Corridor Feasibility Study

for

ROSEDALE AVENUE CORRIDOR

located at

West Chester Borough & West Goshen Township, Chester County, PA

File No. 13-03030T

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Prepared For:

West Chester Borough, West Goshen Township
and West Chester University

Prepared By:
Gilmore & Associates, Inc.
Engineers ♦ Land Surveyors ♦ Planners ♦ GIS Consultants
65 E. Butler Avenue
New Britain, PA 18901
215-345-4330

GILMORE & ASSOCIATES, INC.
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EXECUTIVE SUMMARY

Gilmore & Associates, Inc. (G&A) was retained by a cooperative effort between West Chester Borough, West Goshen Township, and West Chester University to perform a traffic feasibility study of traffic and pedestrian improvements along the Rosedale Avenue corridor from Route 52 east to South Franklin Street. This report has been updated to incorporate feedback received at public meetings held on February 26, 2014 and April 23, 2014. The Rosedale Avenue Corridor is a two-lane roadway in the vicinity of West Chester University that experiences heavy vehicular traffic as well as high pedestrian traffic due to the proximity of the University and the east/west movement of residential traffic to and from the US-202 corridor. The report identifies improvements along the corridor to bring all approaches to each studied intersection to a Level of Service (LOS) D or better.

The results of the traffic analysis for the 2018 PM Peak conditions indicate that all intersections and approaches operate at acceptable levels of service with the exceptions of Rosedale Avenue and PA Route 52, South New Street, and South Matlack Street intersections during the PM peak hour, and Rosedale Avenue & High Street during the Midday peak hour.

A traffic signal warrant analysis was conducted and indicates the volumes satisfy the requirements for signalization at the intersections of Rosedale and PA Route 52 and South Matlack Street. South New Street requires realignment between the northern and southern legs of the intersection to provide a safer through movement for vehicles. Upon realignment, the existing split signal phasing could be eliminated to provide an improved level of service. At South High Street additional capacity improvements such as constructing a right–turn lanes and providing timing adjustments are needed to d to improve the intersection to operate at LOS D or better. In addition, the following pedestrian improvements are recommended along the Rosedale corridor including curb ramp upgrades, repair and or replacement of sidewalks, upgraded pedestrian equipment at signalized intersections, refreshed pavement markings, and the installation of an improved pedestrian crossing between Roslyn Avenue and South Church Street.

With the installation of the traffic signals at PA Route 52 & Matlack Street, the realignment of South New Street, and capacity improvements at South High Street, all studied intersections and approaches will operate at LOS D or better. In addition, the pedestrian enhancements identified in the report will provide a safer walking environment along the corridor for pedestrian traffic as well. However, those improvements will not divert any of the existing or future traffic volume from Rosedale Avenue. Therefore, additional intermediate and long term alternatives were identified as described below.

One-way Pairs – Provide one-way pairs in order to increase the capacity of the existing roadways. In particular, Rosedale Avenue (EB) and Sharpless Street (WB) would provide one of the one-way pairs and High Street (NB) and New Street (SB) would provide the other one-way pair. Additionally, a southbound right turn lane would be provided along New Street which could be accomplished within the existing cartway width with minor modifications to the existing pavement markings.

Upgrade Pleasant Grove Road – Upgrade the existing roadway to provide adequate lane and shoulder widths and install a traffic signal at the intersection with US 202/US 322. In order to improve the viability of this option, Pleasant Grove Road should be extended to Birmingham Road.

Extend Rosedale Avenue to Bolmar Street/Westtown Road – Extend Rosedale Avenue to provide a more direct connection to Westtown Road and US 202/US 322. This improvement would likely have high environmental impacts due to existing streams and floodplains in the vicinity of the probable alignment of the extension. Terminating the proposed roadway extension at Bolmar Street would minimize the impacts of the improvement. Traffic traveling north would utilize the existing signal at Nields Street and traffic traveling south to US 202/US 322 would utilize Autopark Boulevard.

Upgrade of Tigue Road and Stadium Drive - The upgrade of these roadways could alleviate traffic on Rosedale Avenue as it would provide a direct connection between the residential areas southwest of West Chester and the US 202/US 322 interchange. However, the environmental impacts would likely be high due to the alignment through the existing Robert B. Gordon Natural Area for Environmental Studies. This improvement would also require modifications to the existing US 202/US 322 interchange to provide direct access to the Stadium Drive extension.

Pedestrian Crossings – There are two existing pedestrian crossings with yellow flashing overhead lights along Rosedale Avenue between Roslyn Avenue and South Church Street. The use of the existing continuous overhead yellow flashing lights is not encouraged as it becomes ineffective over time as drivers grow accustomed to the flashing lights and they eventually provide little or no benefit to pedestrian safety. The alternatives identified include the upgrade of the existing flashing yellow lights to Rectangular Rapid Flashing Beacons (RRFB), the installation of two new traffic signals with pedestrian actuation, and the construction of an elevated pedestrian bridge over Rosedale Avenue.

Upgrade West Street Road (S.R. 0926) – Upgrade the existing roadway to provide adequate lane and shoulder widths from Creek Road to US 202/US 322.

The Tigue Road and Stadium Drive improved and upgraded to provide a connection from PA Route 52 to the US 202/US 322 interchange would provide the highest traffic diversion and relief for Rosedale Avenue and likely the region. Additional studies would be required to determine the exact impact of this alternative on the existing Nature Area. Although this improvement would provide some relief for the Rosedale Corridor, the benefit for the Rosedale Corridor vs the cost (b/c ratio) will not likely justify the infrastructure investment based on relief of the Rosedale Corridor..

I. INTRODUCTION AND BACKGROUND

Gilmore & Associates, Inc. (G&A) has been retained by a cooperative effort between West Chester Borough, West Goshen Township, and West Chester University to perform a traffic feasibility study of traffic and pedestrian improvements along the Rosedale Avenue corridor, from Route 52 east to South Franklin Street. This report has been updated to incorporate feedback received at the public meetings held on February 26, 2014 and April 23, 2014 at the West Goshen Township building.

The Rosedale Avenue Corridor is a two-lane roadway in the vicinity of West Chester University that experiences heavy vehicular traffic as well as pedestrian traffic due to the proximity of West Chester University. The Rosedale Avenue provides access to High Street and Matlack Street that subsequently provides access to US Route 202 for residents to the west and southwest of West Chester. Significant development has occurred in this area; however, no major roadway improvements were implemented to mitigate the increase in traffic. Therefore, vehicles must travel along the overburdened streets within West Chester Borough to access US Route 202. This report will identify improvements along the corridor to accommodate existing and future traffic volumes and bring all approaches to each studied intersection to a Level of Service (LOS) D or better. Alternatives will include improvements for both roadway and pedestrian facilities, as there are high pedestrian volumes related to West Chester University campus. Additionally, other improvements will be identified and considered as alternatives to reduce congestion along Rosedale Avenue.

This report was conducted at a macro level. Improvements identified in this report have neither been designed nor fully engineered. Engineering along with additional vetting for feasibility may be necessary prior to implementation of any subsequent improvements.

STUDY AREA
Fourteen intersections have been identified to be analyzed in this study. The intersections include the following:

1. West Rosedale Avenue & PA Route 52 (Lenape Road/S. Bradford Avenue)
2. West Rosedale Avenue & Brookwood Road
3. West Rosedale Avenue & College Avenue
4. West Rosedale Avenue & South Wayne Street
5. West Rosedale Avenue & South New Street
6. West Rosedale Avenue & Roslyn Avenue
7. West Rosedale Avenue & South Church Street (northern leg)
8. West Rosedale Avenue & South Church Street (southern leg)
9. West Rosedale Avenue & Ceredo Avenue
10. West Rosedale Avenue & US Route 322 (South High Street)
11. East Rosedale Avenue & Sharon Alley
12. East Rosedale Avenue & South Walnut Street
13. East Rosedale Avenue & South Matlack Street
14. East Rosedale Avenue & South Franklin Street

The scope for this project is based on the findings of the 2005 *Regional Transportation Feasibility and Design Study Final Report* prepared by the West Chester Regional

Planning Commission. The study recommendations include intersection capacity improvements to accommodate existing and future traffic volumes, as well as additional and more enhanced pedestrian facilities to create a safer walking environment.

A project location map is shown on ***Figure 1***.

II. EXISTING ROADWAY NETWORK

Rosedale Avenue is a two-lane roadway with variable lane widths and a posted speed limit of 25 mph. Curb and pedestrian facilities exist along varying sides of the roadway beginning west of Brookwood Avenue travelling east along the entire corridor to South Franklin Street. There is both free and metered parking on the north side of Rosedale Avenue between South New Street and South Matlack Street. The approximately 1.2 mile corridor has a mix of residential uses (single family, apartment complexes and student housing) and institutional (West Chester University). A more detailed description of each study area intersection and existing pedestrian facilities is provided below.

PA Route 52 & West Rosedale Avenue
There is an existing mountable median island on the southbound Rosedale Avenue approach to the intersection. The southbound approach is stop-controlled. There are currently no pedestrian facilities present. Four (4) to six (6) foot shoulders exist along Route 52 with a posted speed limit of 35 mph. However, no pedestrian activity was observed during the field visit. There are no shoulders present along Rosedale Avenue in the vicinity of the intersection.

Brookwood Avenue & West Rosedale Avenue
Brookwood Avenue is stop-controlled at West Rosedale Avenue and provides access to an apartment complex. The existing curb ramps crossing Brookwood Avenue are not currently ADA compliant (curb cuts are not provided). There is curb on the southeast side of Rosedale Avenue and no delineated shoulders; no curbing or sidewalks exist on the northwest side of Rosedale Avenue.

College Avenue & West Rosedale Avenue
This intersection currently operates under all-way stop control. There are existing pedestrian facilities on the south side of Rosedale Avenue. However, there are no pedestrian facilities along College Avenue or the north side of Rosedale Avenue. No crosswalks are provided to cross Rosedale Avenue.

South Wayne Street & West Rosedale Avenue
South Wayne Street is stop controlled and provides access to single family residential homes. Four-foot wide ADA compliant sidewalks exist on the eastern side of South Wayne Street and the southern side of Rosedale Avenue. A painted crosswalk is located on the eastern side of the intersection crossing Rosedale Avenue.

South New Street & West Rosedale Avenue
The intersection is signalized and currently has pedestrian restrictions on the southern and western legs. Painted crosswalks are provided across the northern and eastern legs. Four foot wide ADA compliant sidewalks exist on three approaches to the intersection. No sidewalks are provided on the southwest corner of the intersection.

Roslyn Avenue & West Rosedale Avenue
Roslyn Avenue is a two-way[1] roadway. The intersection is stop controlled for the minor approach and free for the major approaches. Pedestrian facilities are present along all approaches to the intersection; however, the corners have non-compliant curb ramps and there are currently no marked crosswalks at this intersection.

Mid-block Raised Pedestrian Crossings
There are two (2) mid-block raised pedestrian crossings between the Roslyn Avenue and South Church Street intersections spaced approximately 300 feet apart. Each crossing utilizes overhead flashing warning lights that flash continually along with removable placards indicating "State Law Yield to Pedestrians Within Crosswalk" located at each. There is a railing on the south side of Rosedale Avenue that restricts pedestrians from crossing Rosedale Avenue between the two midblock crossings and redirects pedestrians to the designated crossing areas.

South Church Street (northern leg) & West Rosedale Avenue
South Church Street is a one-way roadway approaching Rosedale Avenue from the southbound direction. The intersection is all-way stop controlled with painted crosswalks crossing each leg of the intersection. All approaches have sidewalk that is five feet wide or greater with ADA compliant slopes. However, the existing curb ramps are not compliant with current ADA standards.

South Church Street (southern leg) & West Rosedale Avenue
South Church Street is a one-way roadway departing Rosedale Avenue. The existing sidewalk adjacent to Rosedale Avenue is greater than five feet and has compliant slopes. South Church Street does not have pedestrian facilities south of West Rosedale Avenue.

Ceredo Avenue & West Rosedale Avenue
Ceredo Avenue is a one-way roadway northbound approaching Rosedale Avenue with stop control. No sidewalk exists along Ceredo Avenue. The existing sidewalk along Rosedale Avenue is ADA compliant; however, the curb ramps crossing Ceredo Avenue are non-compliant and no pavement markings are provided. No crossing or ADA ramps are provided for crossing West Rosedale Avenue.

South High Street & West Rosedale Avenue
This signalized intersection appears to be ADA compliant for current standards for all sidewalks and curb ramps on all approaches. Crosswalks are provided for the pedestrian crossings on all four approaches of the intersection. Currently the crosswalks vary in width from 6' to 8' depending on the approach and stop bar location.

[1] Roslyn Avenue was operating as a one-way roadway intersection during the time period the Midday counts were conducted. Recently, the operation has been converted back to two-way operation.

Sharon Alley & East Rosedale Avenue
Sharon Alley is assumed stop-controlled, but no signs or pavement markings are present. Utilities (manhole covers) currently exist in the roadway that interfere with the pedestrian access route for handicapped pedestrians. Sidewalks are four feet in width with compliant slopes. There are no sidewalks present on Sharon Alley.

South Walnut Street & East Rosedale Avenue
The northern leg of South Walnut Street is a one-way roadway departing Rosedale Avenue; however, there are no signs indicating the restriction. The southern leg is also a one-way roadway leaving the intersection. There are currently four-foot wide sidewalks with compliant longitudinal and cross slopes along Rosedale Avenue. On South Walnut Street, there are no sidewalks currently installed on the southern leg and the northern leg has compliant sidewalk along the eastern side of the street. There is an ADA compliant asphalt path on the western wide of the roadway that services the park.

South Matlack Street & East Rosedale Avenue
The southbound approach to this all-way stop controlled intersection is one-way approaching Rosedale Avenue. The northbound approach has dedicated left-turn and right-turn lanes. The sidewalk on the northern side of Rosedale Avenue is not compliant due to the reduced width of three (3) feet. Additionally, utility poles are installed within the sidewalk thereby decreasing the width to 2.5 feet at several locations. Curb ramps at the intersection are also not compliant. Portions of the sidewalk on the northern side of Rosedale Avenue between Matlack Street and Franklin Street are constructed of asphalt and are severely damaged. In addition, the cross slope in this section of sidewalk exceeds the two percent ADA compliant maximum.

South Franklin Street & East Rosedale Avenue
The eastbound approach has a free movement while the other approaches are stop controlled. On the northern side of Rosedale Avenue, the asphalt sidewalk continues around the corner to the western side of Franklin Street and is damaged. The width is not compliant due to the reduced width of three (3) feet and the cross slope is also not compliant. On the southern side of Rosedale Avenue, an apartment complex emergency entrance exists and compliant sidewalk and handrails serve this entrance. No crosswalks exist for Rosedale Avenue and are not feasible due to the emergency access driveway and gate.

IIII. EXISTING/FUTURE NO-BUILD CONDITIONS

Existing traffic volume information for the PM peak period (4:00PM-6:00PM) was obtained from various traffic studies conducted along the corridor in recent years. Data was also collected during the Midday peak period (11:00AM-1:00PM) for the intersections listed in bold below.

1. West Rosedale Avenue & Lenape Road (Route 52)
2. West Rosedale Avenue & Brookwood Avenue
3. West Rosedale Avenue & College Avenue
4. West Rosedale Avenue & South Wayne Street
5. **West Rosedale Avenue & South New Street**
6. **West Rosedale Avenue & Roslyn Avenue**

7. West Rosedale Avenue & South Church Street (northern leg)
8. **West Rosedale Avenue & South Church Street (southern leg)**
9. West Rosedale Avenue & Ceredo Avenue
10. **West Rosedale Avenue & South High Street**
11. East Rosedale Avenue & Sharon Alley
12. East Rosedale Avenue & South Walnut Avenue
13. East Rosedale Avenue & South Matlack Street
14. East Rosedale Avenue & South Franklin Street

The study area intersections were analyzed during the PM peak and Midday peak period in Existing (2013) and Future (2018) No-Build conditions. These volumes were factored to current and future conditions utilizing a growth factor obtained from the Pennsylvania Department of Transportation Bureau of Planning and Research. The existing traffic count data is included in ***Appendix A***. The counts were factored to the projection year (2018) utilizing a yearly growth factor of 1.91 for Urban Non-Interstate roadways within Chester County. The resultant current year traffic volumes are shown on ***Figure* 2A** for the PM Peak Hour and ***Figure 2B*** for the Midday peak hour***.*** The future year no-build traffic volumes are shown on ***Figure 3A for the PM*** peak hour and ***Figure 3B the Midday*** peak hour*.*

IV. LEVEL OF SERVICE ANALYSIS – EXISTING & FUTURE NO-BUILD

The volumes were subjected to a detailed Level of Service (LOS) analysis according to standard procedures found in *Highway Capacity Manual 2010 (HCM2010)* published by the Transportation Research Board, Washington DC and discussed in detail in ***Appendix B***. A summary of the level of service results are indicated in ***Table 1: Existing and Future No-Build Level of Service and Delays (Peak 4PM-6PM***.) At the signalized intersections, the existing analysis utilized the existing signal timings while the future analysis assumed optimized signal timings. The detailed analysis reports for the Existing (2013-14) and the Future No-Build (2018) PM peak hour are provided in ***Appendix C*** and ***Appendix D***, respectively.

The PM peak hour LOS results are summarized on ***Figure 4A: Existing Conditions PM Peak Hour LOS*** and ***Figure 5A: 2018 Future Conditions PM Peak Hour LOS***.

As indicated in ***Table 1*** for the PM Peak Hour, for the Future No-Build 2018 condition, the intersections of PA Route 52 & West Rosedale Avenue, S. New Street and West Rosedale Avenue, and S. Matlock St and West Rosedale Ave have movements that operate below the preferred level of service (LOS D or better) and mitigation should be provided.

A summary of the level of service results for the Midday Peak Hour is provided in ***Table 2: Existing and Future No-Build Level of Service and Delays (Midday Peak 11AM-1PM)***. At the signalized intersections, the existing analysis utilized the existing signal timings while the future analysis assumed optimized signal timings. The detailed analysis reports for the Existing (2014) and the Future No-Build (2018) are also provided in ***Appendix C*** and ***Appendix D***, respectively.

Table 1: Existing and Future No-Build Level of Service and Delays (Peak 4PM-6PM)

Intersection	Existing 2013 PM Peak Hour LOS (Delay in seconds)	Future No-Build 2018 PM Peak Hour LOS (Delay in seconds)
PA Route 52 & W Rosedale Ave	B (14.5)	**F (124.0)**
Westbound Left	F (86.4)	**F (543.0)**
Southbound Left	A (8.2)	A (8.4)
Brookwood Ave & W Rosedale Ave	A (0.6)	A (0.5)
Westbound Left	A (7.6)	A (7.7)
Northbound Left	A (9.4)	A (9.5)
College Ave & W Rosedale Ave	A (8.4)	A (8.6)
Eastbound Left	A (8.6)	A (8.8)
Southbound Left	A (7.6)	A (7.7)
S Wayne St & W Rosedale Ave	A (0.5)	A (0.2)
Eastbound Left	A (7.9)	A (7.9)
Southbound Left	B (10.9)	B (11.1)
S New St & W Rosedale Ave	E (67.0)	**E (73.4)**
Eastbound Left	B (15.4)	C (21.7)
Westbound Left	C (30.1)	**E (57.3)**
Northbound Left	D (35.5)	D (39.1)
Southbound Left	F (192.1)	**F (169.0)**
Roslyn Ave & W Rosedale Ave	A (1.5)	A (1.7)
Northbound Left	C (18.3)	C (21.2)
Westbound Left	A (8.2)	A (8.4)
S Church St & W Rosedale Ave (N)	B (11.3)	B (12.4)
Southbound Left	B (10.4)	B (11.1)
S Church St &W Rosedale Ave (S)	A (0.2)	A (0.2)
Westbound Left	A (8.9)	A (9.2)
Ceredo Ave & W Rosedale Ave	A (0.8)	A (0.7)
Northbound Left	C (16.7)	C (17.5)
S High St & W Rosedale Ave	C (21.0)	C (23.3)
Eastbound Left	D (42.2)	D (44.1)
Eastbound Thru/Right	C (26.3)	C (24.4)
Westbound Left	C (27.6)	C (27.9)
Westbound Thru/Right	C (22.1)	C (20.9)
Northbound Left	C (20.5)	C (26.5)
Northbound Thru/Right	B (14.1)	B (19.0)
Southbound Left	B (18.4)	C (26.9)
Southbound Thru/Right	B (14.4)	B (19.0)
Sharon Alley & E Rosedale Ave	A (0.4)	A (0.4)
Eastbound Left	A (8.2)	A (8.4)
Southbound Left	B (13.9)	C (15.0)
S Walnut St & E Rosedale Ave	A (0.7)	A (0.7)
Eastbound Left	A (9.0)	A (9.1)
Westbound Left	A (8.0)	A (8.0)
S Matlack St & E Rosedale Ave	B (15.0)	D (29.9)
Northbound Left	C (21.3)	**F (55.9)**
Westbound Left	B (12.6)	C (16.7)
Southbound Left	B (11.0)	B (13.0)
S Franklin St & E Rosedale Ave	A (7.4)	A (7.5)
Eastbound Left	A (7.6)	A (7.6)
Southbound Left	A (9.6)	A (9.5)

Table 2: Existing and Future No Build Level of Service and Delays (Midday Peak 11AM-1PM)

Intersection	Existing 2014 Midday Peak Hour LOS (Delay in seconds)	Future No-Build 2018 Midday Peak Hour LOS (Delay in seconds)
S New St & W Rosedale Ave	E (66.9)	**F (85.2)**
Eastbound Left	B (16.3)	B (16.5)
Westbound Left	C (30.3)	**D (35.8)**
Northbound Left	F (79.7)	**F (108.1)**
Southbound Left	F (128.1)	**F (159.3)**
Roslyn Ave & W Rosedale Ave	A (2.2)	A (2.4)
Northbound Left	C (17.1)	C (19.0)
Westbound Left	A (9.5)	A (9.7)
S Church St & W Rosedale Ave (N)	B (11.2)	B (12.0)
Southbound Left	B (10.3)	B (10.7)
S High St & W Rosedale Ave	F (170.5)	**F (200.5)**
Eastbound Left	F (251.7)	F (187.7)
Eastbound Thru/Right	F (127.3)	**F (162.7)**
Westbound Left	F (284.0)	F (213.5)
Westbound Thru/Right	F (177.1)	**F (228.5)**
Northbound Left	F (612.5)	F (502.7)
Northbound Thru/Right	F (206.1)	F (177.6)
Southbound Left	F (262.6)	**F (391.8)**
Southbound Thru/Right	F (161.0)	**F (223.7)**

The LOS results are summarized on ***Figure 4B: Existing Conditions Midday Peak Hour LOS*** and ***Figure : 2018 Future Conditions Peak Hour LOS***.

As indicated in ***Table 2***, for the Existing Midday Peak Hour condition and the Future No-Build 2018 condition, the intersection of S. New Street and West Rosedale Avenue, and S. High St and West Rosedale Ave have movements that operate below the preferred level of service (LOS D or better) and mitigation should be provided.

V. PLANNED ROADWAY IMPROVEMENTS

Upon review of the Delaware Valley Regional Planning Commission's Transportation Improvement Program (TIP), there are no improvements programmed in the vicinity of the study corridor that would have an impact on operations along Rosedale Avenue. The only project within West Chester Borough is the Church Street Streetscape project, from Chestnut Street to Miner Street. The streetscape project includes the installation of sidewalks, curbs, pedestrian street lighting, street furniture, ADA ramps, etc. There is also an improvement project planned for the S.R 0926 & US 202/ US 322 intersection including additional lanes and signal upgrades; however, the construction of that improvement is not scheduled until Fiscal Year 2017-2020 and will likely not have a significant impact on the Rosedale Avenue corridor.

VI. ALTERNATIVES AND LOS IMPACTS

As stated previously, the purpose of this report is to identify improvements along the corridor to bring all approaches to each studied intersection to a Level of Service (LOS) D or better for the existing and future traffic conditions. Improvements have also been identified that may be constructed along Rosedale Avenue and are discussed in more detail below. As indicated previously, the PA Route 52 & West Rosedale Avenue, South Matlack Street & East Rosedale Avenue, and High Street and Rosedale Avenue intersections are the only locations that require mitigation to improve the vehicular Level of Service of the intersection. The roadway improvements mentioned above along with pedestrian improvements have been identified for each location to improve the pedestrian safety along the corridor:

PA Route 52 & West Rosedale Avenue
The poor overall level of service at this intersection is due to the high volume of traffic from the minor street trying to gain access to Route 52. A preliminary traffic signal warrant evaluation was conducted in accordance with PennDOT Publication 46, *Engineering and Traffic Studies,* Subchapter 4.3 "Traffic Signal Warrants and Engineering Studies". The volumes satisfy the requirements for signalization for Signal Warrant 3 (Peak Hour volume warrant) utilizing projected 2018 traffic volumes. The signal warrant worksheet is included in ***Appendix E***. With the installation of a traffic signal, the overall level of service will be improved to LOS A and the westbound approach will be improved from LOS F to LOS B. All other movements at this intersection will operate at acceptable LOS B or better.

Due to the skewed angle of Rosedale Avenue in relation to PA Route 52, as well as the generally consistent volumes on all three approaches to the intersection, an alternative option to consider would be the installation of a roundabout. One benefit provided by a roundabout is once it is installed the operation/maintain cost is less than when compared to the cost associated with operation/maintenance of a traffic signal. Roundabouts use yield conditions on all approaches and allow for slow consistent speeds for all movements; in addition, a roundabout would provide the necessary traffic control measure that is sensitive to the historical context of the area. However, the site would have to be more closely evaluated to determine available right-of-way, potential utility conflicts, existing grades, etc. to verify whether construction of a roundabout is feasible at this location.

