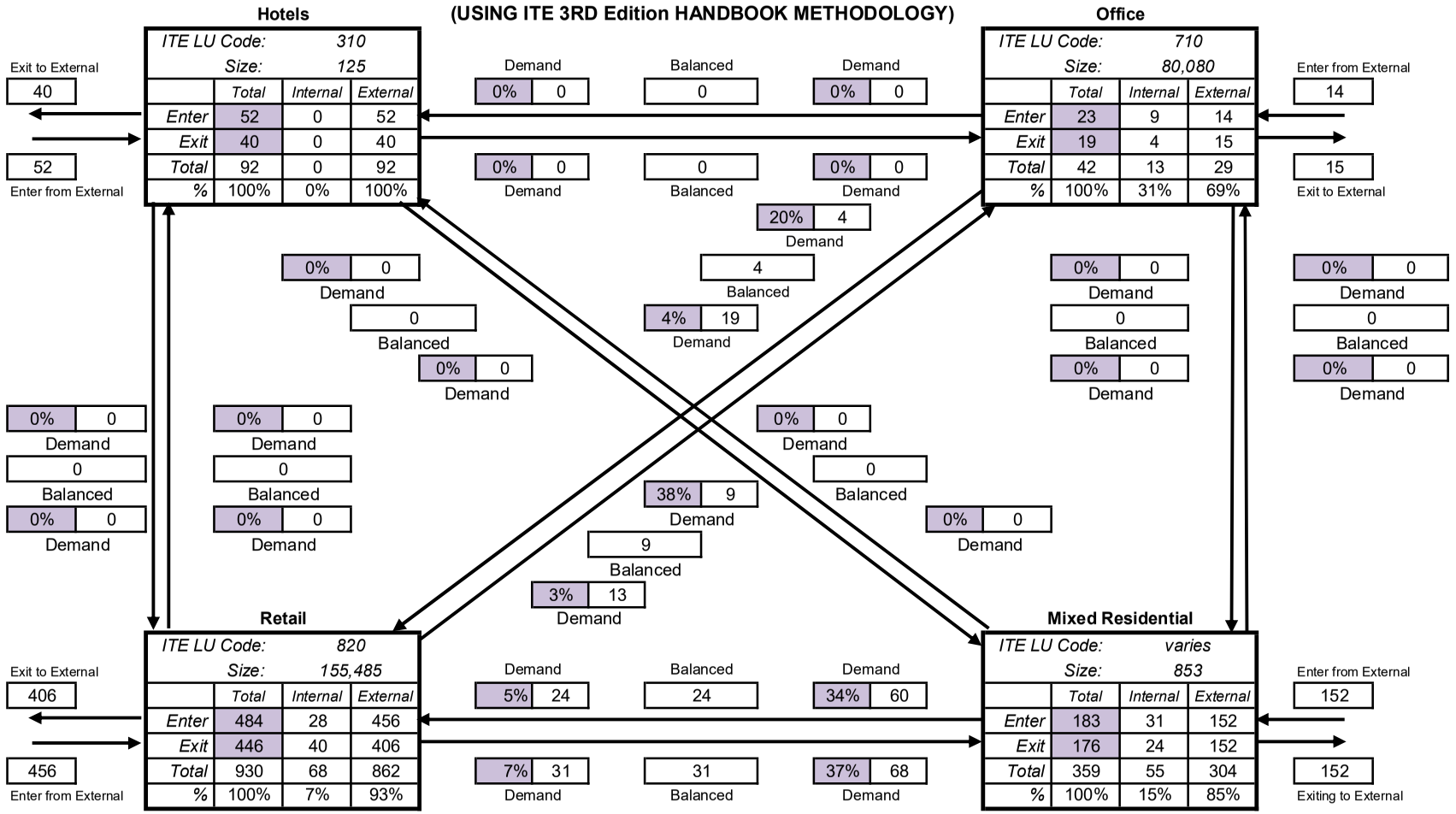
Source: Kaku Associates, Inc.

INTERNAL CAPTURE 29%

Analyst KAMP
Data 4/17/2025

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
(USING ITE 3RD Edition HANDBOOK METHODOLOGY)

Name of Dvlpt Proposed
Time Period Saturday Peak Hour



Net External Trips for Multi-Use Development					
	Hotels	Retail	Office	Mixed Residential	TOTAL
Enter	52	456	14	152	674
Exit	40	406	15	152	613
Total	92	862	29	304	1287
Single-Use Trip Gen.Est	92	930	42	359	1423

Source: Kaku Associates, Inc.

INTERNAL CAPTURE 10%