Brookwood Avenue & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. However, the existing curb ramps crossing Brookwood Avenue should be upgraded to be ADA compliant. The four-foot wide sidewalk along the southern side of Rosedale Avenue will require replacement adjacent to the proposed curb ramps. Sections of the sidewalk between Brookwood Avenue and College Avenue have cross slopes that exceed two percent and should therefore be replaced.

College Avenue & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. Since there are no pedestrian facilities along College Avenue, there is no requirement to provide pedestrian crossings at this intersection. However, ADA compliant crossings should be

provided at the driveway for the Cambridge Hall Apartment complex that is immediately adjacent to this intersection. Additionally, sidewalk should be constructed on the east side of the driveway to continue the pedestrian path along the south side of Rosedale Avenue. There is evidence of existing pedestrian traffic at this location due to a path worn in the grass.

South Wayne Street & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. The existing sidewalk transitions from the south side of Rosedale Avenue to the north side at South Wayne Street. An existing painted crosswalk is located on the eastern side of the intersection crossing Rosedale Avenue. However, the pavement markings are faded and should be repainted. In addition, since this is a mid-block pedestrian crossing, advance warning signs should be installed on both the eastbound and westbound approaches to warn drivers of the potential for pedestrians crossing the street. Installing rectangular rapid flash beacons (RRFBs) at the crossing with pedestrian actuation, either active (pushbutton) or passive (sensors, video detection, etc.), would draw attention to pedestrians within the roadway. Decorative pavement or a raised crossing could further improve the safety of pedestrians at this location. In addition, the existing curb ramps at the intersection are not ADA compliant. The ramps on the northeast and southeast corners of the intersection should be upgraded.

South New Street & West Rosedale Avenue
With proper intersection alignment of New Street, the two New Street approaches will operate concurrently in lieu of the split phase timings for the existing operation. This will provide a more efficient operation at the intersection. This intersection will function acceptably in the future condition with a LOS B. Minor widening may be required for alignment of the New Street approaches along with removal of some parking along New Street. In addition, removal of the parking along Rosedale should be considered along with some minor widening along Rosedale Avenue for the eastbound approach. With these two improvements left-turn lanes may be provided along Rosedale Avenue at the intersection further reducing vehicular delay at the intersection. A sketch plan has been provided as Figure 6 to depict the improved intersection configuration. Upgrades are required to the pedestrian facilities as no ADA compliant curb ramps are present at this intersection. Signal equipment upgrades should be installed including pedestrian push buttons and pedestrian signals with countdown timers. Since no pedestrian facilities are present on the southwest corner, the existing pedestrian restrictions should remain.

Roslyn Avenue & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. The existing curb ramps are not ADA compliant and should be upgraded. In addition, pavement markings should be installed for the pedestrian crossing of Roslyn Avenue.

During the time the PM counts were collected, Roslyn Avenue was operating as a two roadway. In April 2014 when the Midday counts were collected, Roslyn Avenue had been converted to one-way roadway. It is our understanding, the township has recently converted Roslyn Avenue back to a two-way roadway.

Roslyn Avenue operating as a two-way roadway helps decrease the vehicular traffic along the Rosedale Avenue Corridor. This allows vehicles to access High Street (ultimately the US 202/US 322 interchange) via Norfolk Avenue or Spruce Avenue.

We understand Roslyn Avenue is a residential street with no centerline striping and not intended for high volume traffic. One alternative to reduce cut-through traffic on this street is to make Roslyn Avenue a one-way roadway from Oak Lane to Spruce Avenue with the one way flow in the northbound direction towards Rosedale Avenue. The modification to this residential street will divert traffic departing the campus area from this residential street to the collector street of Spruce Avenue which is designed to handle higher volumes than Roslyn Avenue. Circulation and access to the surrounding neighborhood would remain almost unaffected. The route around the one–way portion would be a minimum increase in travel time and distance.

In the surrounding neighborhoods, if excessive traffic volumes or speeding occur, traffic calming alternatives could be installed to reduce speeding and protect residents. Traffic calming alternatives if necessary can be investigated as part of a separate study.

South Church Street (northern leg) & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS B. Although there are painted crosswalks at the intersection, the existing markings are faded and should be refreshed. The existing curb ramps are non-compliant and should be upgraded accordingly.

South Church Street (southern leg) & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. ADA compliant curb ramps are required for the crossing of South Church Street.

Ceredo Avenue & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. The existing curb ramps crossing Ceredo Avenue should be upgraded to be ADA compliant.

South High Street & West Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS C during the PM peak hour. The intersection does not function at an acceptable LOS D or better in existing or future midday peak hours. As shown in Table 2, the LOS in the existing midday peak analysis and the future midday peak hour is LOS F. The unacceptable LOS F is due to the high volume of vehicular and pedestrian traffic during the midday peak hour. In order to increase the LOS to an acceptable level, several improvements could be implemented. The intersection meets the minimum volumes to install right-turn lanes on all four approaches. Based on the data available an advance left-turn phase is warranted for the northbound direction and an advance left-turn phase is likely warranted in the southbound direction. If right-turns are installed on all approaches along with some signal timing and phasing adjustments the intersection will operate at LOS D or better for all movements. The feasibility of installing right-turn lanes with regard to the right-of-way turn will need to be examined in more detail.

The existing crosswalks have faded and should be repainted. The crosswalk widths could be increased to a 10-foot width to better accommodate the pedestrian volume

during certain times. The signalized intersection has pedestrian signals that should be upgraded to pedestrian countdown timers with the associated signage. Consideration should be given to remove metered parking along the west leg of Rosedale Avenue. With removal of the parking the eastbound left-turn lane could be extended. Meter parking may be relocated as directed by West Chester Borough and West Chester University. A sketch depicting the extended eastbound turn-lane is provided as ***Figure 7***. Strong consideration should be given to upgrading the signal controller to a traffic adaptive system. This will allow the traffic signal to constantly collect data and adjust itssignal timings based on the real time fluctuations in traffic to better meet the changing vehicular and pedestrian demand at this intersection. Additional traffic signals along High Street such as Price Street, and Linden Street could be added to the traffic adaptive system to provide better coordination. Currently, all three signals are listed as part of a closed loop system but Linden Street and Rosedale Avenue are operating in "free" mode without the benefit of coordination. Consideration should also be given to constructing an overhead pedestrian walkway to reduce pedestrian's conflicts at the intersection.

Sharon Alley & East Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. Curb ramps should be upgraded to be ADA compliant. Painted crosswalks should be installed crossing Sharon Alley and the manholes should be adjusted so the rims are flush with the pavement.

South Walnut Street & East Rosedale Avenue
This intersection functions acceptably in the future condition with a LOS A. ADA compliant curb ramps should be installed crossing South Walnut Street on both sides of Rosedale Avenue. One-way (R6-1L & R6-1R) signs should be installed to indicate the traffic flows of South Walnut Street.

South Matlack Street & East Rosedale Avenue
Although the overall level of service at this intersection is within acceptable parameters (LOS C), the northbound left-turn movement experiences heavy delay with a LOS D. There is an excessively high volume of left turning vehicles during the PM peak hour. A preliminary traffic signal warrant evaluation was conducted in accordance with PennDOT Publication 46, *Engineering and Traffic Studies,* Subchapter 4.3 "Traffic Signal Warrants and Engineering Studies". The volumes satisfy the requirements for signal Warrant 3 (peak hour volume warrant) utilizing projected 2018 traffic volumes. The traffic signal warrant evaluation worksheet is included in ***Appendix E***. With the implementation of this improvement, the overall level of service is improved to LOS B and the northbound approach is improved to LOS B.

New ADA compliant sidewalk should be installed between South Matlack Street and South Walnut Street on the northern side of Rosedale Avenue. Upgraded curb ramps should be installed on all corners of the intersection. Existing crosswalks are faded and should be repainted to increase visibility. Update the crosswalk markings crossing the northern leg to be consistent with the remainder of the intersection. New sidewalk must also be installed on the northern side of Rosedale Avenue between South Matlack Street and South Franklin Street to be compliant.

South Franklin Street & East Rosedale Avenue
The existing asphalt sidewalk on the northern side of Rosedale Avenue that continues around the corner onto South Franklin Street should be replaced as it is damaged, the three foot width, and the cross slope is not ADA compliant. Upgraded curb ramps should be installed on the northern side of Rosedale Avenue for the crossing of Franklin Street.

A summary of the level of service analysis for the Future 2018 condition with the implementation of the alternative improvements identified above is provided in ***Table 3: Future 2018 Build Level of Service and Delays*** and on ***Figure 8: 2018 Recommended Improvements Peak Hour Level of Service***. The detailed analysis reports are provided in ***Appendix F***.

Table 3: Future 2018 Build Level of Service and Delays

Intersection	Improvement	Future Build 2018 PM Peak Hour LOS (Delay in seconds)
PA Route 52 & W. Rosedale Ave	Install traffic signal	B (14.7)
New Street and W. Rosedale Avenue	Realign new Street	B(10.9)
S Matlack St & E Rosedale Ave	Install traffic signal	B (14.0)
S. High Street & W. Rosedale Ave	Install right-turn lanes and phasing improvements	D (54.0)

Alternative Improvements

Create one-way pairs around campus

The "city block" layout of the roadways surrounding the West Chester University campus provide a unique opportunity to revise them to one-way pairs in order to increase the capacity of the existing roadways. In particular, Rosedale Avenue (EB) and Sharpless Street (WB) could provide one of the one-way pairs and High Street (NB) and New Street (SB) could provide the other one-way pair. By removing one of the directional traffic flows, it reduces the conflicts at the existing intersections and provides better signal coordination. In addition, a new southbound right-turn lane would be required along New Street at the intersection with Rosedale Avenue. This could be accomplished with the removal of some of the on-street parking in the vicinity of the intersection and installation of new pavement markings within the existing cartway width. If desired, two eastbound lanes could be provided along Rosedale Avenue between New Street and High Street, with a left turn only lane drop at High Street. Signing becomes extremely important when implementing an improvement of this nature so as to appropriately direct traffic around the campus. The roadways identified for this alternative improvement are shown in ***Figure 9***. The approximate cost of this improvement is $94,650. The traffic volumes associated with this alternative and the corresponding levels of service at each intersection are provided in ***Appendix G***.

Improve Pleasant Grove Road

Another option that was discussed in planning meetings was the use of West Pleasant Grove Road to provide access to US 202/ US 322. Eastbound Pleasant Grove Road is currently restricted to allow only the southbound movement onto US 202/ US 322 via a ramp with a yield condition. Similarly, westbound Pleasant Grove Road traffic must turn right to continue northbound on US 202/ US 322 via a stop-controlled intersection. For this to be a viable alternative, all movements must be allowed at this intersection which would likely require signalization. The nearest signal to the north is approximately 1,250 feet at Skiles Boulevard and the adjacent signal to the south is approximately 3,150 feet at West Street Road (S.R. 0926). Pleasant Grove Road from South New Street to US 202/ US 322 is a two lane roadway approximately 18 feet in width. The posted speed limit is 35 mph. The roadway would require widening to provide adequate lane widths and shoulders. Additionally, the roadway would likely require a major upgrade as the existing road is in poor condition.

The current alignment of Pleasant Grove Road with a terminus at South New Street would likely not provide much congestion relief for Rosedale Avenue since traffic west of Lenape Road would have a difficult travel path to access Pleasant Grove Road. For this to be a viable option, Pleasant Grove Road would need to be extended to South Birmingham Road. This improvement requires further investigation, as there are possible environmental impacts due to the existing waterway (Radley Run) in the vicinity of the proposed extension. The construction costs for this improvement may be high due to bridge structures that would be required to carry the extension over the stream channel. The location of the proposed alternative improvement is provided in ***Figure 10***. The approximate cost of just improving Pleasant Grove Road and providing a full-access signalized intersection is $2,065,700. The approximate cost to extend to South Birmingham Road is $1,613,800. The traffic volumes associated with this alternative and the corresponding levels of service at each intersection are provided in ***Appendix G***.

Upgrade of Tigue Road and Stadium Drive

There are existing 18-20 foot roadways between PA Route 52 and South New Street (Tigue Road) and South New Street and South High Street that traverse through the Robert B. Gordon Natural Area for Environmental Studies, known as Stadium Drive. The upgrade of these roadways could alleviate traffic on Rosedale Avenue as it would provide a direct connection between the residential areas southwest of West Chester and the US 202/US 322 interchange. The roadways would likely require a major upgrade as the existing roads are in poor condition and are not wide enough to accommodate two-way traffic with the appropriate lane and shoulder widths. Consideration must be given to the likelihood of high environmental impacts with this alignment due to the location of Stadium Drive within the Nature Area. Although this alternative may provide the highest diversion of traffic from Rosedale Avenue, it may also provide the highest environmental impacts. Additional roadway alignments may also be examined to determine if a roadway can be installed along the south border of the Nature Area. Any realignment would be at a significantly higher cost but may have less of an environmental impact. Additional studies must be done to identify the effect

either of these alternatives improvements on the Nature Area and to determine if either option is feasible.

Another consideration with this alternative improvement is the Stadium Drive intersection with South High Street. The existing unsignalized intersection provides an ideal location for traffic traveling eastbound on Stadium Drive to access both northbound and southbound US 202. However, accommodations would be required for traffic exiting southbound US 202 to provide access to the Stadium Drive connector. One alternative to consider would be a "slip ramp" off the existing northbound US 322 off ramp that would tie in across from Stadium Drive for traffic destined for South New Street or Lenape Road (PA 52). This would likely require signalization of this intersection and an upgrade of the existing off ramp. The location of the proposed alternative improvement is provided in ***Figure 11***. The approximate cost of this improvement is $4,574,500. This estimate includes only the roadway construction costs and does not include the cost of an environmental study that will have to be performed to determine the impacts within the Nature Area. The traffic volumes associated with this alternative and the corresponding levels of service at each intersection are provided in ***Appendix G***.

Rosedale Avenue Extension to South Bolmar Street/Westtown Road

This project also included the investigation of extending Rosedale Avenue east across South Bolmar Street to intersect with Westtown Road. After reviewing the study area with respect to traffic and environmental constraints, we offer the following considerations:

- If the extension were constructed, there is a potential to increase the through traffic along Rosedale Avenue that could jeopardize the safety of the existing pedestrians along the corridor.
- The skewed alignment at East Rosedale Avenue and South Franklin Street would require split phase timing if a traffic signal were to be installed at this location. This would cause increased delay along the Rosedale Avenue corridor
- Coordination and approval with the existing rail line would be required.
- A cursory review of FEMA floodplain maps identified the area between Rosedale Avenue and South Bolmar Street as being within a floodplain, which could substantially increase the cost of permitting, constructing and maintaining the proposed roadway.
- Due to the location of existing buildings and parking areas, the alignment of the connection to Westtown Road would likely parallel and/or cross the existing stream channel located between the developments along Autopark Boulevard and East Nields Street. This would require either the relocation of the stream or construction of numerous bridge structures to carry the roadway over the stream. This could substantially increase the cost of this improvement and require a lengthy environmental permitting process.

If the extension were constructed, the proposed improvement to Rosedale Avenue should terminate at South Bolmar Street. This would require vehicles destined to the north to utilize East Nields Street to access the existing signal at Westtown Road and vehicles destined to the south to utilize either Autopark Boulevard or continue along South Bolmar Street to South Concord Road. The only available land area to continue

the extension out to Westtown Road without having substantial right-of-way and property impacts is within an identified floodplain along an existing creek. The location of the proposed alternative improvement is provided in ***Figure 12.*** The approximate cost of the extension to South Bolmar Street is $551,250. The cost to extend the alignment to Westtown Road is $1,039,900 not including the cost for construction and permitting through the rail right of way. Additional studies would be necessary to determine the impact this extension would have on the following intersections:

1. Bolmar Street & Rosedale Avenue Extension
2. Bolmar Street & Nields Street
3. Nields Street & Westtown Road
4. Bolmar Street & Autopark Boulevard
5. Autopark Boulevard and Westtown Road

The traffic volumes associated with this alternative and the corresponding levels of service at each intersection are provided in ***Appendix G***.

Pedestrian Crossing Between Sykes Student Union and Killinger Hall

There are two (2) existing mid-block raised pedestrian crossings with overhead yellow flashers between the Roslyn Avenue and South Church Street intersections that provide linkage from the main campus of West Chester University to the Earl F. Sykes Student Union building across Rosedale Avenue. The use of the existing continuous overhead yellow flashing lights is not a viable option as it becomes ineffective over time as drivers become accustomed to the flashing lights and they eventually provide little or no benefit to pedestrian safety.

One alternative that can be explored would be to replace the yellow flashers with two rectangular rapid flashing beacons (RRFB) that would be triggered by pedestrians utilizing either active (pushbutton) or passive (sensors, video detection, etc.) actuation. This would improve pedestrian safety since the LED lights would catch a driver's attention and only flash when pedestrians are waiting to cross Rosedale Avenue. The raised crossings could also be replaced or enhanced with decorative crosswalks to draw attention to the crossing and the pedestrians within the roadway. The approximate cost of this improvement is $55,700 and would require permitting through Pennsylvania Department of Transportation.

Another option would be to install traffic signals at each existing crossing that would turn red upon pedestrian actuation, either through active or passive deployment. Due to the proximity of the two crossings (approximately 300 feet apart) and to maximize efficiency, stop bars could be installed west of the western crossing for the eastbound lane and east of the eastern crossing for the westbound lane which would allow the entire area between the crossings to be used by pedestrians. This would eliminate the need for the existing railing on the south side of Rosedale Avenue and provide a large pedestrian area to allow a maximum number of pedestrians to cross in a shorter timeframe. A raised crossing and/or decorative pavement could be used within the pedestrian area to increase awareness and visibility. The traffic signal would remain green on Rosedale Avenue when no pedestrians are present. This unique option should be discussed with PennDOT as the situation is in an unusually high pedestrian area. The approximate cost of this improvement is $265,700.

An additional option would be the construction of an elevated pedestrian overpass that would allow pedestrians free movement without conflicting with vehicular traffic along Rosedale Avenue. The entrance to the student union building is already at a higher elevation than the roadway, so it provides the opportunity to carry that elevation across the roadway and tie into the existing grade of the campus on the north side of Rosedale Avenue. Pedestrian access would be restricted across Rosedale Avenue in this area with the use of fencing or some other deterrent while the on-street parking restrictions in the vicinity of the existing crosswalks would be removed, providing additional parking for students and faculty. The location of the proposed alternative improvement is provided in ***Figure 13***. The approximate cost of this improvement is $523,200.

Improve West Street Road (S.R. 0926)

West Street Road is a good route for those destined for southbound US 202/US 322 as it provides a direct connection from Creek Road. However, it is likely that those destined for the north would still use Rosedale Avenue or other roadways within the Borough. Although this route may not divert traffic from Rosedale Avenue, the corridor could still be utilized for access and should be considered for future improvement. The existing two-lane roadway has a posted speed limit of 45mph and is approximately 21 feet in width. The roadway should be widened to provide appropriate lane and shoulder widths. The intersection of S.R. 0926 and US 202/322 is already planned for upgrades beginning in Fiscal Year 2017. The location of the proposed alternative improvement is provided in ***Figure 14***. The approximate cost of this improvement is $3,498,000. The traffic volumes associated with this alternative and the corresponding levels of service at each intersection are provided in ***Appendix G***.

Below in Table 4 is a summary of improvements suggested in this study. These improvements have been classified as improvements that could be completed in short-term (less than 6 months), intermediate (6 month-2 years) and long-term (more than 2 years) improvements assuming funding is available. An approximate cost of the improvements has been provided.

Table 4- Improvement Summary			
	Intersection	Description	Approx. Cost
Short Term Improvements			
1	South Wayne Street and West Rosedale Avenue	• Refresh Pavement Markings at intersection. • Install advance warning signs at the crossing	$120 $400
2	Brookwood Avenue & West Rosedale Avenue	• Upgrade to ADA compliant ramps at intersection	$6,000
3	College Avenue & West Rosedale Avenue	• Upgrade to ADA compliant ramps at intersection • Replace sidewalk between College Avenue and Wayne Avenue	$12,000 $25,550
4	South New Street & West Rosedale Avenue	• Upgrade curb ramps • Installed pedestrian push buttons • Install pedestrian signals with countdown timers.	$12,000 $1,000 $2,000
5	Roslyn Avenue & West Rosedale Avenue	• Upgrade curb ramps • Refresh crosswalk pavement markings.	$12,000 $240
6	South Church Street (northern leg) & West Rosedale Avenue	• Upgrade curb ramps • Refresh crosswalk pavement markings.	$18,000 $240
7	South Church Street (southern leg) & West Rosedale Avenue	• Upgrade curb ramps	$6,000
8	Rosedale Avenue Ceredo Avenue & West	• Upgrade curb ramps	$6,000
9	South High Street & West Rosedale Avenue	• Install pedestrian signals with countdown timers. • Widen Crosswalk	$4,000 $600
10	Sharon Alley & East Rosedale Avenue	• Upgrade curb ramps • Install crosswalks • Adjust manhole rims to be flush with the pavement.	$12,000 $240 $200
11	South Walnut Street & East Rosedale Avenue	• Install ADA compliant curb ramps	$24,000
12	South Matlack Street & East Rosedale Avenue	• Install ADA compliant sidewalk between South Matlack Street and South Walnut Street on the northern side of Rosedale Avenue. • Upgrade curb ramps • Refresh crosswalk pavement markings.	$21,200 $24,000 $480
13	South Franklin Street & East Rosedale Avenue	• Replace damaged sidewalk. • Upgrade curb ramps	$22,000

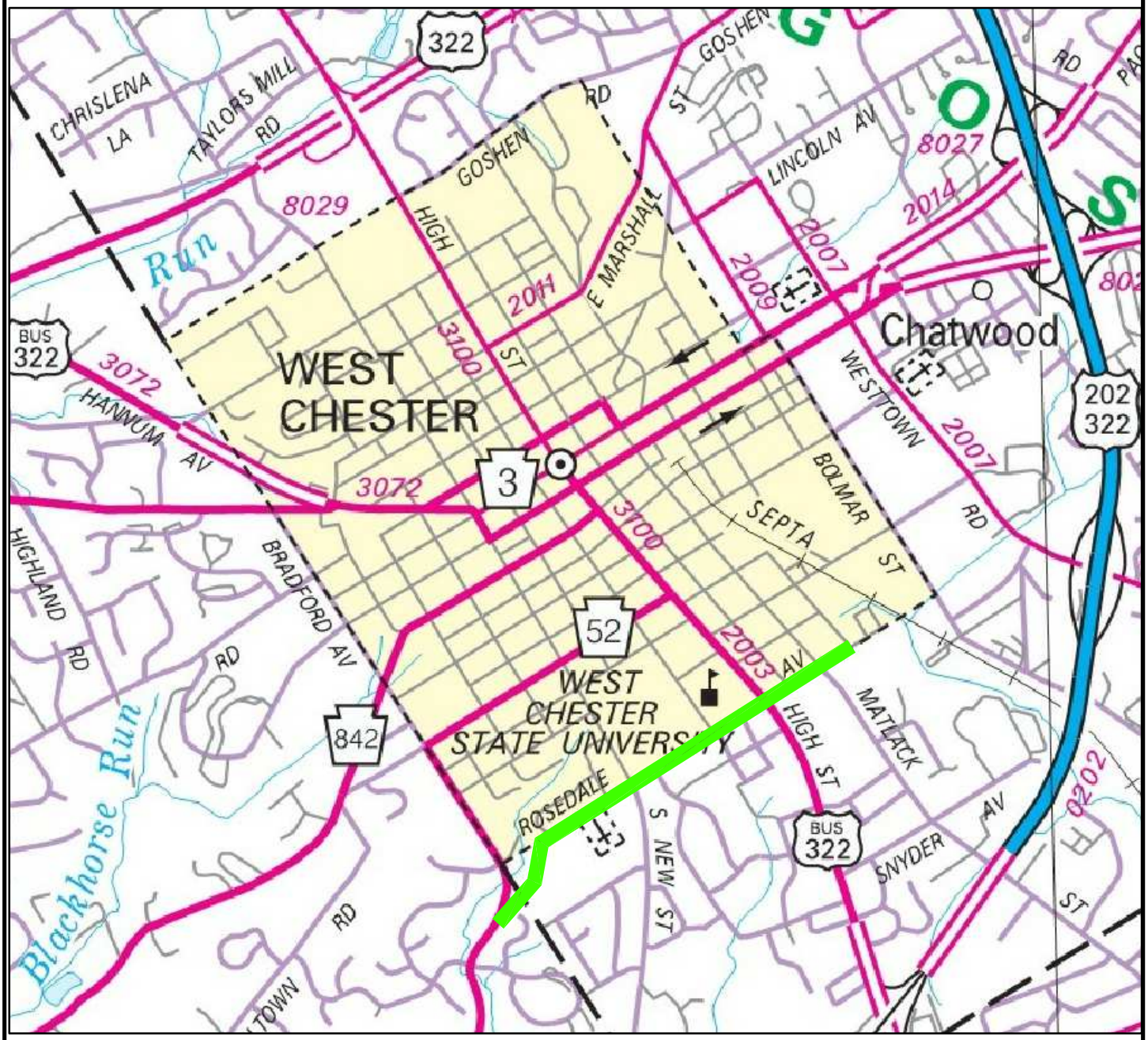
	Intermediate Term Improvements		
14	PA Route 52 & West Rosedale Avenue	• Install a traffic signal or • Install a roundabout	$250,000 $250,000
15	South Wayne Street and West Rosedale Avenue	• Install rectangular rapid flash beacons (RRFB's) • Install ADA complaint ramps	$50,000 $12,000
16	Create one-way pairs around campus	• Rosedale Avenue (EB) and Sharpless Street (WB) could provide one of the one-way pairs and High Street (NB) and New Street (SB) could provide the other one-way pair. Install Signage • Remove on-street parking in the vicinity of the intersection and install pavement markings.	Total cost $94, 650
17	Improve Pleasant Grove Road	• Allow all movements at the intersection of US 202 and Pleasant Grove Road via a traffic signalization. • Widen to provide adequate the lane widths and shoulders. • Upgrade pavement as the existing road is in poor condition. • Extend to South Birmingham Road	 Total cost $2,065,700 $1,613,800
18	South Matlack Street & East Rosedale Avenue	• Install Traffic Signal	$250,000
19	Pedestrian Crossing Between Sykes Student Union and Killinger Hall	• Replace the yellow flashers with two rectangular rapid flashing beacons (RRFB) to be trigger by actuation • The raised crossings could also be replaced or enhanced with decorative crosswalks. • Install traffic signal at each of the crossings	$55,700 $14,500 $265,650
	Long Term Improvements		
20	Upgrade of Tigue Road and Stadium Drive	• Upgrade existing roads to accommodate two-way traffic with the appropriate lane and shoulder widths • Construct a "slip ramp" off the existing northbound SR 322 off ramp • Signalize High Street and Stadium Drive	$4,574,500

21	Rosedale Avenue Extension to South Bolmar Street/Westtown Road	• Extend Rosedale Avenue east across to South Bolmar Street. • Install traffic signal at East Rosedale Avenue and South Franklin Street. • Coordination and approval with the existing rail line would be required. • Environmental permitting will be necessary with the appropriate agencies. • Extend Rosedale Avenue east across to South Westtown Road.	Total:$551,250 $1,039,900
22	Pedestrian Crossing Between Sykes Student Union and Killinger Hall	• Construction of an elevated pedestrian walkway.	$523,200
23	South High Street & West Rosedale Avenue	• Construction of an elevated pedestrian walkway.	$1,500,000
24	Improve West Street Road (S.R. 0926)	• Widen roadway to provide appropriate lane and shoulder widths.	$3,498,000

CONCLUSIONS

With the installation of the traffic signals at PA Route 52 and Matlack Street, PA Route 52 and Matlack Street, will operate at LOS D or better for all approaches. Realignment of New Street at Rosedale Avenue is recommended to have this intersection operate at LOS D or better. At High Street capacity improvements such as installation of right–turn lanes and timing adjustments are needed to reach a LOS D or better at this intersection. A traffic adaptive system at this intersection adapting to the changing traffic conditions would be beneficial. However, these improvements will not divert any of the existing or future traffic volume from the roadway. The pedestrian enhancements identified in the report will provide a safer walking environment along the corridor for pedestrian traffic. Discussions should begin with PennDOT once the municipalities and West University are ready to proceed regarding the feasibility of installing pedestrian and traffic signals at the identified locations on Rosedale Avenue.

An improved and upgraded Tigue Road/Stadium Drive with a connection from PA Route 52 to the US 202/US 322 interchange would provide the highest traffic diversion and relief for Rosedale Avenue and likely the region. Additional studies would be required to determine the exact impact of this alternative on the existing Nature Area. Although this improvement would provide some relief for the Rosedale Corridor, the benefit for the Rosedale Corridor vs the cost ratio (b/c ratio) will not likely justify the infrastructure investment.



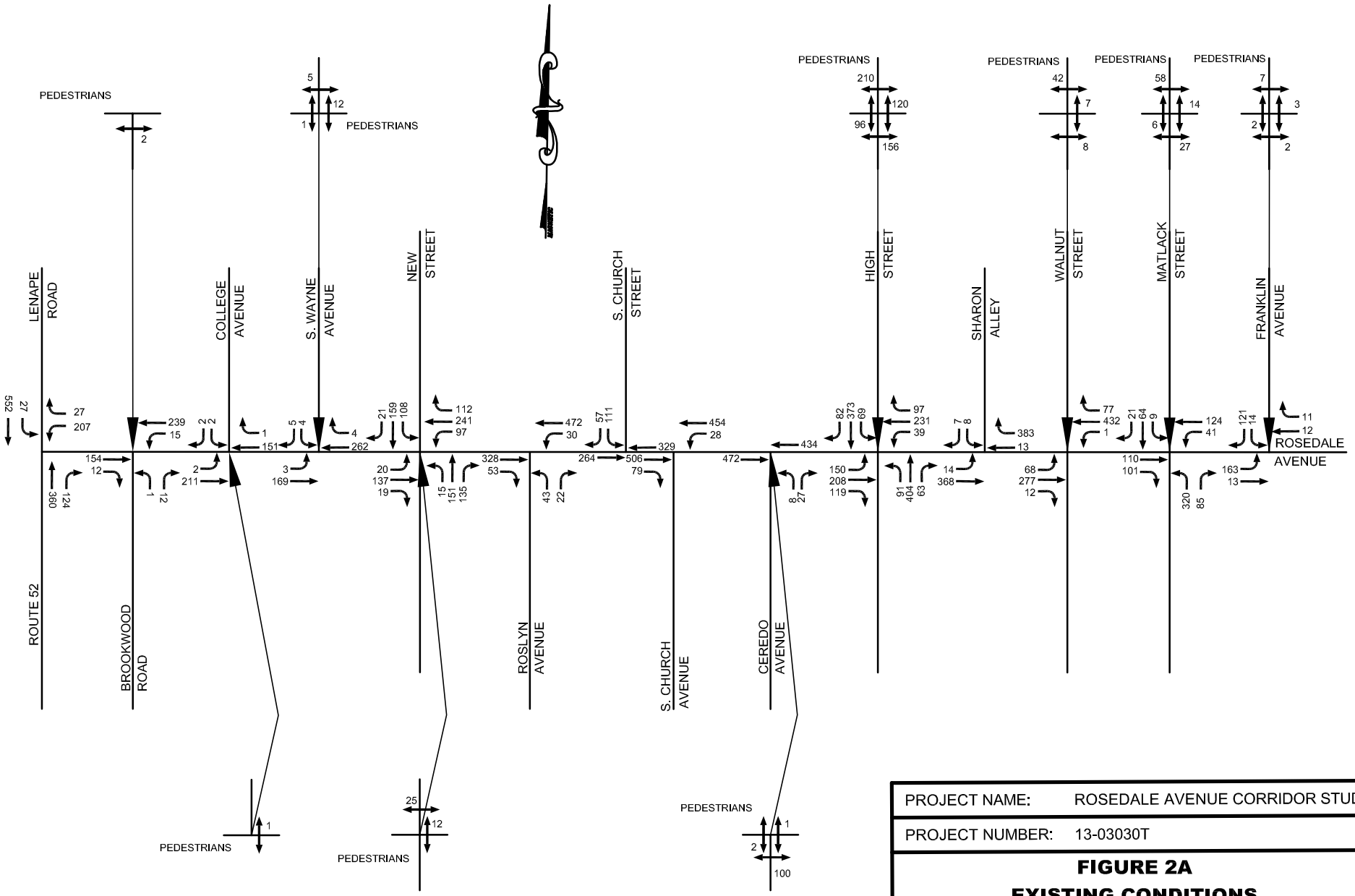
Project Corridor

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 1

PROJECT LOCATION MAP

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 2A

EXISTING CONDITIONS
PM PEAK HOUR TRAFFIC VOLUMES

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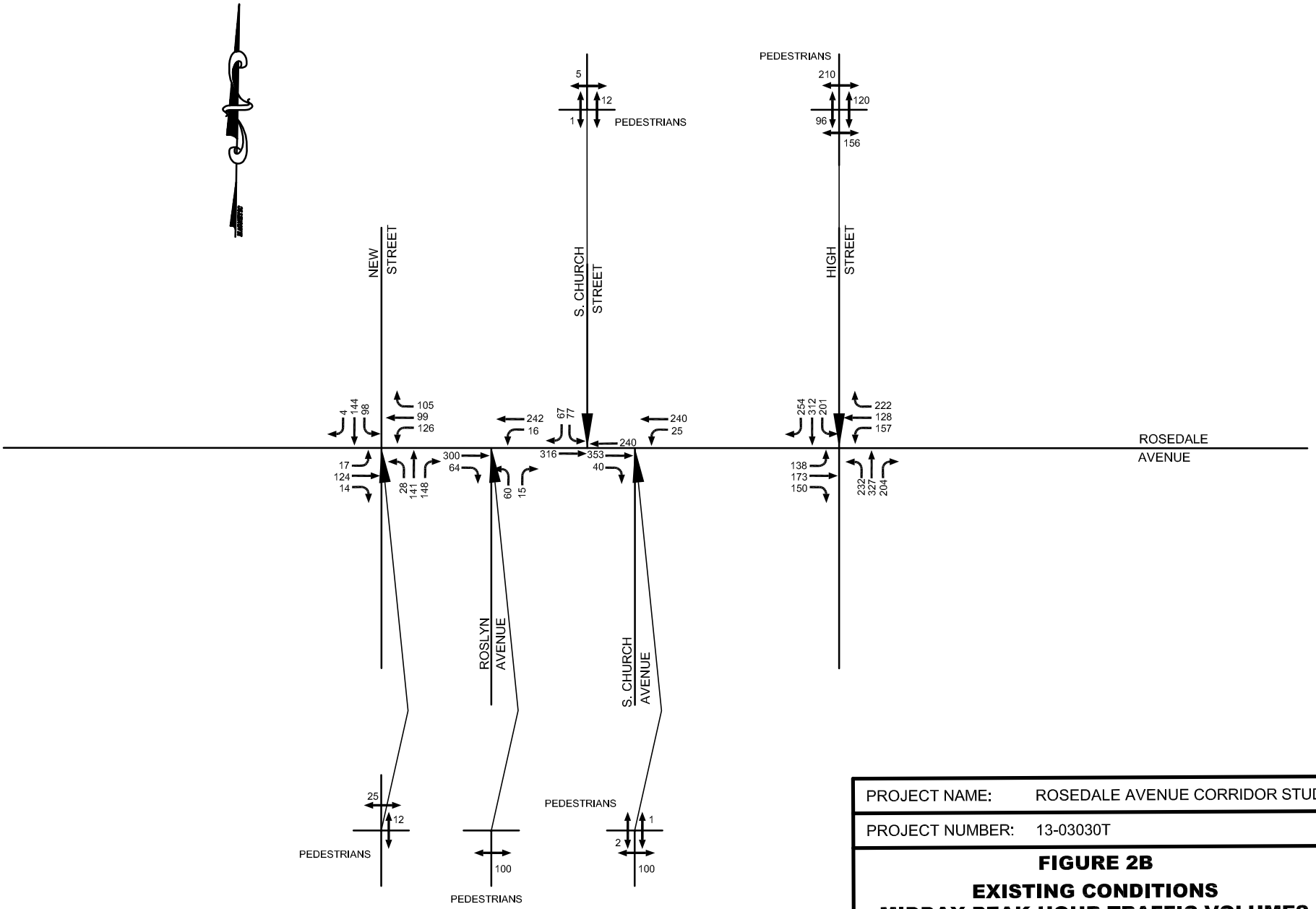

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 2B

EXISTING CONDITIONS
MIDDAY PEAK HOUR TRAFFIC VOLUMES

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New Britain, PA 18901
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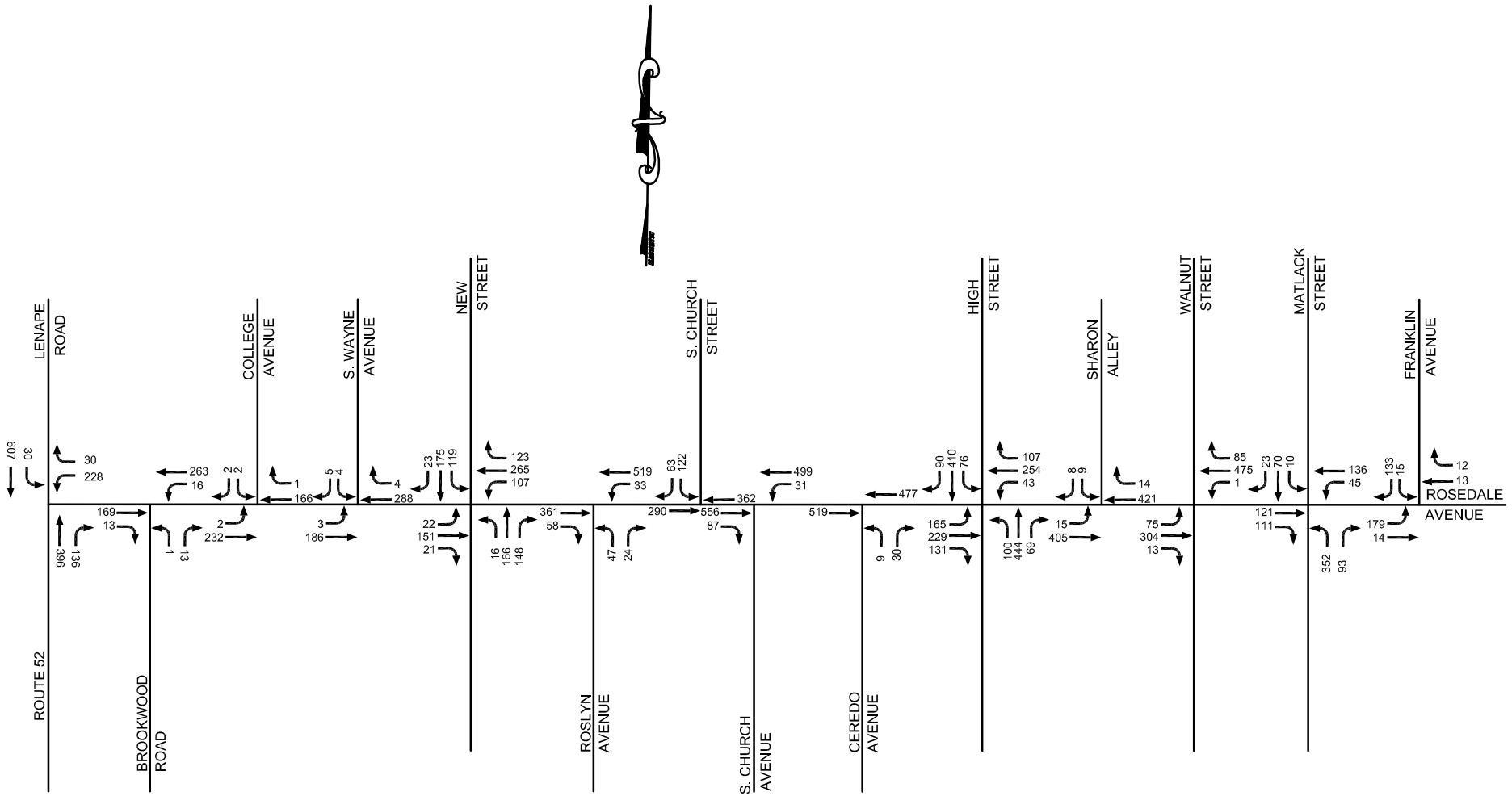

LEGEND

XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 3A

2018 FUTURE CONDITIONS
PM PEAK HOUR TRAFFIC VOLUMES

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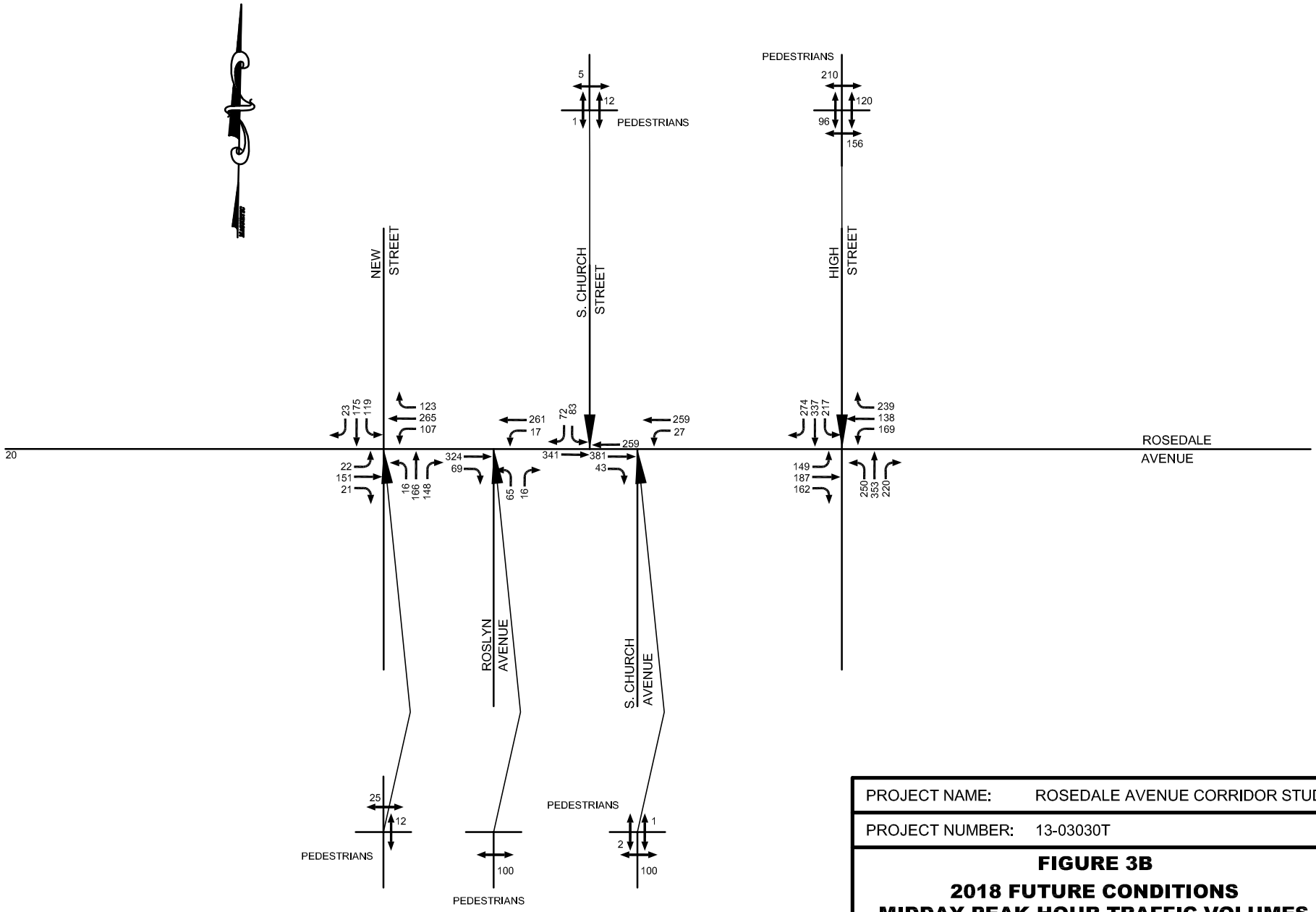

LEGEND

XX MIDDAY PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 3B

2018 FUTURE CONDITIONS
MIDDAY PEAK HOUR TRAFFIC VOLUMES

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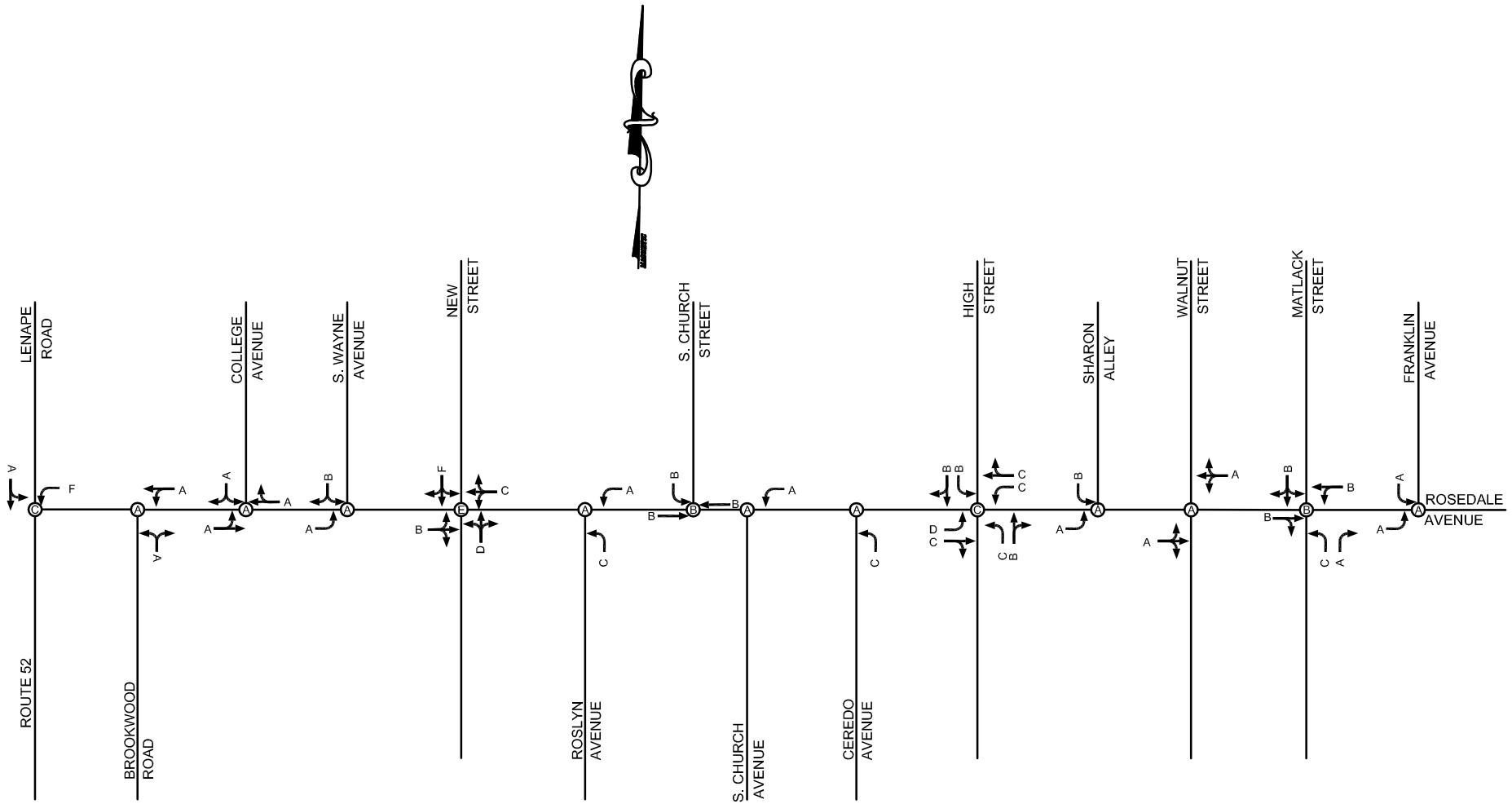

LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 4A

EXISTING CONDITIONS
PM PEAK HOUR LEVELS OF SERVICE

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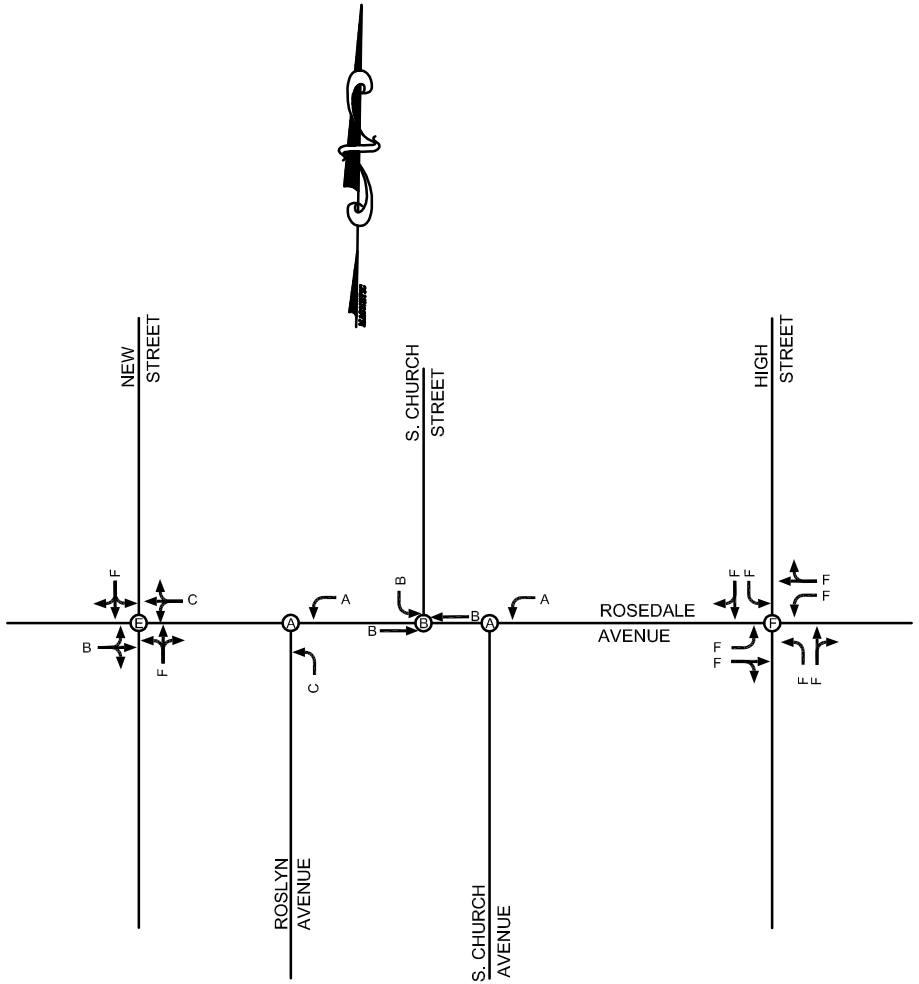
(215) 345-4330



LEGEND

XX MIDDAY PEAK HOUR LEVELS OF SERVICE

Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 4B

EXISTING CONDITIONS
MIDDAY PEAK HOUR LEVELS OF SERVICE

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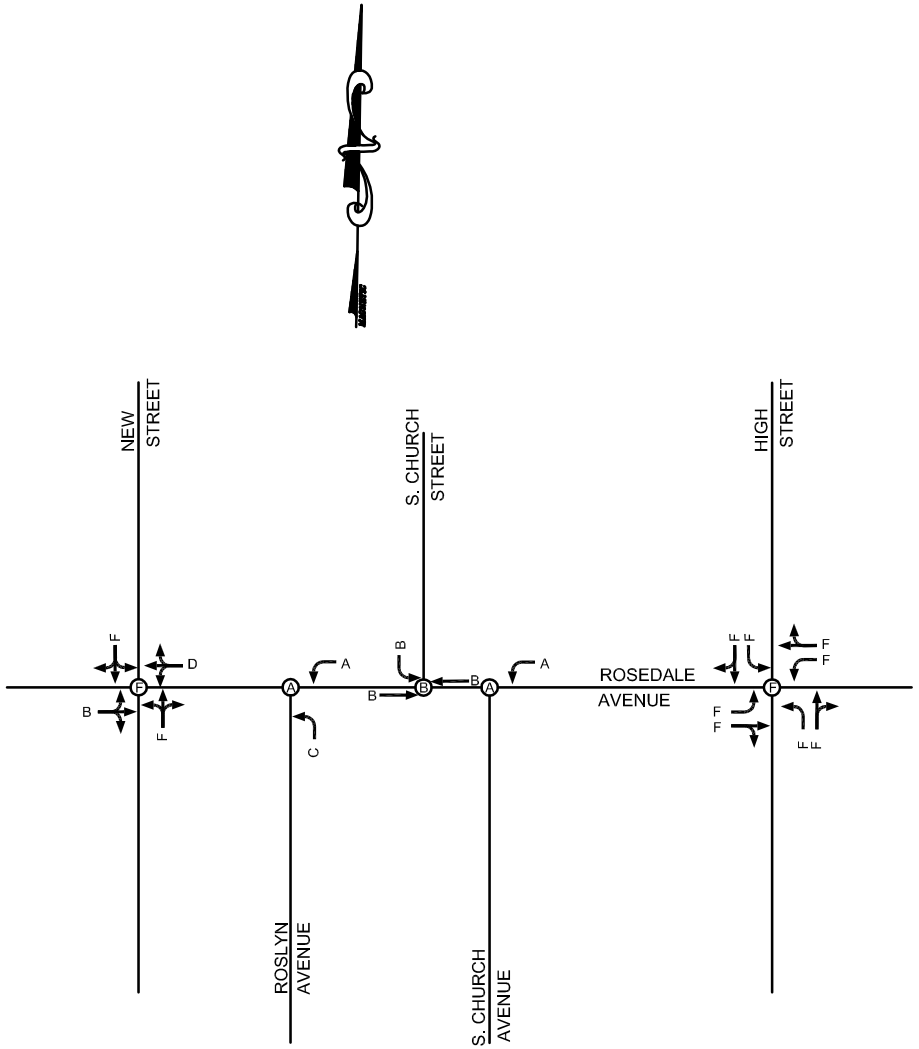
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX MIDDAY PEAK HOUR LEVELS OF SERVICE

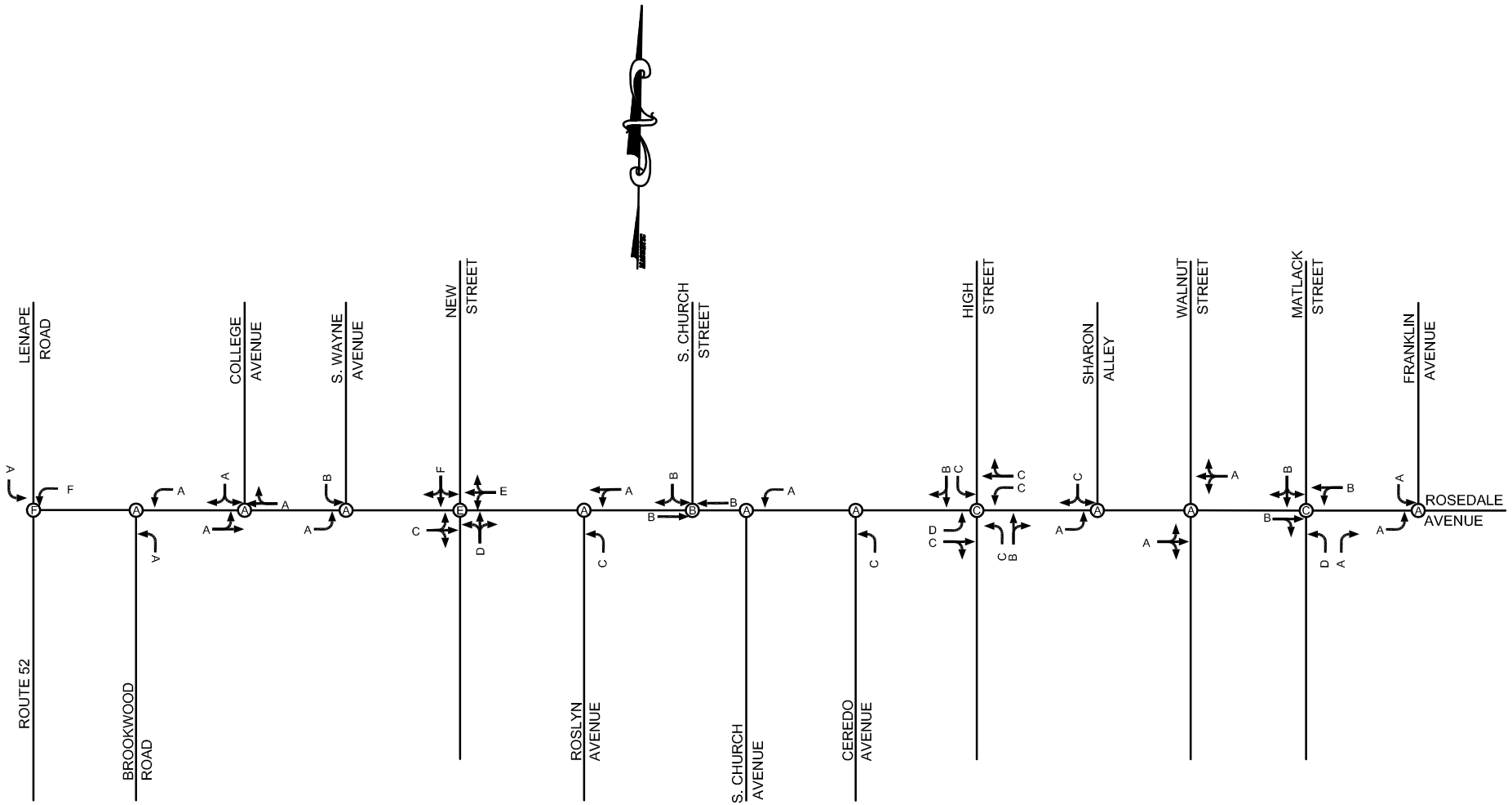
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 5B

2018 FUTURE CONDITIONS
MIDDAY PEAK HOUR LEVEL OF SERVICE

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

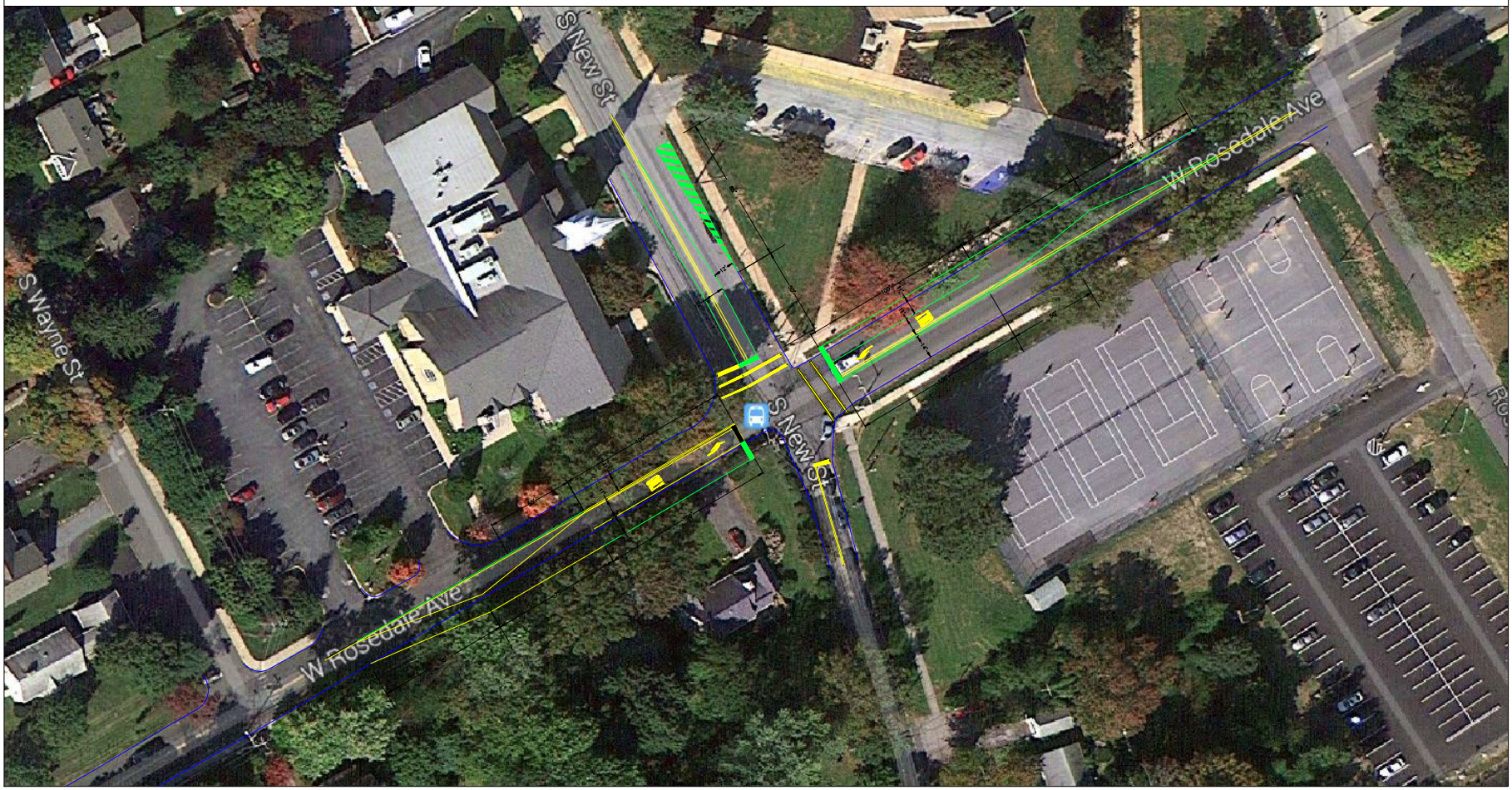
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 5A

2018 FUTURE CONDITIONS
PM PEAK HOUR LEVEL OF SERVICE

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

EXISTING PAVEMENT MARKING
EXISTING CURB LINES
PROPOSED PAVEMENT MARKING

REV.	DESCRIPTION	DATE	BY

TAX MAP PARCEL NO.:

CONCEPTUAL SKETCH

FIGURE 6

ROSEDALE AVENUE STUDY

WEST CHESTER BOROUGH & WEST GOSHEN TWP.
CHESTER COUNTY, PENNSYLVANIA

TOTAL AREA:	TOTAL LOTS:
DATE: 05/19/2014	SCALE: 1"=50'

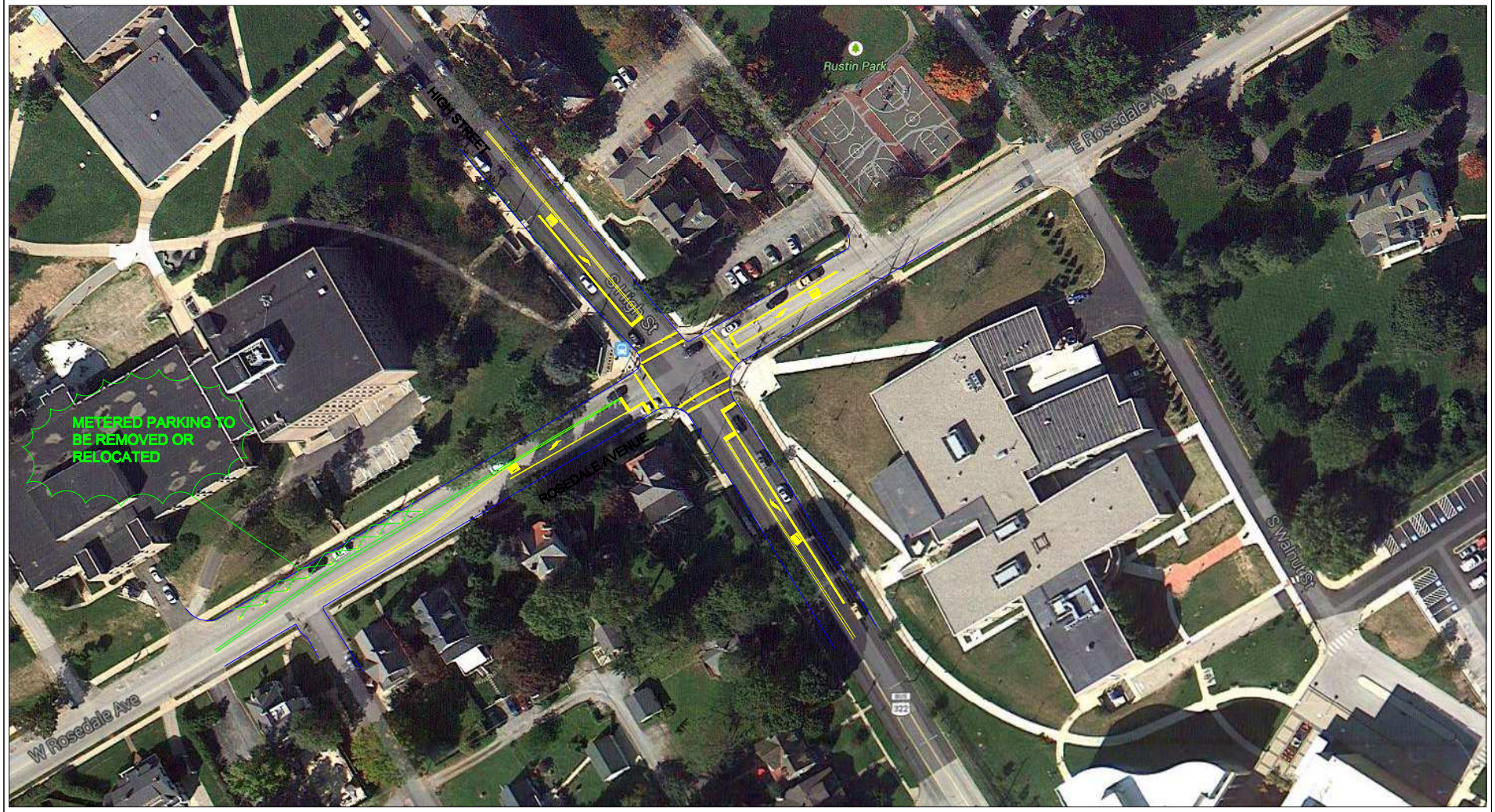
GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

SCALE: 50 0 50 100 IN FEET

JOB NO.: 2013-03030T

SHEET NO.: 1 OF 2

DESIGNED BY:	DRAWN BY:	CHECKED BY:
DAD	BJM	DAD



LEGEND

EXISTING PAVEMENT MARKING
EXISTING CURB LINES
PROPOSED PAVEMENT MARKING

REV.	DESCRIPTION	DATE	BY

TAX MAP PARCEL NO.:
TOTAL AREA: TOTAL LOTS:
DATE: 05/19/2014 SCALE: 1"=50'

CONCEPTUAL SKETCH
FIGURE 7
HIGH ST AND ROSEDALE AVE
ROSEDALE AVENUE STUDY
WEST CHESTER & WEST GOSHEN TWP, CHESTER COUNTY, PENNSYLVANIA

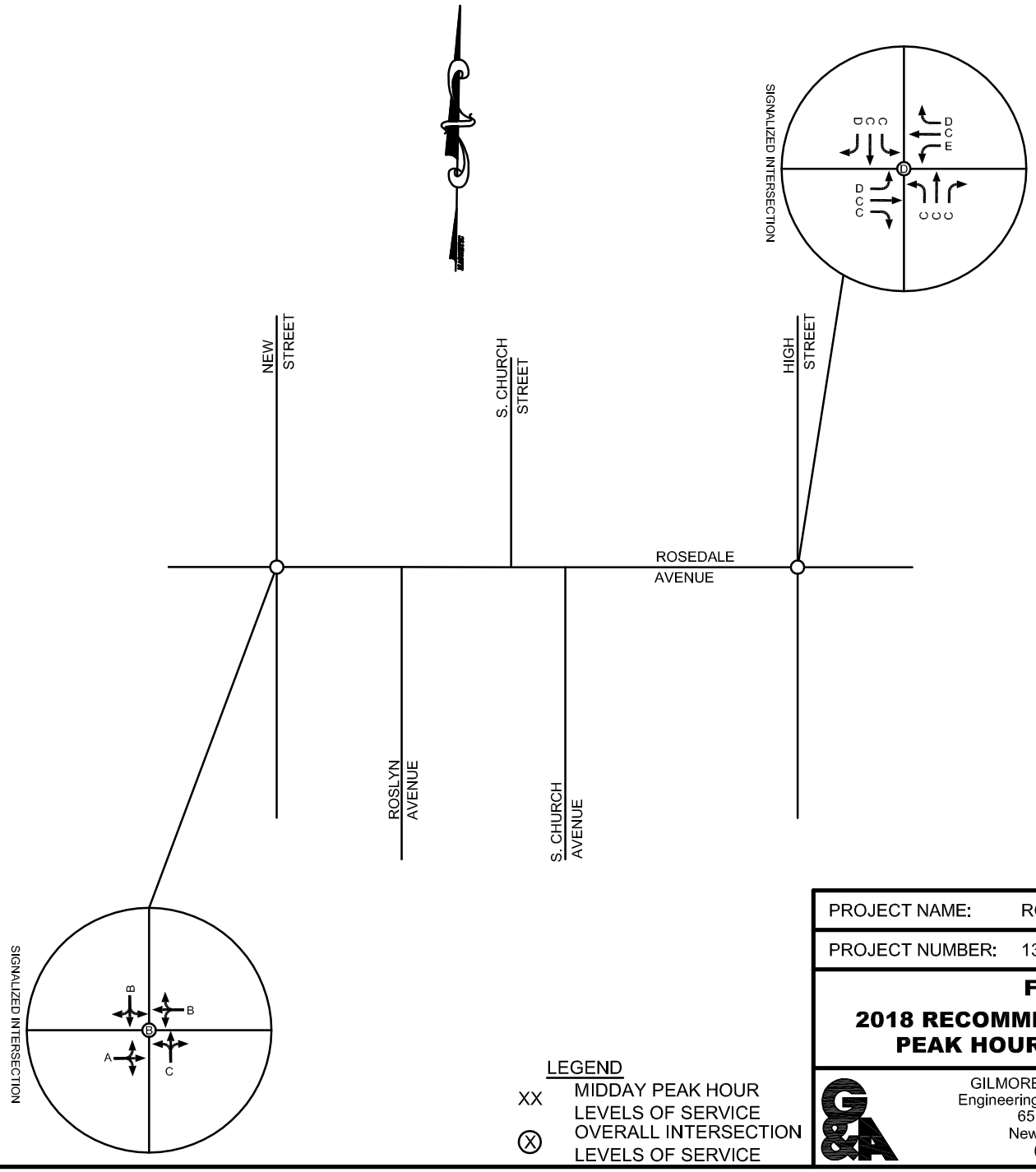
GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

50 0 50 100
SCALE IN FEET

JOB NO.: 2013-03030T
SHEET NO.: 1 OF 2

DESIGNED BY: DAD | DRAWN BY: BJM | CHECKED BY: DAD

ROSEDALE AVENUE
FRANKLIN AVENUE
MATLACK STREET
WALNUT STREET
SHARON ALLEY
HIGH STREET
CEREDO AVENUE
S. CHURCH AVENUE
S. CHURCH STREET
ROSLYN AVENUE
NEW STREET
S. WAYNE AVENUE
COLLEGE AVENUE
BROOKWOOD ROAD
LENAPE ROAD
ROUTE 52
SIGNALIZED INTERSECTION
SIGNALIZED INTERSECTION
SIGNALIZED INTERSECTION
LEGEND
PM PEAK HOUR
XX LEVELS OF SERVICE
OVERALL INTERSECTION
LEVELS OF SERVICE
PROJECT NAME: ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER: 13-03030T
FIGURE 8
2018 RECOMMENDED IMPROVEMENTS
PEAK HOUR LEVEL OF SERVICE
GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330

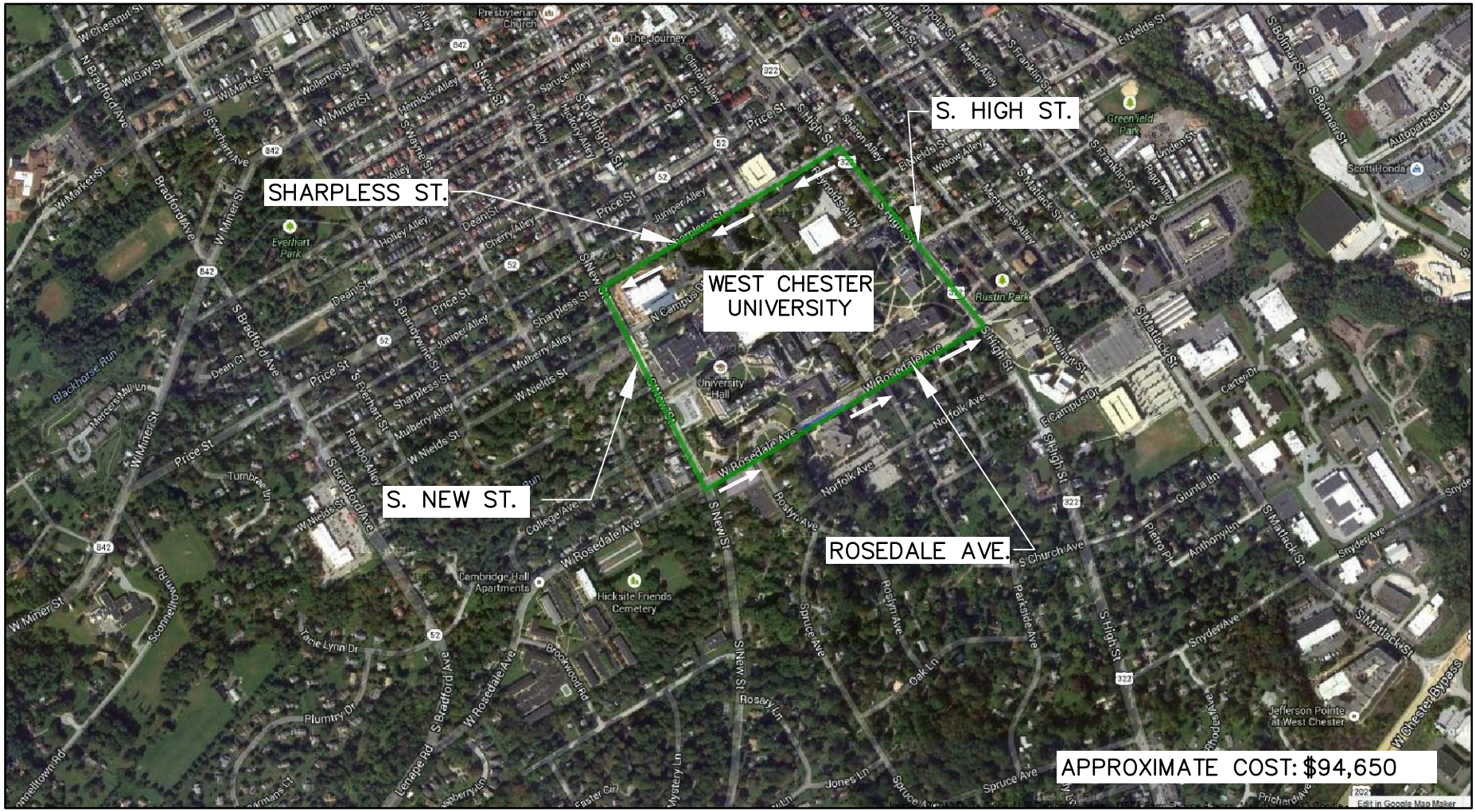


PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 8B

2018 RECOMMENDED IMPROVEMENTS PEAK HOUR LEVEL OF SERVICE

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



ADVANTAGES

- REDUCES INTERSECTION CONFLICTS
- PROVIDES BETTER SIGNAL COORDINATION
- CAN PROVIDE INCREASED CAPACITY WITH TWO LANES MOVING IN ONE DIRECTION BETWEEN S. NEW ST. AND S. HIGH ST.

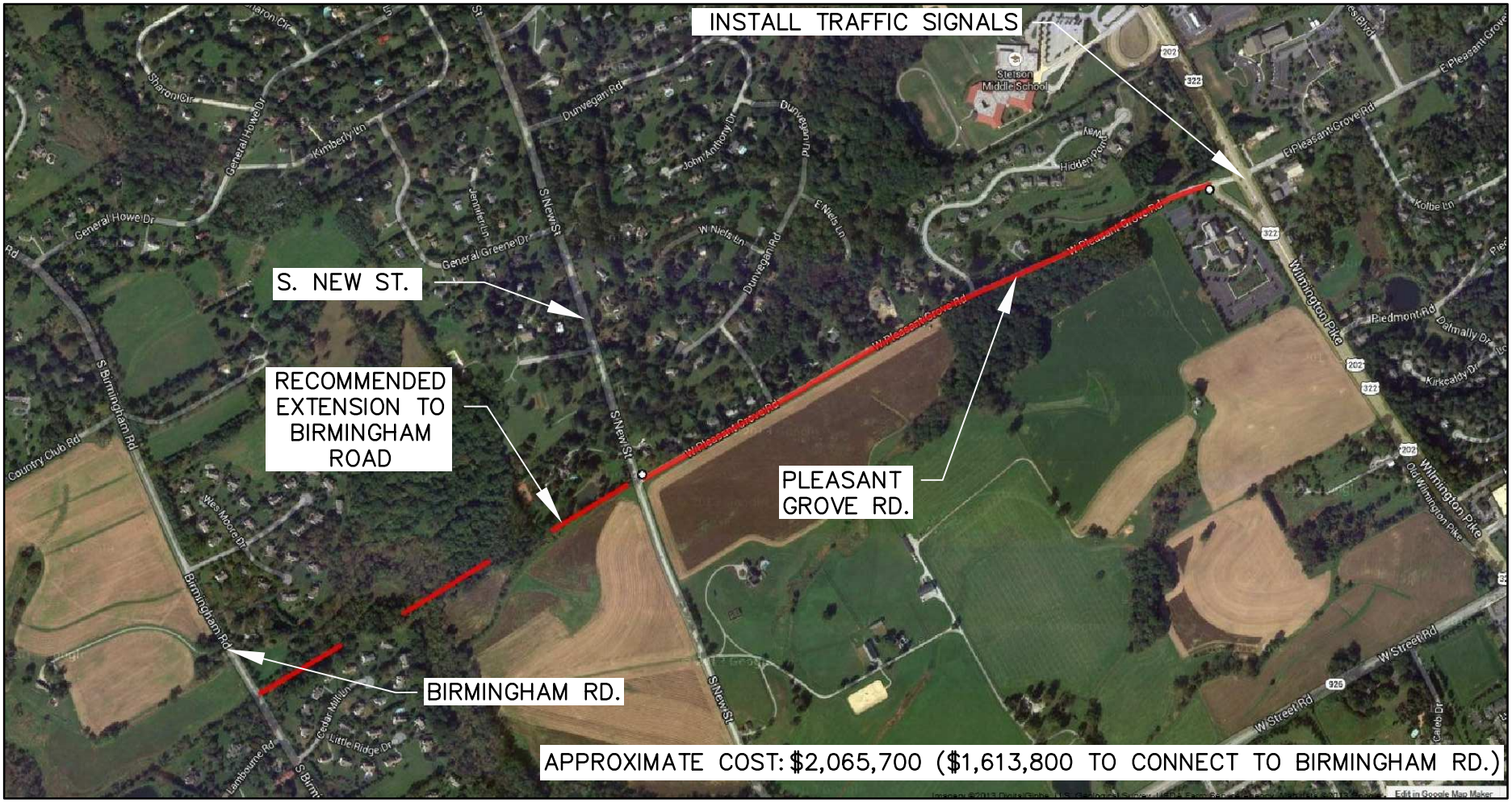
DISADVANTAGES

- SLIGHTLY LONGER TRAVEL TIMES FOR WESTBOUND TRAFFIC.
- COULD LEAD TO INCREASED SPEEDS IN THE VICINITY OF THE UNIVERSITY.

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 9
ONEWAY PAIRS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



ADVANTAGES

- EXISTING ROADWAY ALIGNMENT

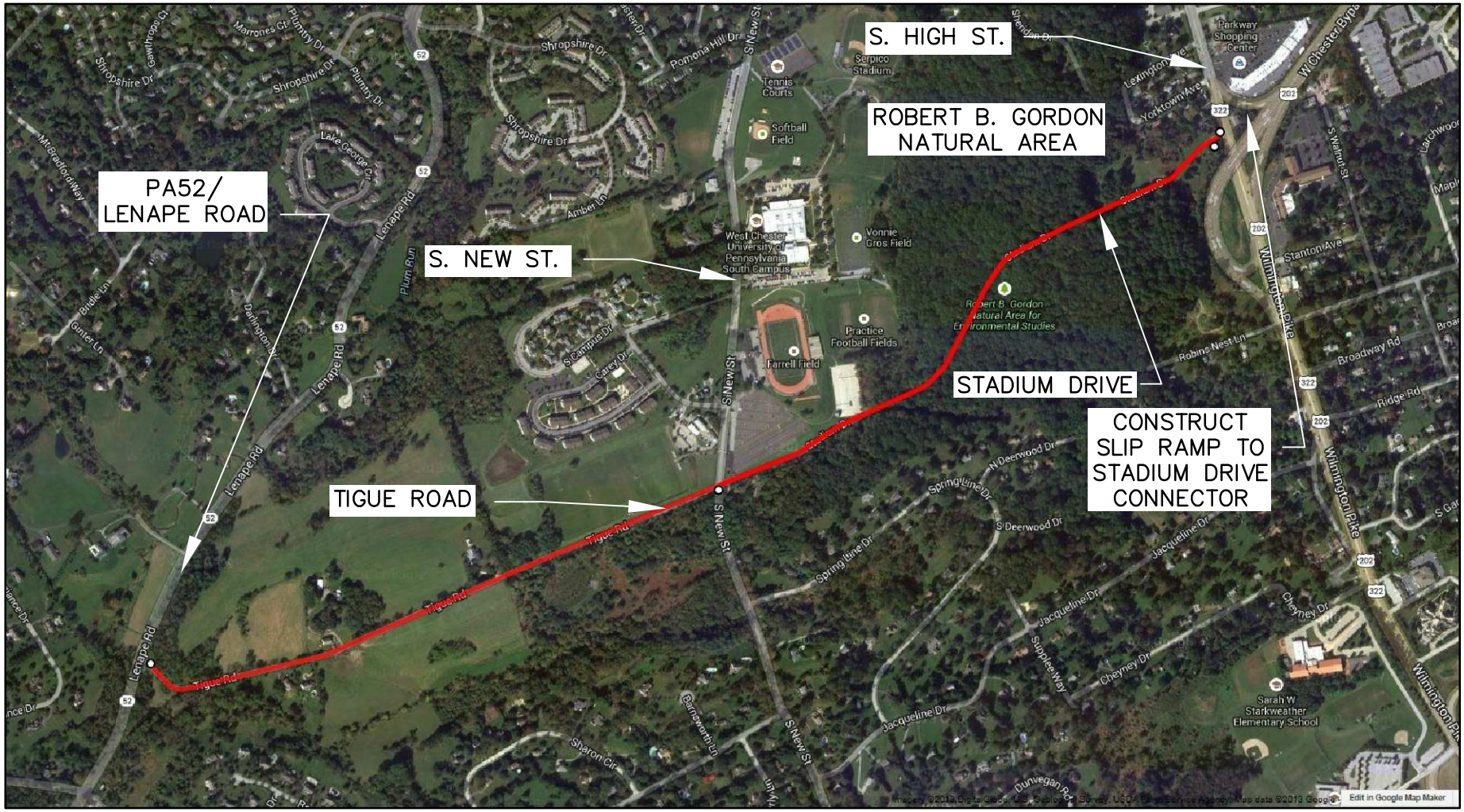
DISADVANTAGES

- DOES NOT PROVIDE DIRECT ACCESS FOR RESIDENTS WEST OF LENAPE ROAD, UNLESS AN EXTENSION TO BIRMINGHAM ROAD IS CONSTRUCTED.
- HIGH RESIDENTIAL IMPACTS ALONG PLEASANT GROVE ROAD.

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 10
UPGRADE PLEASANT GROVE ROAD

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



ADVANTAGES

- WILL DIVERT GREATEST AMOUNT OF TRAFFIC FROM ROSEDALE AVENUE.
- PROVIDES DIRECT ACCESS TO US 202/322 INTERCHANGE WITHOUT UTILIZING OTHER ROADWAYS.
- ROADWAY ALIGNMENT ALREADY EXISTS
- LOW RESIDENTIAL IMPACTS

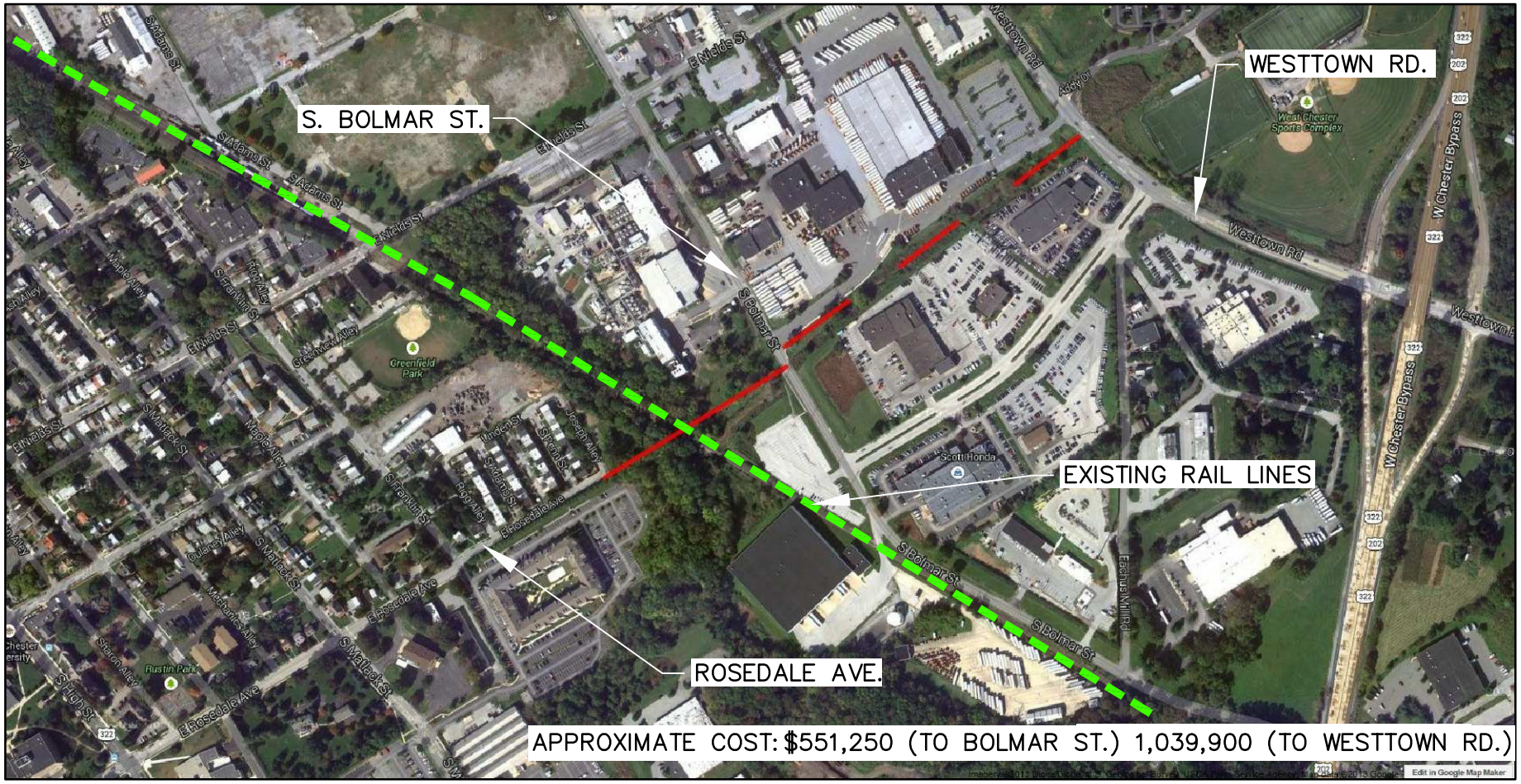
DISADVANTAGES

- WILL LIKELY HAVE HIGH ENVIRONMENTAL IMPACTS DUE TO NATURAL AREA.
- LENGTHY ENVIRONMENTAL PERMITTING PROCESS
- INCREASED COSTS DUE TO ENVIRONMENTAL PROCESS AND INTERCHANGE CONSTRUCTION.

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 11
STADIUM DRIVE CONNECTION

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



ADVANTAGES

- PROVIDES SOUTHERNMOST CONNECTION TO US 202/322 VIA WESTTOWN ROAD.
- WOULD LIKELY RELIEVE SOME OF THE TRAFFIC ON NIELDS STREET.

DISADVANTAGES

- COORDINATION REQUIRED WITH EXISTING RAIL LINE

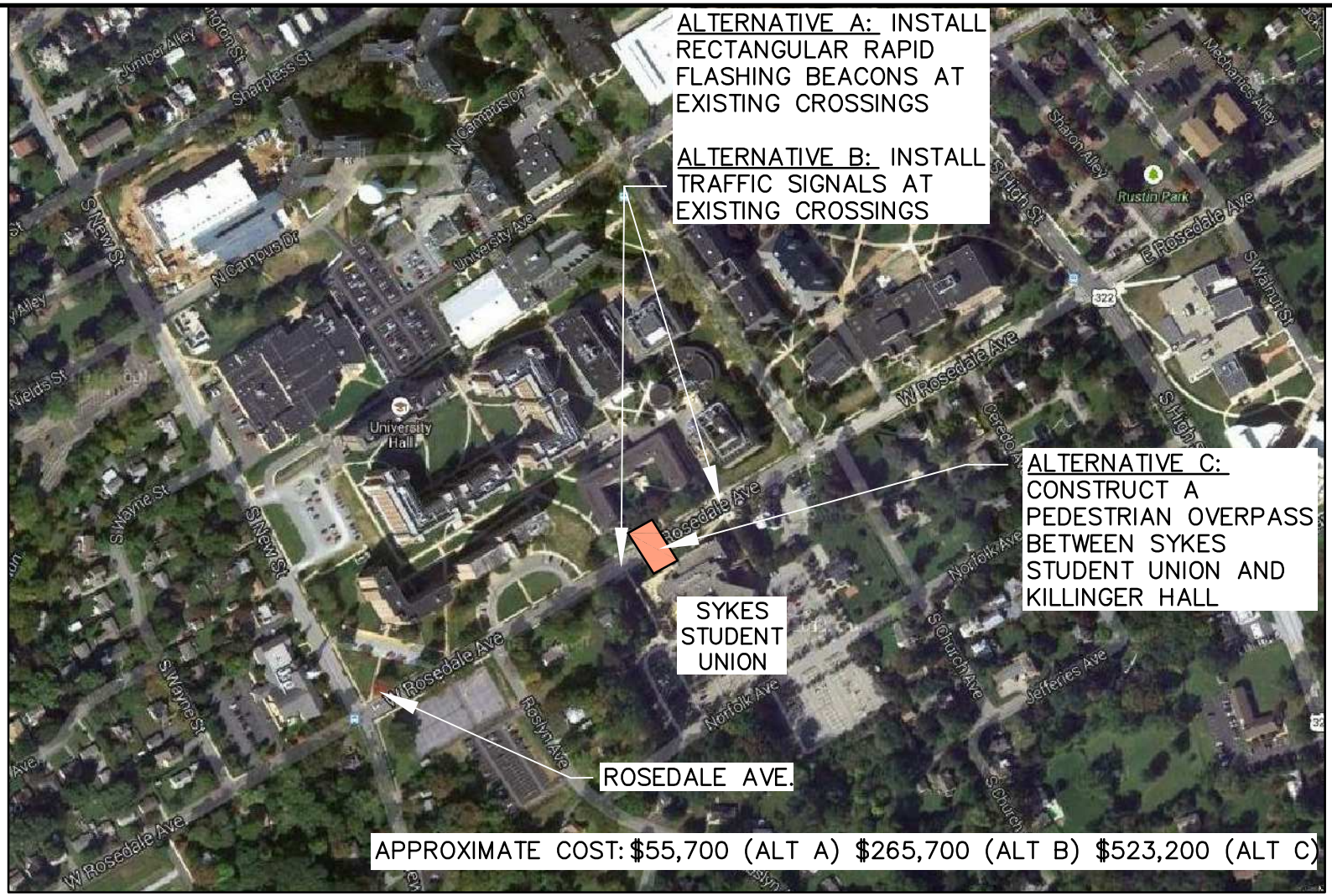
DISADVANTAGES (CONT.)

- WOULD LIKELY INCREASE TRAFFIC VOLUMES ALONG ROSEDALE AVENUE.
- ALIGNMENT TO BOLMAR STREET TRAVERSES THROUGH A FLOODPLAIN.
- EXTENSION TO WESTTOWN ROAD WOULD LIKELY TRAVERSE A STREAM CHANNEL, INCREASING ENVIRONMENTAL IMPACTS/ PERMITTING COSTS
- PROPOSED INTERSECTION AT WESTTOWN ROAD WOULD REQUIRE SIGNALIZATION IN PROXIMITY TO TWO ADJACENT SIGNALS.

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 12
ROSEDALE AVENUE EXTENSION

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



ALTERNATIVE A:

ADVANTAGES

- INCREASED VISIBILITY OF CROSSING
- LOW COST IMPROVEMENT

DISADVANTAGES

- PEDESTRIANS STILL CONFLICT WITH VEHICULAR TRAFFIC.

ALTERNATIVE B:

ADVANTAGES

- PROVIDES LARGE PEDESTRIAN CROSSING AREA

DISADVANTAGES

- PEDESTRIANS STILL CONFLICT WITH VEHICULAR TRAFFIC.

ALTERNATIVE C:

ADVANTAGES

- PROVIDES FREE MOVEMENT OF PEDESTRIANS WITH NO VEHICULAR CONFLICTS
- ALLOWS FREE MOVEMENT OF VEHICLES ALONG ROSEDALE AVE.

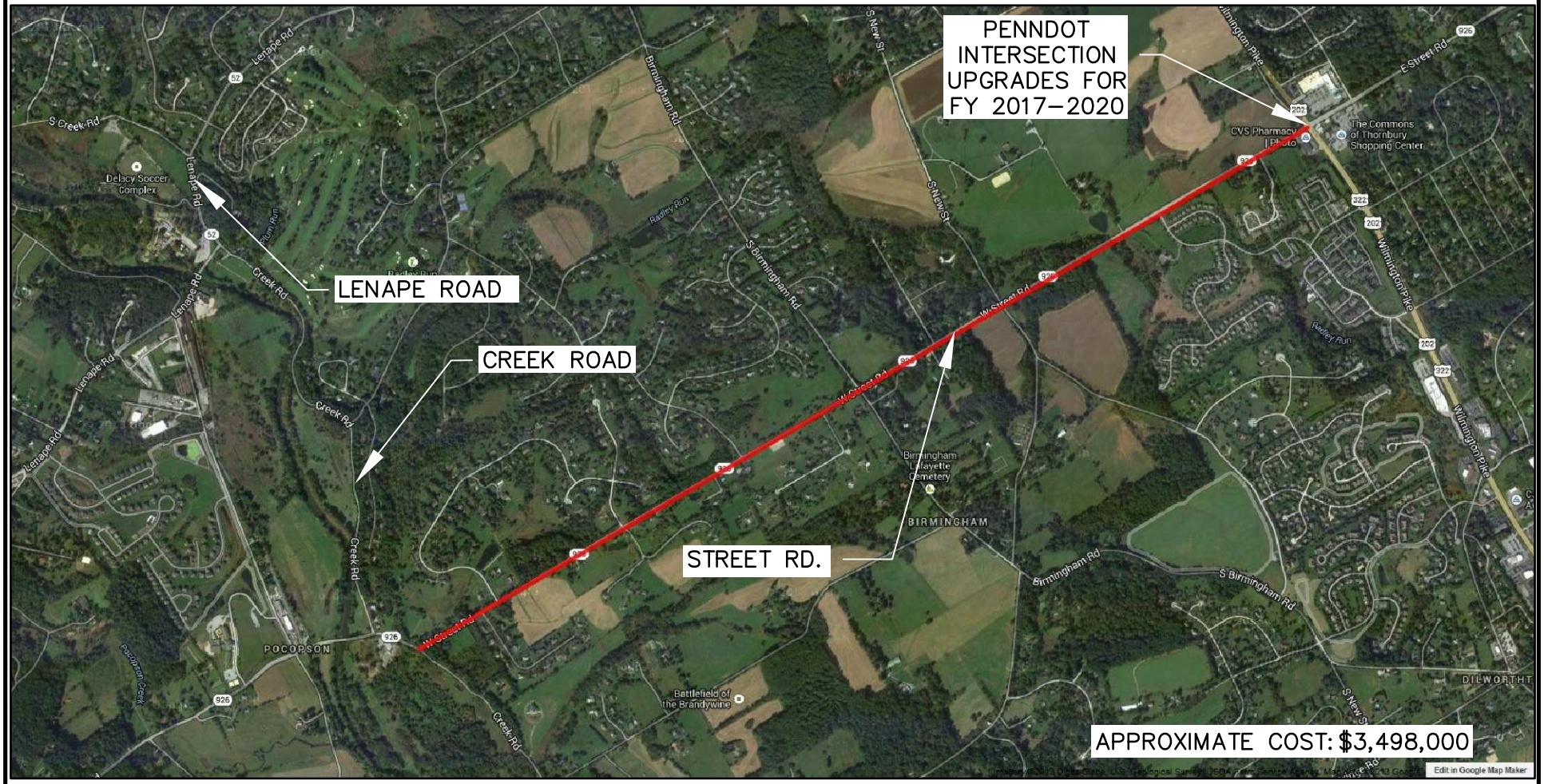
DISADVANTAGES

- LIKELY THE HIGHEST COST ALTERNATIVE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 13
PEDESTRIAN CROSSING

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



ADVANTAGES

- EXISTING ROADWAY ALIGNMENT
- PROVIDES DIRECT CONNECTION FOR SOUTHBOUND TRAFFIC
- PENNDOT IMPROVEMENTS ALREADY PLANNED FOR SR 926/US 202/322 INTERSECTION IN FY 2017-2020

DISADVANTAGES

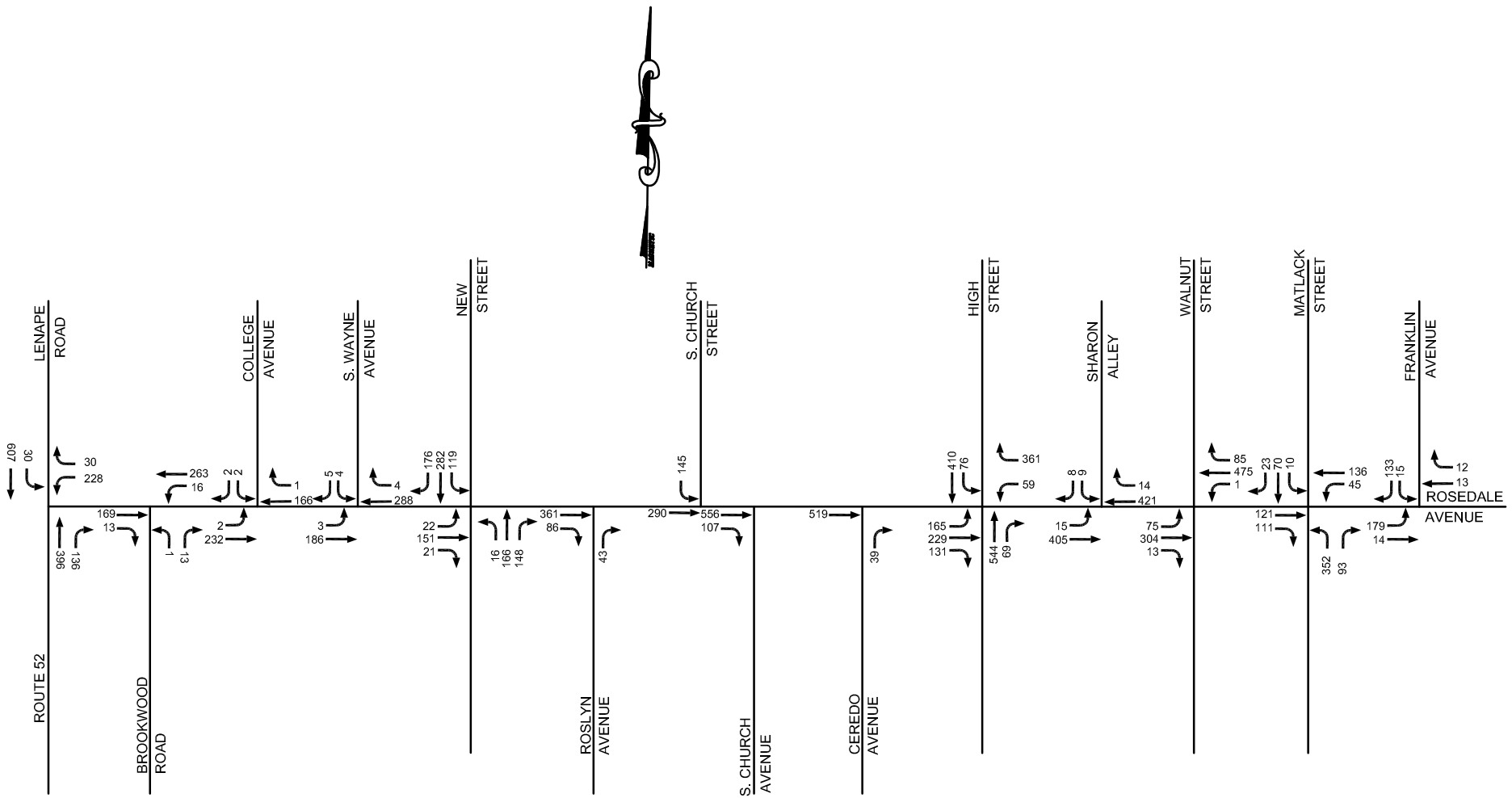
- WOULD LIKELY NOT RELIEVE TRAFFIC FROM ROSEDALE AVENUE.
- COSTLY IMPROVEMENTS WITH OVER 2.6 MILES OF ROADWAY UPGRADES.

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE 14

UPGRADE SR 0926 (W. STREET ROAD)

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

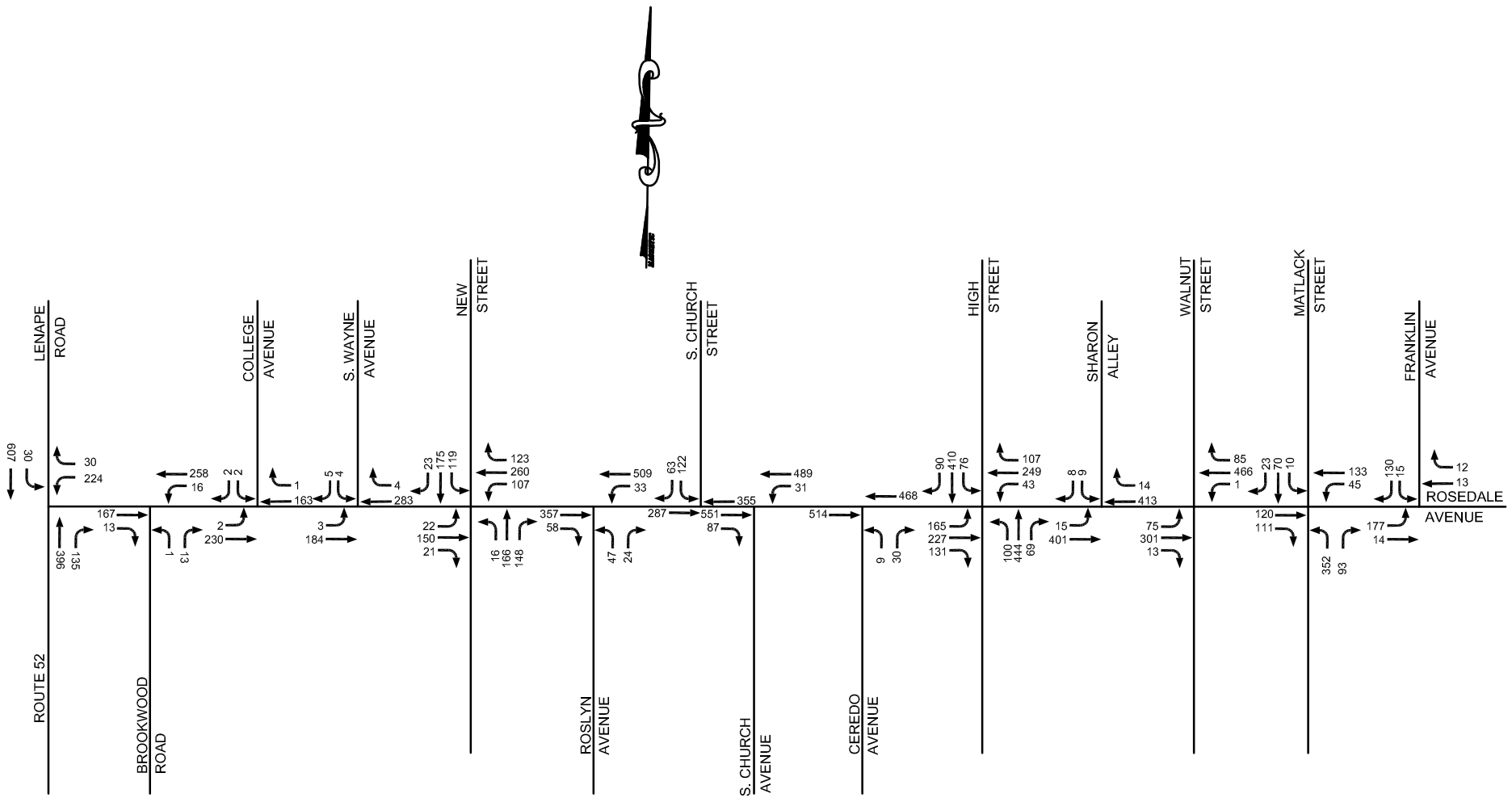
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G1

2018 FUTURE CONDITIONS ONE-WAY PAIRS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

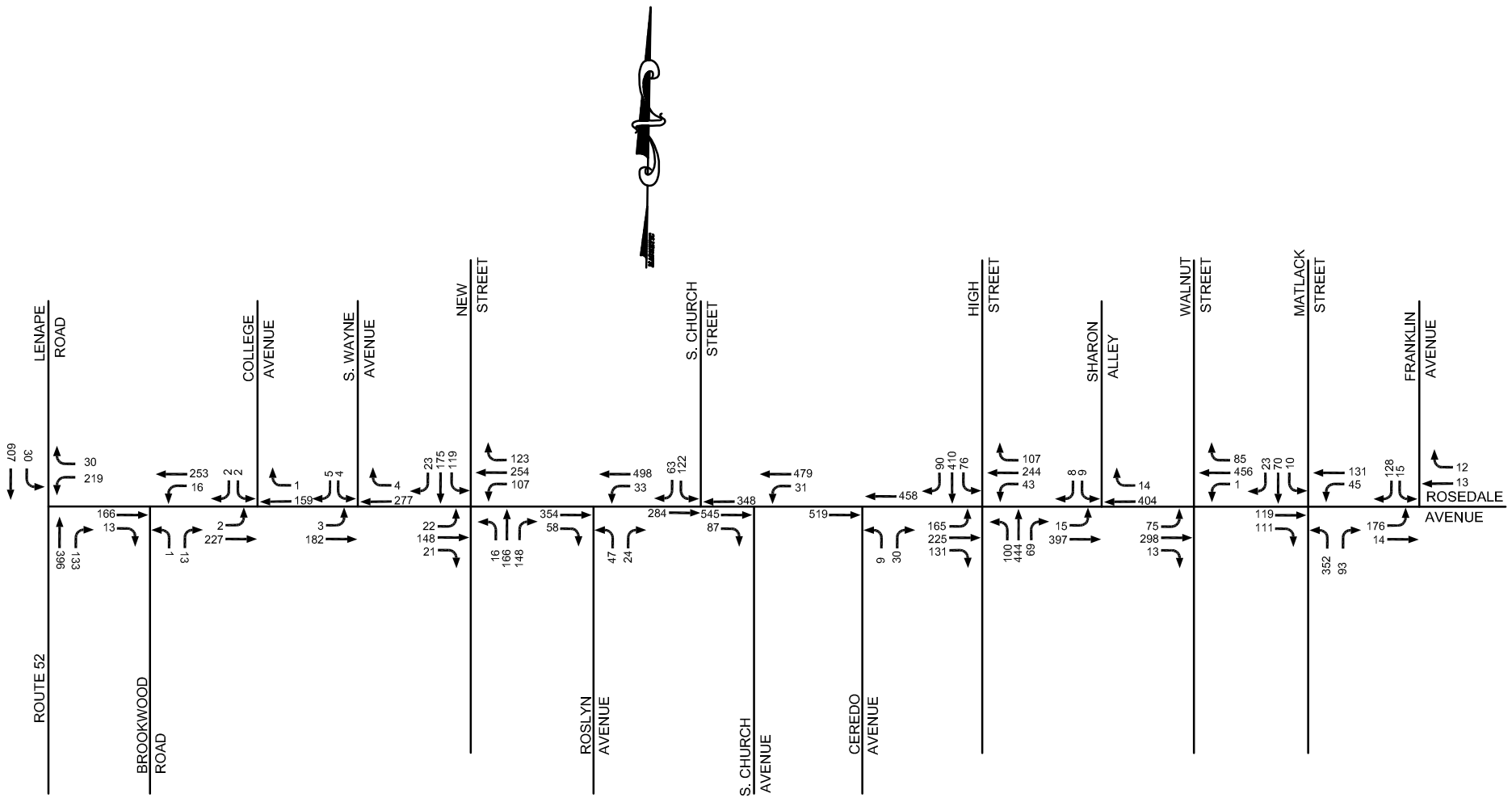
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G2

2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE ROAD

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



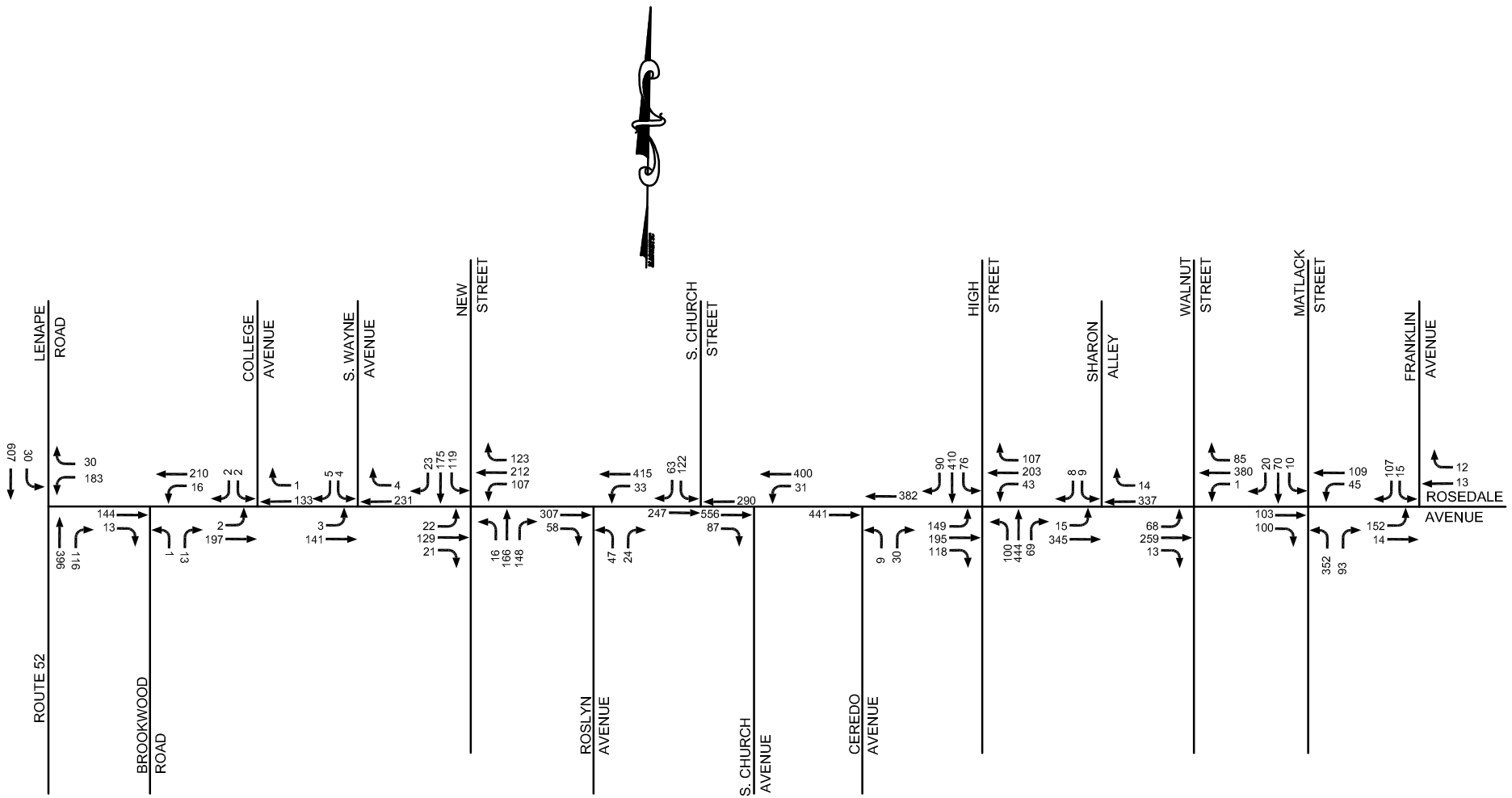
LEGEND

XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G3
2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE RD WITH EXTENSION TO BIRMINGHAM

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

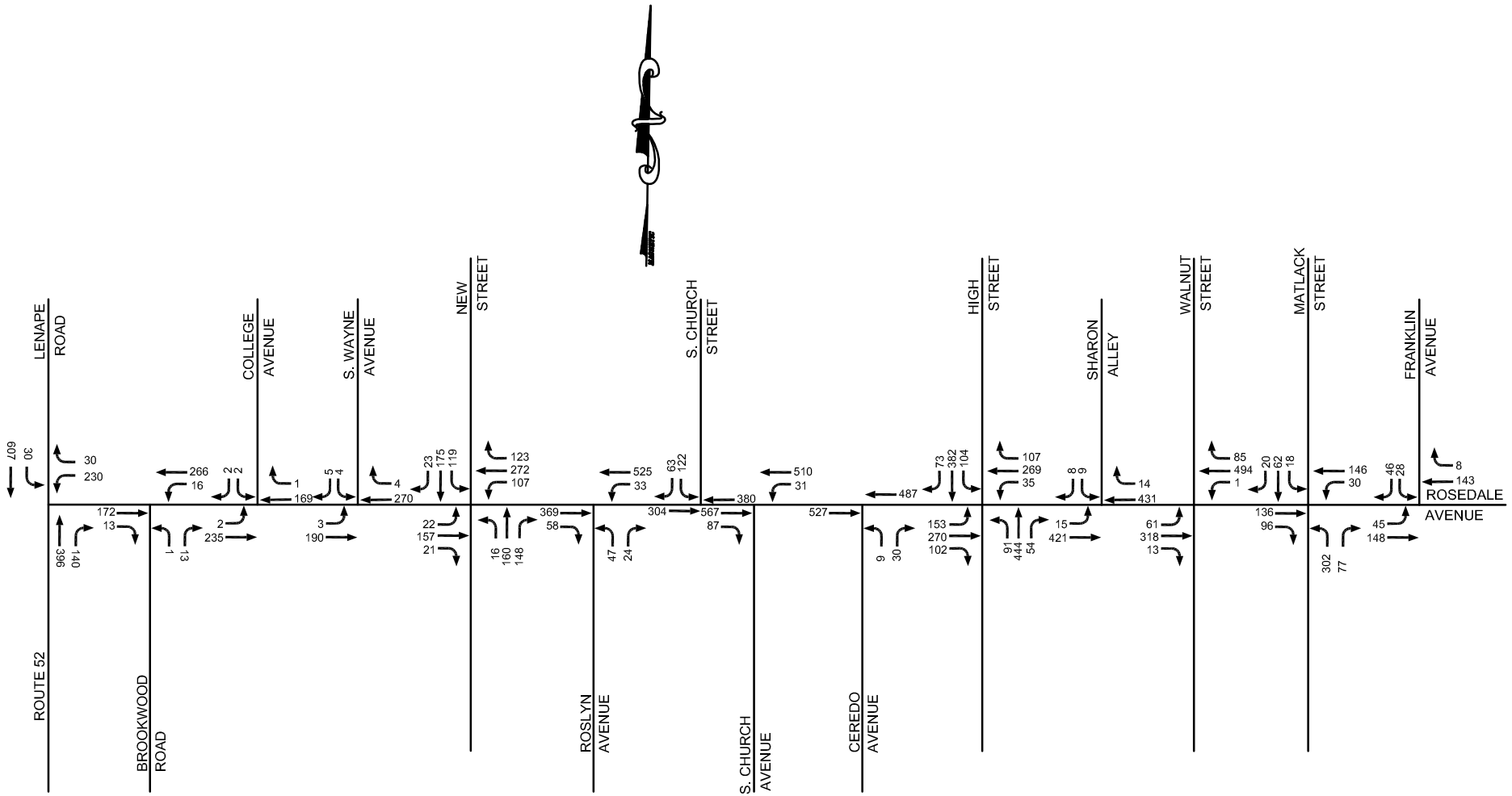
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G4

2018 FUTURE CONDITIONS
STADIUM DRIVE ACCESS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

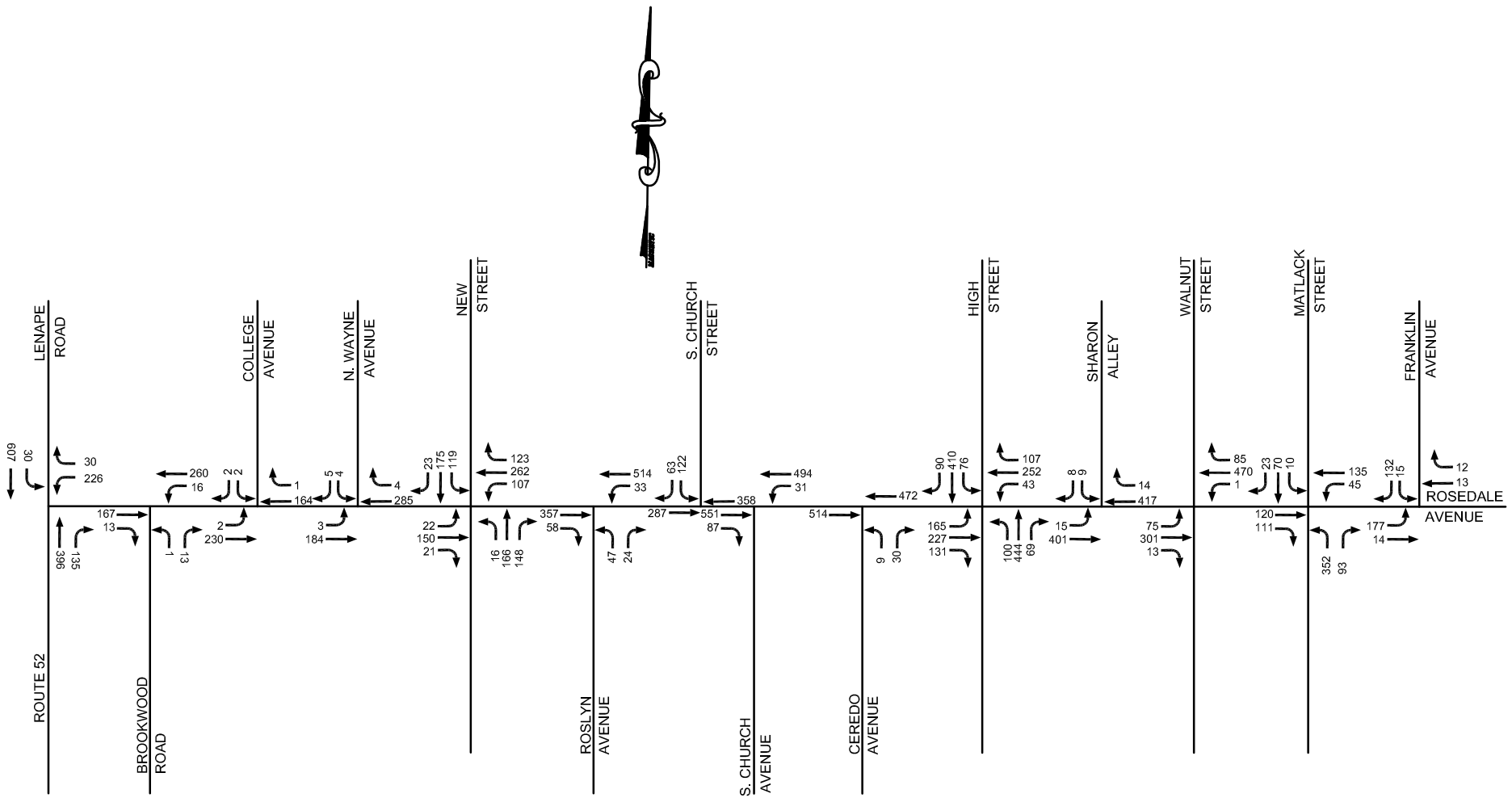
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G5

2018 FUTURE CONDITIONS
EXTENSION TO BOLMAR STREET

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

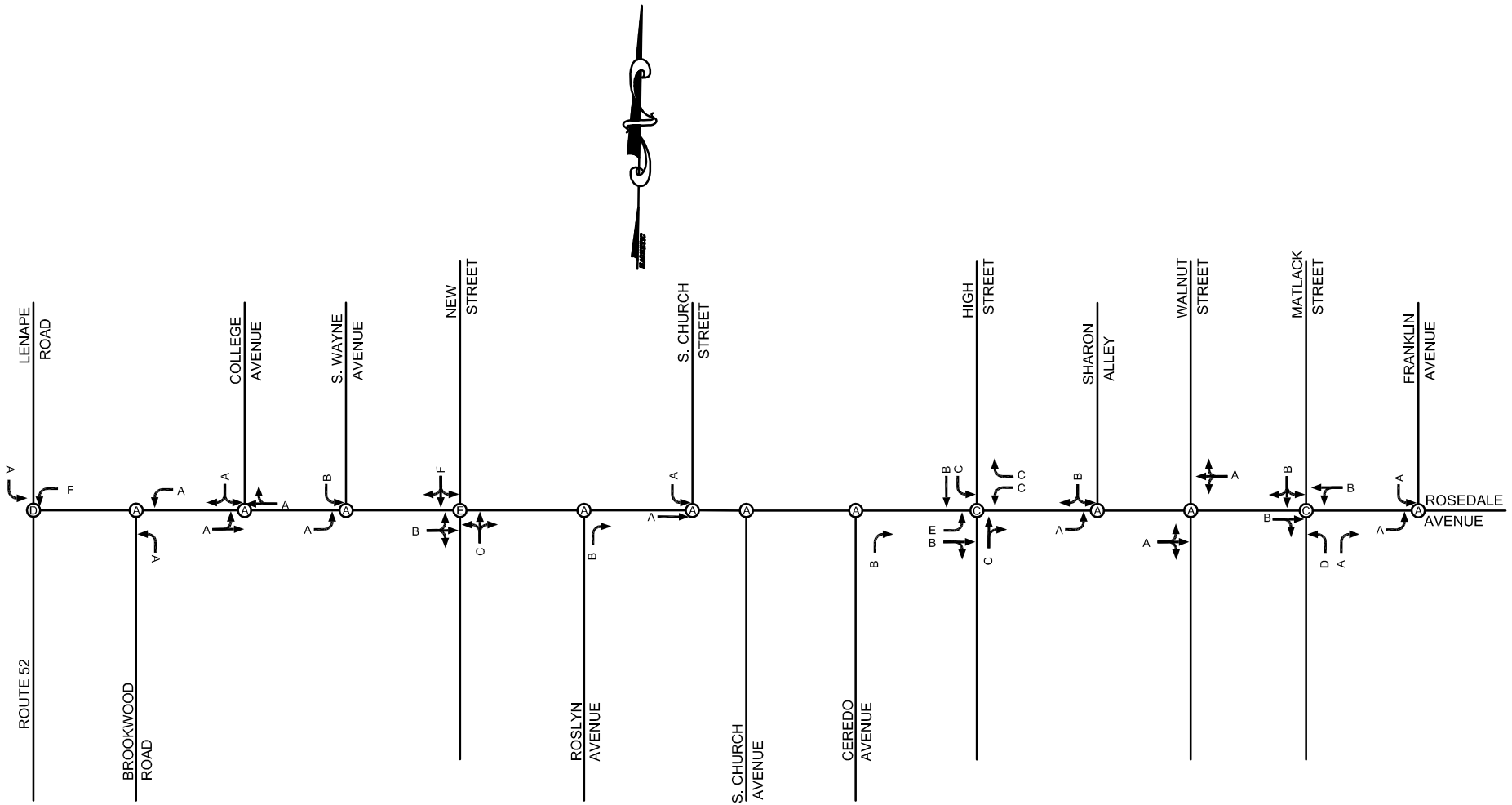
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G6

2018 FUTURE CONDITIONS
IMPROVE S.R. 0926 (W. STREET ROAD)

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

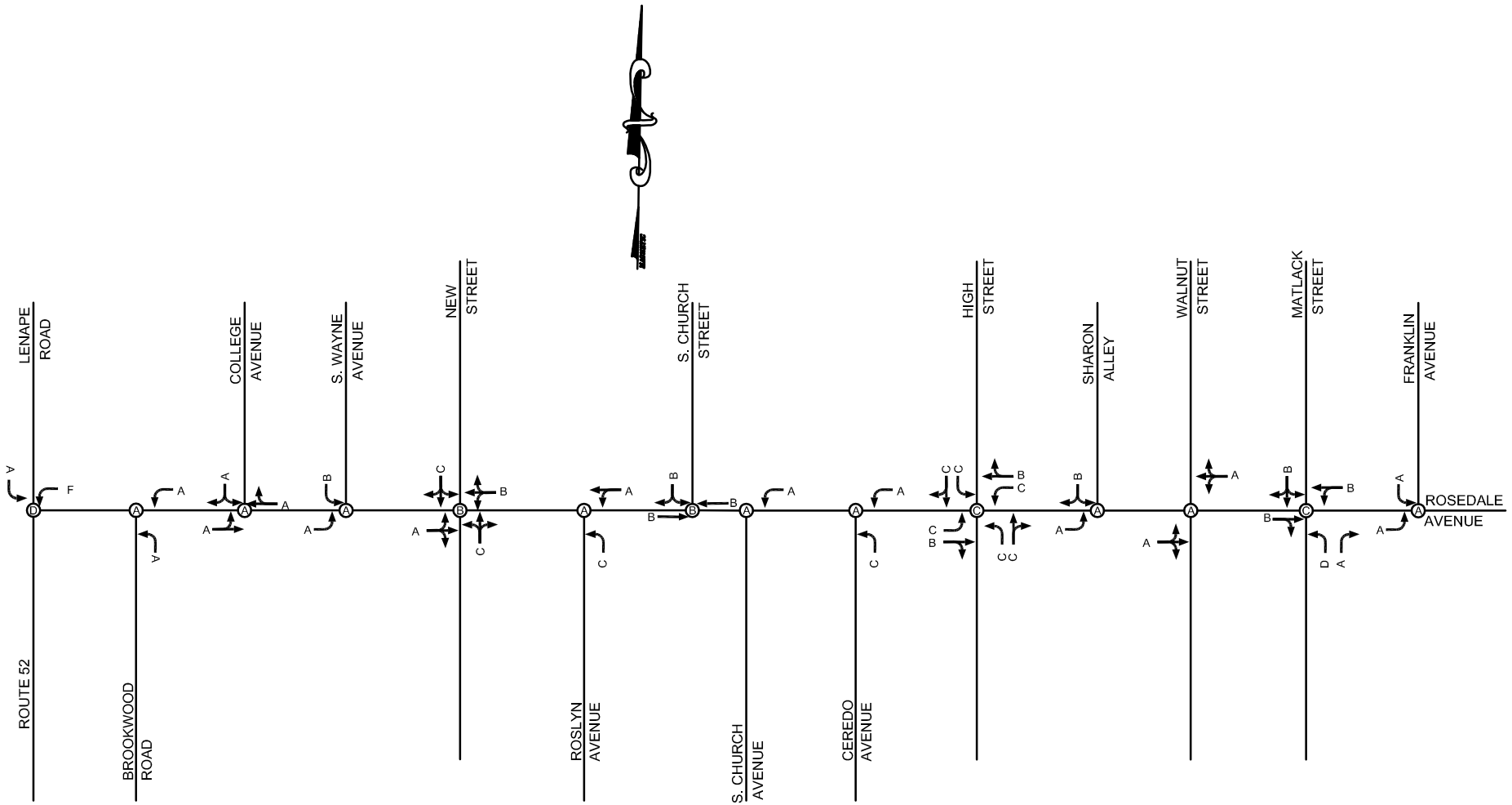
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G7

2018 FUTURE CONDITIONS
ONE-WAY PAIRS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

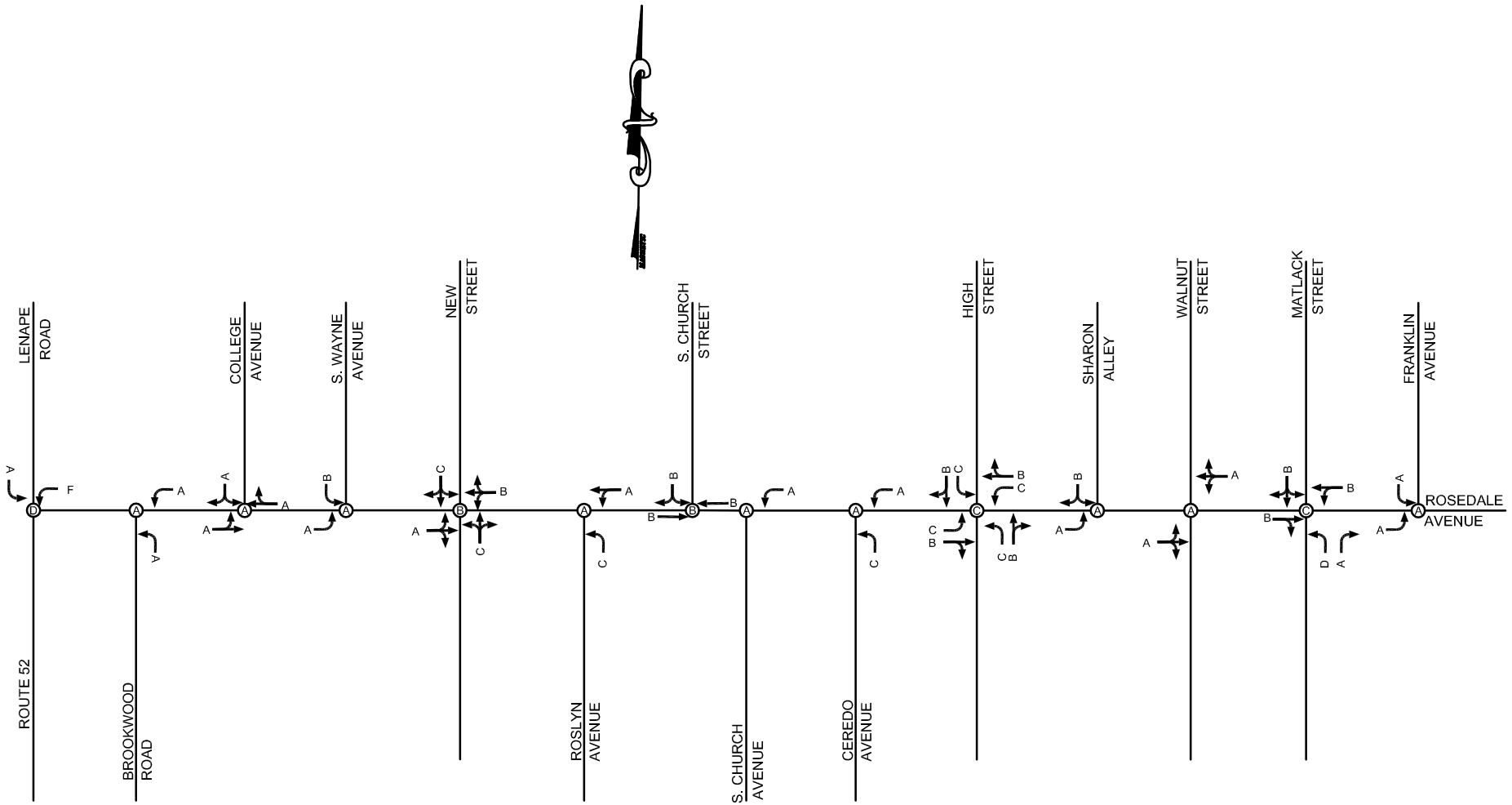
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G8

2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE ROAD

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

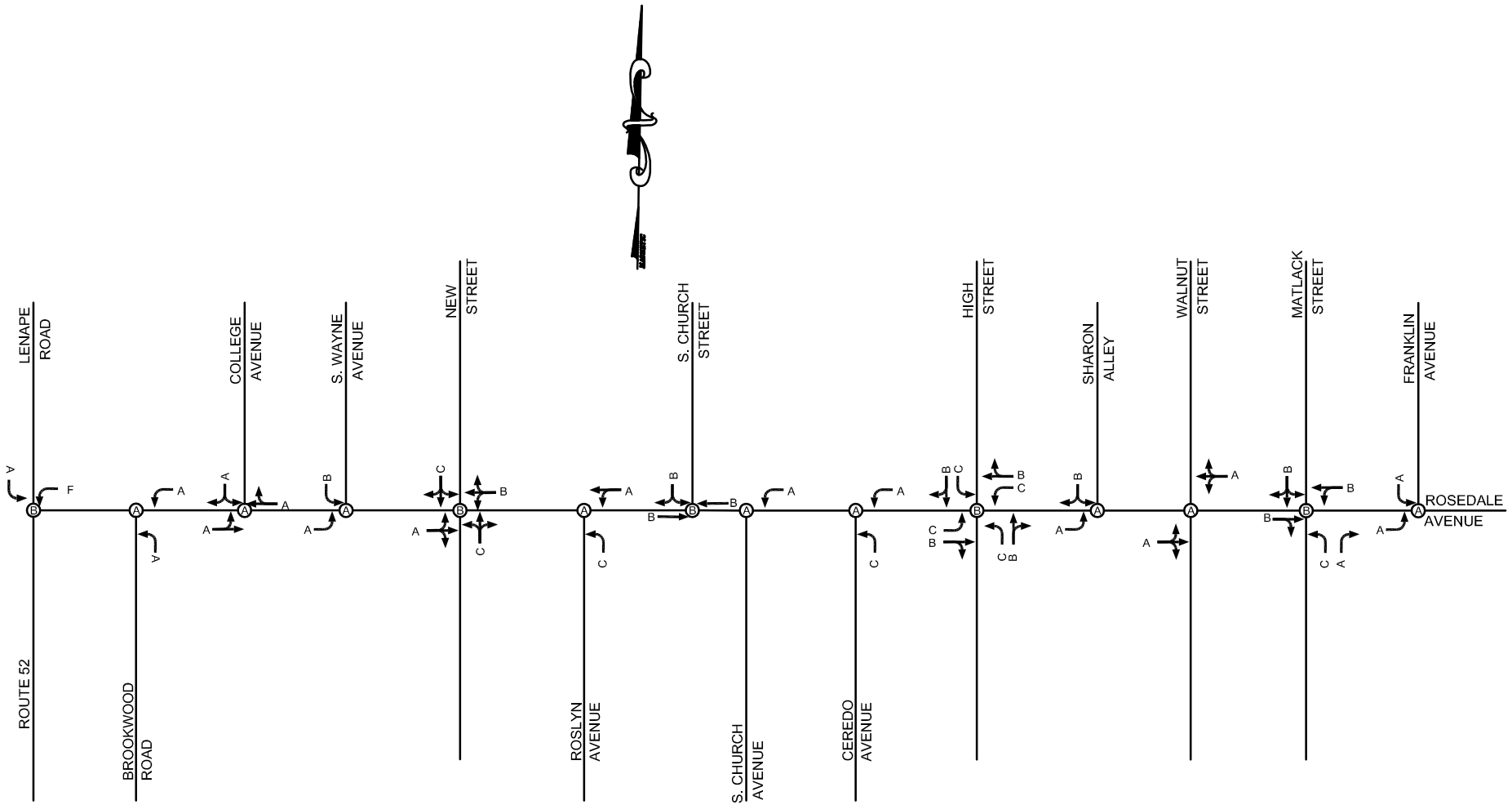
XX PM PEAK HOUR LEVELS OF SERVICE

Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G9
2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE RD WITH EXTENSION TO BIRMINGHAM

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

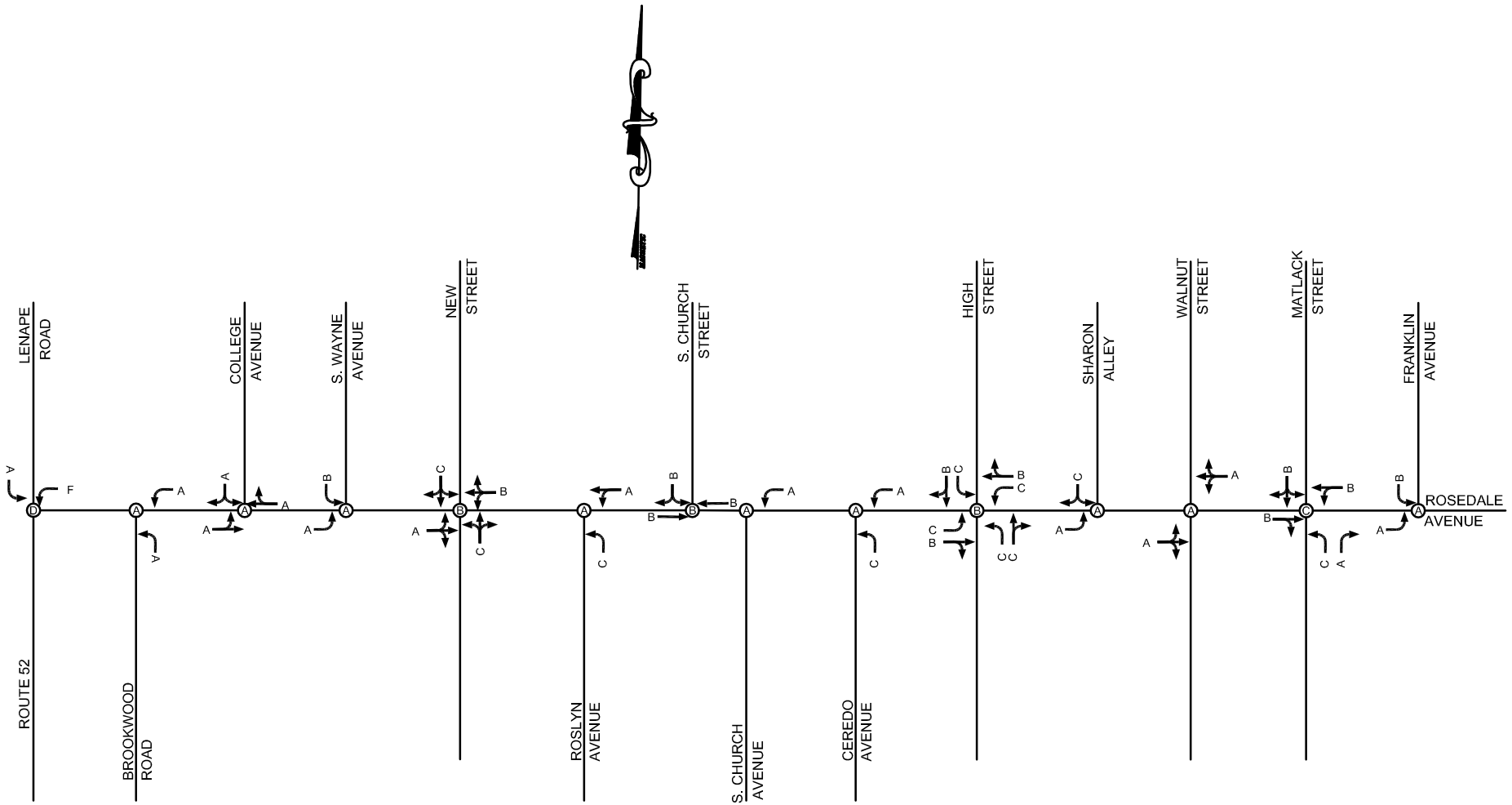
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G10

2018 FUTURE CONDITIONS
STADIUM DRIVE ACCESS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

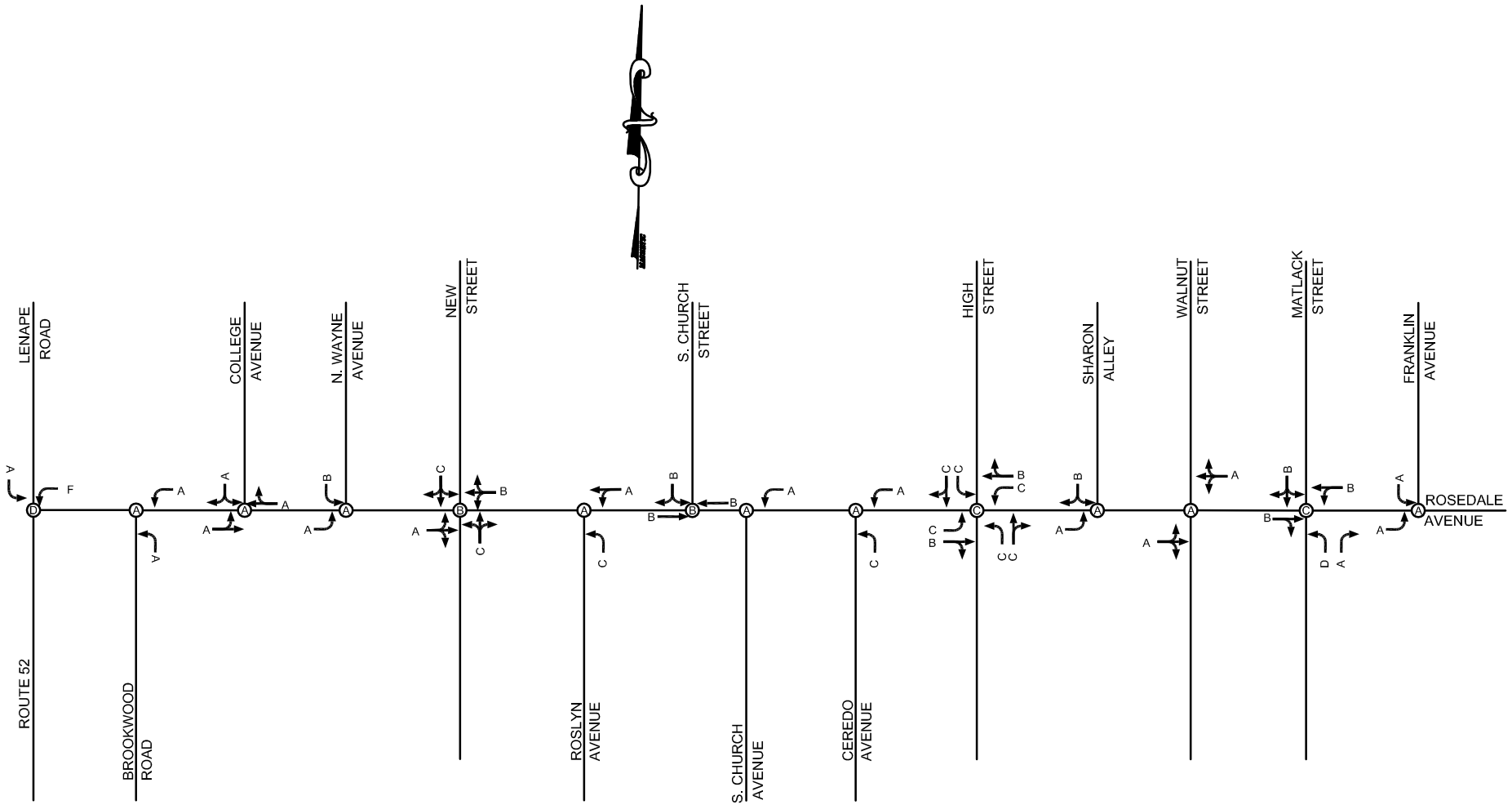
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G11

2018 FUTURE CONDITIONS
EXTENSION TO BOLMAR STREET

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

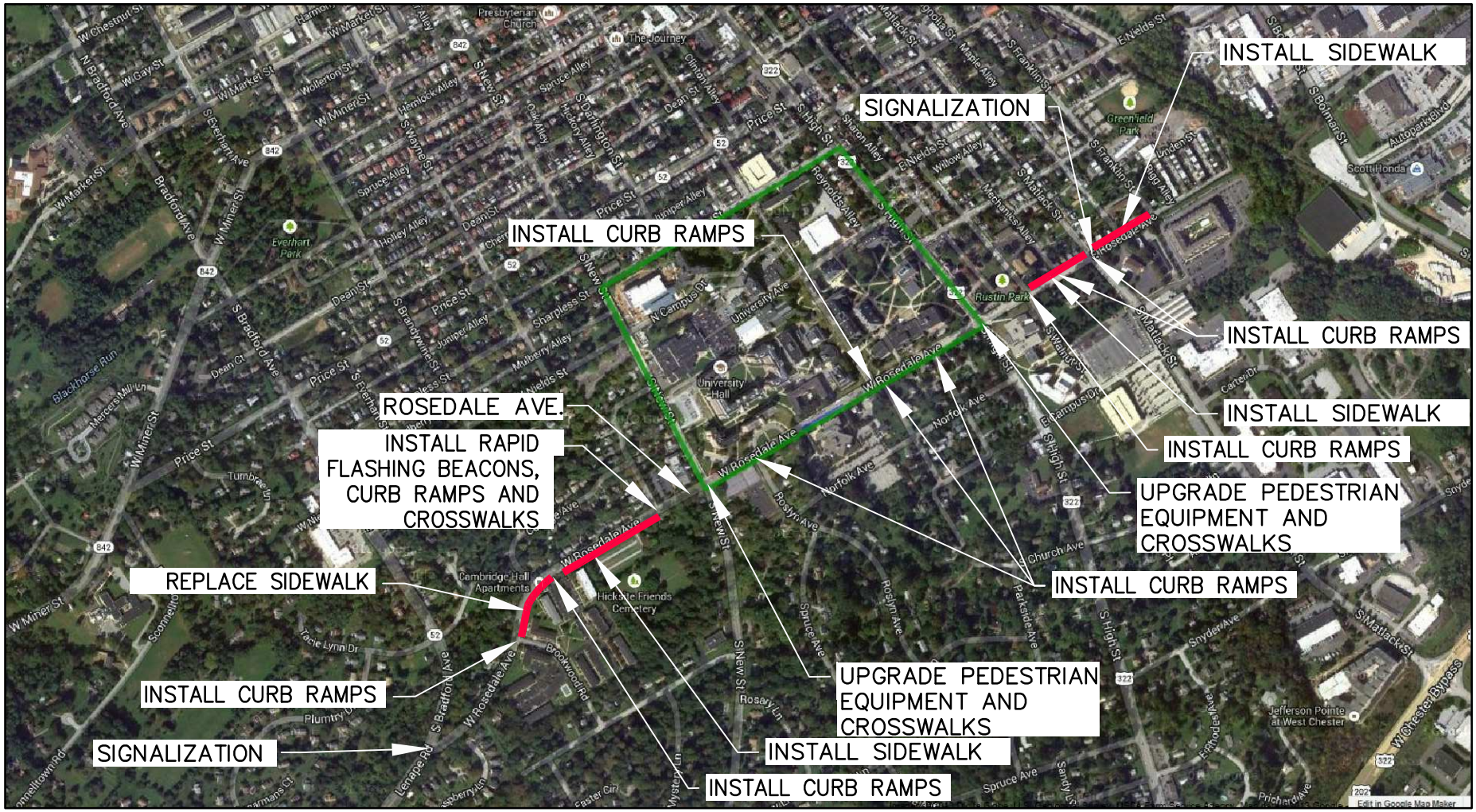
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G12

2018 FUTURE CONDITIONS
IMPROVE S.R. 0926 (W. STREET ROAD)

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



ADVANTAGES

- WILL PROVIDE THE GREATEST LEVEL OF SERVICE IMPROVEMENTS
- PROVIDES SAFE AND EFFICIENT TRAVEL FOR PEDESTRIANS.

DISADVANTAGES

- WILL LIKELY NOT RELIEVE TRAFFIC FROM ROSEDALE AVENUE.
- PEDESTRIANS STILL CONFLICT WITH VEHICULAR TRAFFIC.

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

RECOMMENDED DESIGN
SIGNALIZED INTERSECTION UPGRADES AND SIDEWALK/ CURB RAMP UPGRADES

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330

Intersection	Rosedale Avenue			Stadium Drive	One Way Pairs	Connection to Bolmar Street	Improve Pleasant Grove Road	Pleasant Grove Rd Extension to Birmingham Road	Improve S.R. 0926 (West Street Road)
	Existing 2013 PM Peak Hour LOS (Delay in seconds)	Future No Build PM Peak Hour LOS (Delay in seconds)	Future Build PM Peak Hour LOS (Delay in seconds)	Future Build PM Peak Hour LOS (Delay in seconds)	Future Build PM Peak Hour LOS (Delay in seconds)	Future Build PM Peak Hour LOS (Delay in seconds)	Future Build PM Peak Hour LOS (Delay in seconds)	Future Build PM Peak Hour LOS (Delay in seconds)	Future Build PM Peak Hour LOS (Delay in seconds)
PA Route 52 & W Rosedale Ave	C (15.4)	D (32.1)	A (9.8)	B (13.6)[1]/A (8.7)[2]	D (32.1)[1]/B (11.3)[2]	D (32.8)[1]/B (11.3)[2]	D (30.1)[1]/B (11.4)[2]	D (28.3)[1]/B (11.2)[2]	D (30.9)[1]/B (10.7)[2]
Westbound Left	F (92.1)	F (192.9)	B (13.3)	F (113.1)[1]/B (13.5)[2]	F (192.9)[1]/C (21.9)[2]	F (196.5)[1]/C (21.9)[2]	F (183.3)[1]/B (15.1)[2]	F (174.6)[1]/B (15.1)[2]	F (186.9)[1]/B (17.4)[2]
Southbound Left	A (8.3)	A (8.4)	B (11.3)	A (8.4)[1]/A (9.5)[2]	A (8.4)[1]/B (11.1)[2]	A (8.4)[1]/B (11.1)[2]	A (8.4)[1]/B (13.3)[2]	A (8.4)[1]/B (13.0)[2]	A (8.4)[1]/B (11.2)[2]
Brookwood Ave & W Rosedale Ave	A (0.6)	A (0.6)		A (0.7)	A (0.6)	A (0.6)	A (0.6)	A (0.7)	A (0.6)
Westbound Left	A (7.6)	A (7.6)		A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)	A (7.6)
Northbound Left	A (.4)	A (9.5)		A (9.3)	A (9.5)	A (9.5)	A (9.5)	A (9.5)	A (9.5)
College Ave & W Rosedale Ave	A (8.4)	A (8.6)		A (8.3)	A (8.6)	A (8.7)	A (8.6)	A (8.6)	A (8.6)
Eastbound Left	A (8.6)	A (8.9)		A (8.5)	A (8.9)	A (8.9)	A (8.9)	A (8.8)	A (8.9)
Southbound Left	A (7.6)	A (7.7)		A (7.6)	A (7.7)	A (7.7)	A (7.7)	A (7.7)	A (7.7)
S Wayne St & W Rosedale Ave	A (0.5)	A (0.5)		A (0.6)	A (0.5)	A (0.5)	A (0.5)	A (0.5)	A (0.5)
Eastbound Left	A (7.9)	A(8.0)		A (7.8)	A (8.0)	A (8.0)	A (8.0)	A (7.9)	A (7.9)
Southbound Left	B (10.9)	B (11.3)		B (10.5)	B (11.3)	B (11.3)	B (11.2)	B (11.1)	B (11.2)
S New St & W Rosedale Ave	B (15.1)	B (16.6)		B (16.4)	E (55.6)	B (16.6)	B (16.6)	B (16.5)	B (16.6)
Eastbound Left	A (6.5)	A (7.1)		A (6.9)	B (17.8)	A (7.1)	A (7.1)	A (7.1)	A (7.1)
Westbound Left	B (10.6)	B (12.9)		B (11.5)	--	B (13.1)	B (12.7)	B (12.6)	B (12.8)
Northbound Left	B (19.6)	C (21.2)		C (21.2)	C (21.2)	C (21.2)	C (21.2)	C (21.2)	C (21.2)
Southbound Left	C (22.6)	C (23.4)		C (23.4)	F (123.8)	C (23.4)	C (23.4)	C (23.4)	C (23.4)
Roslyn Ave & W Rosedale Ave	A (1.5)	A (1.7)		A (1.7)	A (1.0)	A (1.7)	A (1.7)	A (1.7)	A (1.7)
Northbound Left	C (18.3)	C (21.2)		C (17.2)	B (11.3)	C (21.6)	C (20.8)	C (20.4)	C (20.8)
Westbound Left	A (8.2)	A(8.4)		A (8.2)	--	A (8.4)	A (8.3)	A (8.3)	A (8.3)
S Church St & W Rosedale Ave (North)	B (11.3)	B (12.4)		B (10.9)	A (9.7)	B (12.9)	B (12.3)	B (12.1)	B (12.3)
Southbound Left	B (10.4)	B (11.1)		B (10.4)	A (9.2)	B (11.3)	B (11.1)	B (11.0)	B (11.1)
S Church St & W Rosedale Ave (South)	A (0.2)	A (0.2)		A (0.3)	A (0.0)	A (0.2)	A (0.2)	A (0.3)	A (0.2)
Westbound Left	A (8.9)	A (9.1)		A (8.8)	A (0.0)	A (9.2)	A (9.1)	A (9.1)	A (9.1)
Ceredo Ave & W Rosedale Ave	A (0.8)	A (0.8)		A (0.9)	A (1.3)	A (0.8)	A (0.8)	A (0.8)	A (0.8)
Northbound Left	C (16.7)	C (18.3)		C (15.9)	B (14.8)	C (18.6)	C (18.1)	C (17.9)	C (18.2)
S High St & W Rosedale Ave	B (18.8)	C (20.8)		B (18.8)	C (25.0)	B (19.5)	C (20.7)	C (20.3)	C (20.8)
Eastbound Left	D (36.0)	C(28.5)		C (26.6)	E (60.1)	C (28.0)	C (28.0)	C (30.7)	C (28.3)
Eastbound Thru/Right	C (23.0)	B (17.3)		B (17.8)	B (19.1)	B (17.4)	B (17.2)	B (18.8)	B (17.2)
Westbound Left	C (25.6)	C (22.0)		C (22.2)	C (24.3)	C (21.8)	C (22.0)	C (23.2)	C (22.0)
Westbound Thru/Right	B (19.2)	B (15.1)		B (15.9)	C (23.0)	B (15.5)	B (14.9)	B (15.9)	B (15.0)
Northbound Left	C (20.9)	C(35.0)		C (28.7)	--	C (28.3)	C (35.0)	C (31.5)	C (35.0)
Northbound Thru/Right	B (14.1)	C (21.8)		B (18.1)	C (27.0)	C (20.6)	C (21.8)	B (19.8)	C (21.8)
Southbound Left	B (17.5)	C (25.0)		C (22.0)	C (28.9)	C (25.4)	C (25.0)	C (23.5)	C (25.0)
Southbound Thru/Right	B (12.5)	C (20.4)		B (16.4)	B (13.5)	B (17.3)	C (20.4)	B (18.2)	C (20.4)
Sharon Alley & E Rosedale Ave	A (0.4)	A (0.4)		A (0.5)	A (0.4)	A (0.4)	A (0.4)	A (0.4)	A (0.4)
Eastbound Left	A (8.2)	A (8.3)		A (8.1)	A (8.3)	A (8.3)	A (8.3)	A (8.3)	A (8.3)
Southbound Left	B (13.9)	B (14.8)		B (13.1)	B (14.8)	C (15.2)	B (14.7)	B (14.5)	B (14.7)
S Walnut St & E Rosedale Ave	A (0.7)	A (0.7)		A (0.7)	A (0.7)	A (0.6)	A (0.7)	A (0.7)	A (0.7)
Eastbound Left	A (9.0)	A (9.3)		A (8.8)	A (9.3)	A (9.3)	A (9.2)	A (9.2)	A (9.2)
Westbound Left	A (8.0)	A (8.0)		A (7.9)	A (8.0)	A (8.1)	A (8.0)	A (8.0)	A (8.0)
S Matlack St & E Rosedale Ave	B (15.0)	C (18.2)	B (14.0)	B (13.3)[1]/B (13.2)[2]	C (18.2)[1]/B (13.6)[2]	C (15.1)[1]/B (13.9)[2]	C (18.0)[1]/B (15.4)[2]	C (17.9)[1]/B (14.7)[2]	C (18.1)[1]/B (10.3)[2]
Northbound Left	C (21.3)	D (27.6)	B (10.2)	C (17.7)[1]/A (8.3)[2]	D (27.6)[1]/A (9.4)[2]	C (20.6)[1]/A (8.8)[2]	D (27.4)[1]/B (16.8)[2]	D (27.2)[1]/B (15.6)[2]	D (27.5)[1]/B (11.1)[2]
Westbound Left	B (12.6)	B (14.1)	B (18.2)	B (11.9)[1]/B (18.1)[2]	B (14.1)[1]/B (17.6)[2]	B (13.0)[1]/B (17.9)[2]	B (13.9)[1]/B (17.0)[2]	B (13.8)[1]/B (16.0)[2]	B (14.0)[1]/B (11.1)[2]
Southbound Left	B (11.0)	B (12.0)	B (14.8)	B (10.8)[1]/B (13.4)[2]	B (12.0)[1]/B (15.0)[2]	B (11.5)[1]/B (14.2)[2]	B (12.0)[1]/A (8.2)[2]	B (11.9)[1]/A (9.1)[2]	B (12.0)[1]/A (6.4)[2]
S Franklin St & E Rosedale Ave	A (7.5)	A (7.6)		A (7.3)	A (7.6)	A (2.6)	A (7.6)	A (7.6)	A (7.6)
Eastbound Left	A (7.6)	A (7.6)		A (7.6)	A (7.6)	A (7.9)	A (7.6)	A (7.6)	A (7.6)
Southbound Left	A (9.7)	A (9.9)		A (9.6)	A (9.9)	B (11.5)	A (9.8)	A (9.8)	A (9.8)

[1] Analyzed as stop controlled [2] Analyzed as signal

APPENDIX A

Existing Traffic Count Data

Intersection with Rosedale Avenue	Counts from Previous Studies							2013 existing counts						2018 projected volumes					
Rosedale travels east west	AM			PM				AM			PM			AM			PM		
	Left	Through	Right	Left	Through	Right		Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Lenape Rd Route 52 Counts from 11/12/13							NB					360	124					396	136
							SB				27	552					30	607	
							WB				207		27				228		30
							EB												
Brookwood Road Counts from 5/14/13							NB				1		12				1		13
							SB												
							WB				15	239					16	263	
							EB					154	12					169	13
College Avenue Counts from 5/15/13							NB												
							SB				2		2				2		2
							WB					151	1					166	1
							EB				2	211					2	232	
S. Wayne Street Counts from 5/14/13							NB												
							SB				4		5				4		5
							WB					262	4					288	4
							EB				3	169					3	186	
New Street Counts from 11/12/13							NB				15	151	135				16	166	148
							SB				108	159	21				119	175	23
							WB				97	241	112				107	265	123
							EB				20	137	19				22	151	21
Roslyn Avenue Counts from 2012 study by McCormick Taylor For Roslyn Neighborhood	25		4	42		22	NB	25		4	43		22	27		4	47		24
							SB												
	11	168		29	463		WB	11	171		30	472		12	188		33	519	
		421	58		322	52	EB		429	59		328	53		472	65		361	58
S Church Street Counts from 2010 study for WCU Business & P.A. Center (7:30-8:30)(3:45-4:45)							NB												
	67		35	105		54	SB	71		37	111		57	78		41	122		63
		194			311		WB		205			329			225			362	
		349			249		EB		369			264			406			290	

Intersection with Rosedale Avenue	Counts from Previous Studies							2013 existing counts						2018 projected volumes					
Rosedale travels east west	AM			PM				AM			PM			AM			PM		
	Left	Through	Right	Left	Through	Right		Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
S. Church Avenue Counts from 5/16/13							NB												
							SB												
							WB				28	454					31	499	
							EB					506	79					556	87
Ceredo Avenue Counts from 5/15/13							NB				8		27				9		30
							SB												
							WB					434						477	
							EB					472						519	
High Street* Counts from 11/12/13							NB				91	404	63				100	444	69
							SB				69	373	82				76	410	90
							WB				39	231	97				43	254	107
							EB				150	208	119				165	229	131
Sharon Alley (7:30-8:30)(3:30-4:30) Counts from 2008 study by TPD for College Arms (08-06038T)							NB												
	6		3	7		6	SB	7		3	8		7	8		3	9		8
		213	4		348	12	WB		234	4		383	13		257	4		421	14
	3	422		13	335		EB	3	464		14	368		3	510		15	405	
S. Walnut Street Counts from 5/14/13							NB												
							SB												
							WB				1	432	77				1	475	85
							EB				68	277	12				75	304	13
Matlack Street Counts from 11/12/13							NB				320		85				352		93
							SB				9	64	21				10	70	23
							WB				41	124					45	136	
							EB					110	101					121	111
S. Franklin Street Counts from 5/15/13							NB												
							SB				14		121				15		133
							WB					12	11					13	12
							EB				163	13					179	14	

* Counted eastbound left turn volume (113) increased due to demand

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Avenue and Lenape
Site Code: 13-03030T
Start Date: 11/12/2013

Turning Movement Data

Start Time	Lenape Ave (Route 52) Southbound					Rosedale Avenue Westbound					Lenape Ave (Route 52) Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
4:00 PM	116	6	0	0	122	8	54	0	0	62	27	61	0	0	88	272
4:15 PM	107	8	0	0	115	11	48	0	0	59	30	82	0	0	112	286
4:30 PM	143	4	0	0	147	10	58	0	0	68	31	79	0	0	110	325
4:45 PM	134	10	0	0	144	7	52	0	0	59	25	75	0	0	100	303
Hourly Total	500	28	0	0	528	36	212	0	0	248	113	297	0	0	410	1186
5:00 PM	134	6	0	0	140	6	51	0	0	57	31	69	0	0	100	297
5:15 PM	153	4	0	0	157	7	53	0	0	60	35	106	0	0	141	358
5:30 PM	131	7	0	0	138	7	51	0	0	58	33	110	0	0	143	339
5:45 PM	100	5	0	0	105	7	52	0	0	59	31	93	0	0	124	288
Hourly Total	518	22	0	0	540	27	207	0	0	234	130	378	0	0	508	1282
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1018	50	0	0	1068	63	419	0	0	482	243	675	0	0	918	2468
Approach %	95.3	4.7	0.0	-	-	13.1	86.9	0.0	-	-	26.5	73.5	0.0	-	-	-
Total %	41.2	2.0	0.0	-	43.3	2.6	17.0	0.0	-	19.5	9.8	27.4	0.0	-	37.2	-
Car	1009	50	0	-	1059	62	411	0	-	473	238	667	0	-	905	2437
% Car	99.1	100.0	-	-	99.2	98.4	98.1	-	-	98.1	97.9	98.8	-	-	98.6	98.7
Truck	9	0	0	-	9	1	8	0	-	9	5	8	0	-	13	31
% Truck	0.9	0.0	-	-	0.8	1.6	1.9	-	-	1.9	2.1	1.2	-	-	1.4	1.3
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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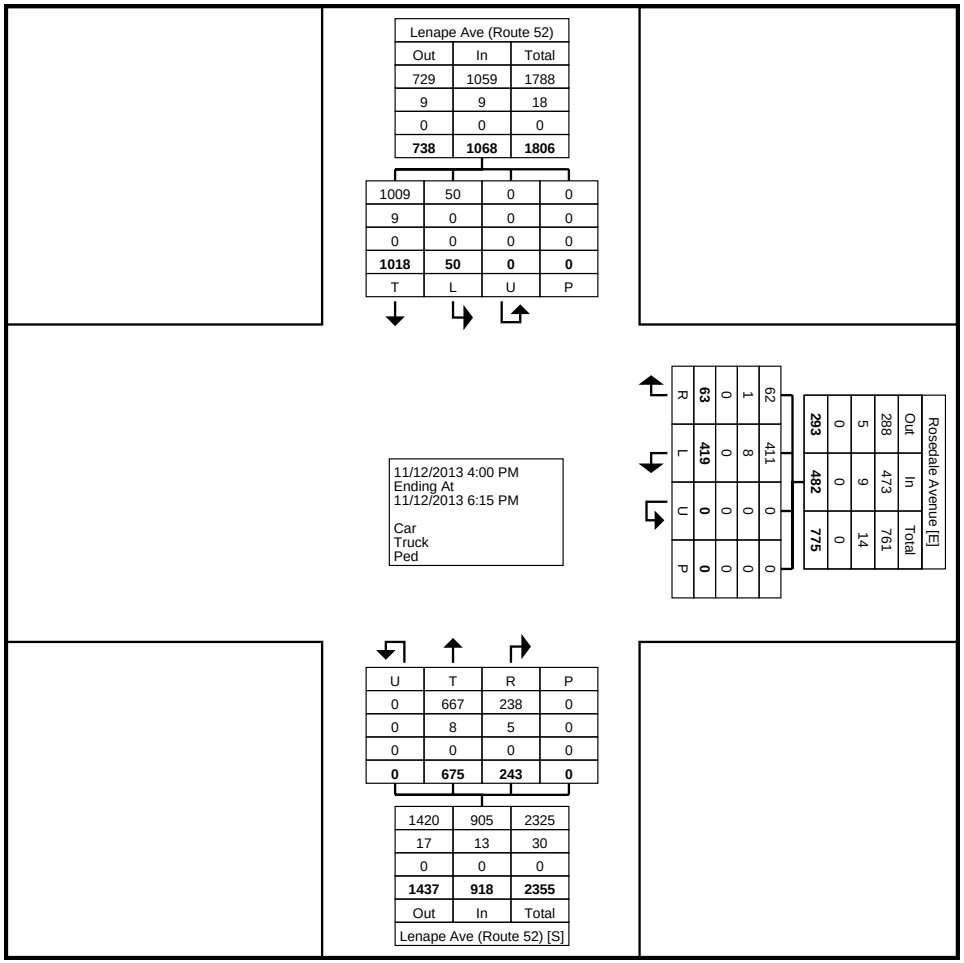
Building on a Foundation of Excellence

Count Name: Rosedale Avenue and Lenape
Site Code: 13-03030T
Start Date: 11/12/2013



Turning Movement Data Plot

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Avenue and Lenape
Site Code: 13-03030T
Start Date: 11/12/2013

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Lenape Ave (Route 52) Southbound					Rosedale Avenue Westbound					Lenape Ave (Route 52) Northbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
4:45 PM	134	10	0	0	144	7	52	0	0	59	25	75	0	0	100	303
5:00 PM	134	6	0	0	140	6	51	0	0	57	31	69	0	0	100	297
5:15 PM	153	4	0	0	157	7	53	0	0	60	35	106	0	0	141	358
5:30 PM	131	7	0	0	138	7	51	0	0	58	33	110	0	0	143	339
Total	552	27	0	0	579	27	207	0	0	234	124	360	0	0	484	1297
Approach %	95.3	4.7	0.0	-	-	11.5	88.5	0.0	-	-	25.6	74.4	0.0	-	-	-
Total %	42.6	2.1	0.0	-	44.6	2.1	16.0	0.0	-	18.0	9.6	27.8	0.0	-	37.3	-
PHF	0.902	0.675	0.000	-	0.922	0.964	0.976	0.000	-	0.975	0.886	0.818	0.000	-	0.846	0.906
Car	547	27	0	-	574	27	206	0	-	233	122	359	0	-	481	1288
% Car	99.1	100.0	-	-	99.1	100.0	99.5	-	-	99.6	98.4	99.7	-	-	99.4	99.3
Truck	5	0	0	-	5	0	1	0	-	1	2	1	0	-	3	9
% Truck	0.9	0.0	-	-	0.9	0.0	0.5	-	-	0.4	1.6	0.3	-	-	0.6	0.7
Ped	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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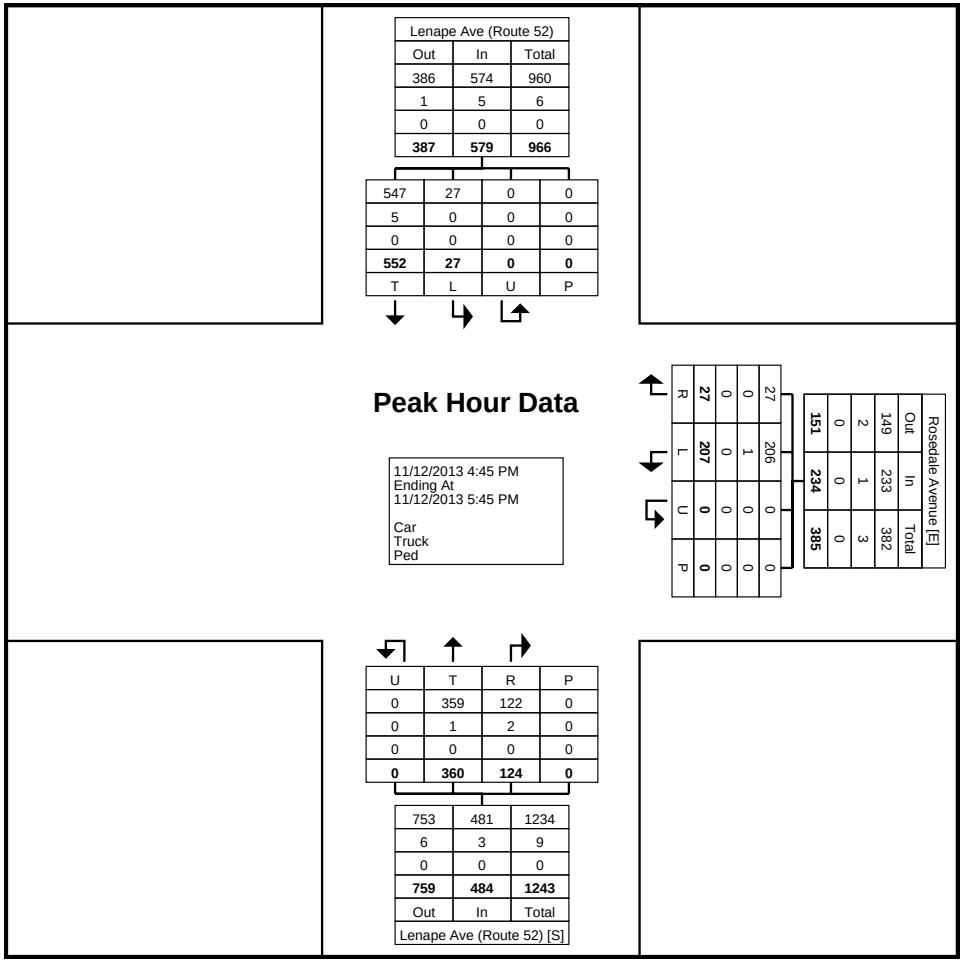
Count Name: Rosedale Avenue and Lenape
Site Code: 13-03030T
Start Date: 11/12/2013



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

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Ave and Brookwood Ave
Site Code: 13-03030T-EPM
Start Date: 05/14/2013

Turning Movement Data

Start Time	Rosedale Avenue Westbound					Brookwood Avenue Northbound					Rosedale Avenue Eastbound					Int. Total
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	
4:43 PM	57	6	0	0	63	5	0	0	0	5	4	40	0	0	44	112
4:58 PM	71	1	0	0	72	4	1	0	1	5	5	36	0	0	41	118
Hourly Total	128	7	0	0	135	9	1	0	1	10	9	76	0	0	85	230
5:13 PM	60	3	0	0	63	2	0	0	1	2	2	36	0	0	38	103
5:28 PM	51	5	0	0	56	1	0	0	0	1	1	42	0	0	43	100
5:43 PM	47	6	0	0	53	4	1	0	2	5	3	40	0	0	43	101
5:58 PM	52	2	0	0	54	3	0	0	0	3	3	38	0	0	41	98
Hourly Total	210	16	0	0	226	10	1	0	3	11	9	156	0	0	165	402
6:13 PM	51	2	0	0	53	3	0	0	0	3	2	36	0	0	38	94
6:28 PM	57	2	0	0	59	1	0	0	0	1	1	31	0	0	32	92
6:43 PM	6	1	0	0	7	0	0	0	0	0	0	4	0	0	4	11
Grand Total	452	28	0	0	480	23	2	0	4	25	21	303	0	0	324	829
Approach %	94.2	5.8	0.0	-	-	92.0	8.0	0.0	-	-	6.5	93.5	0.0	-	-	-
Total %	54.5	3.4	0.0	-	57.9	2.8	0.2	0.0	-	3.0	2.5	36.6	0.0	-	39.1	-
Car	446	28	0	-	474	23	2	0	-	25	21	299	0	-	320	819
% Car	98.7	100.0	-	-	98.8	100.0	100.0	-	-	100.0	100.0	98.7	-	-	98.8	98.8
Truck	6	0	0	-	6	0	0	0	-	0	0	4	0	-	4	10
% Truck	1.3	0.0	-	-	1.3	0.0	0.0	-	-	0.0	0.0	1.3	-	-	1.2	1.2
Ped	-	-	-	0	-	-	-	-	4	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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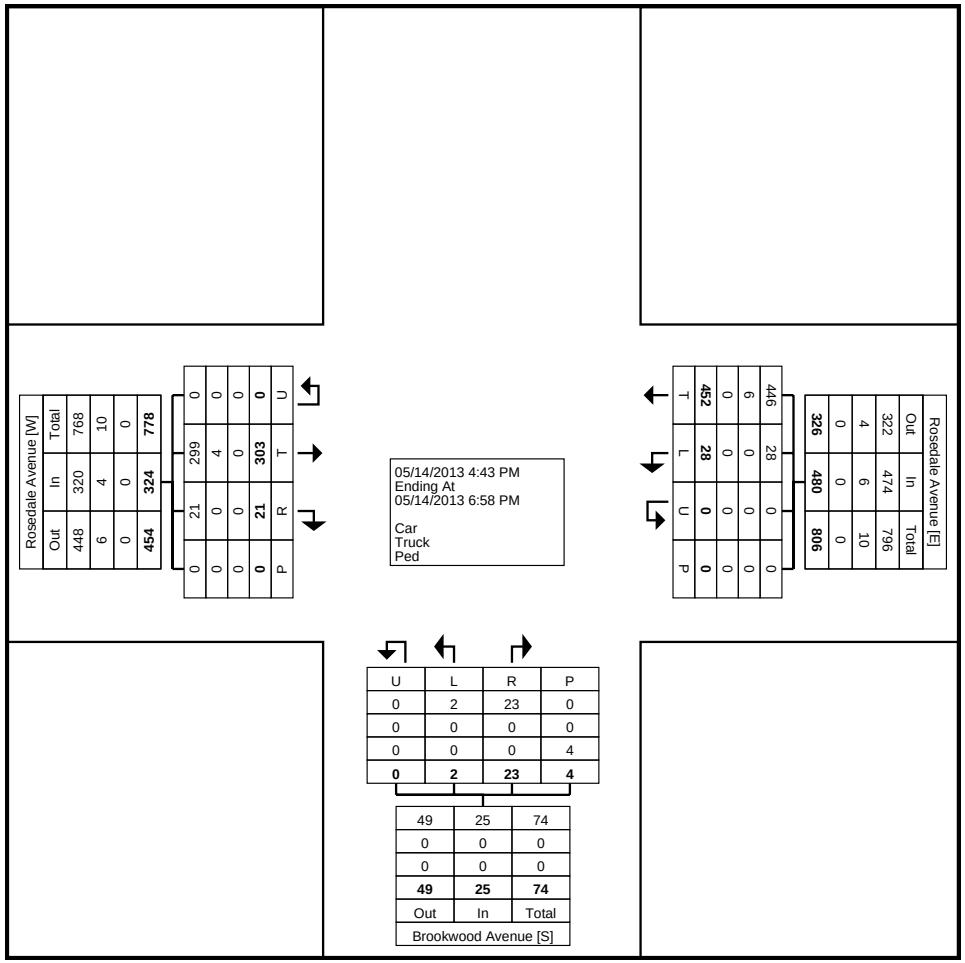
Count Name: Rosedale Ave and Brookwood Ave
Site Code: 13-03030T-EPM
Start Date: 05/14/2013



Turning Movement Data Plot

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Count Name: Rosedale Ave and Brookwood Ave
Site Code: 13-03030T-EPM
Start Date: 05/14/2013

Turning Movement Peak Hour Data (4:43 PM)

Start Time	Rosedale Avenue Westbound					Brookwood Avenue Northbound					Rosedale Avenue Eastbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
4:43 PM	57	6	0	0	63	5	0	0	0	5	4	40	0	0	44	112
4:58 PM	71	1	0	0	72	4	1	0	1	5	5	36	0	0	41	118
5:13 PM	60	3	0	0	63	2	0	0	1	2	2	36	0	0	38	103
5:28 PM	51	5	0	0	56	1	0	0	0	1	1	42	0	0	43	100
Total	239	15	0	0	254	12	1	0	2	13	12	154	0	0	166	433
Approach %	94.1	5.9	0.0	-	-	92.3	7.7	0.0	-	-	7.2	92.8	0.0	-	-	-
Total %	55.2	3.5	0.0	-	58.7	2.8	0.2	0.0	-	3.0	2.8	35.6	0.0	-	38.3	-
PHF	0.842	0.625	0.000	-	0.882	0.600	0.250	0.000	-	0.650	0.600	0.917	0.000	-	0.943	0.917
Car	234	15	0	-	249	12	1	0	-	13	12	153	0	-	165	427
% Car	97.9	100.0	-	-	98.0	100.0	100.0	-	-	100.0	100.0	99.4	-	-	99.4	98.6
Truck	5	0	0	-	5	0	0	0	-	0	0	1	0	-	1	6
% Truck	2.1	0.0	-	-	2.0	0.0	0.0	-	-	0.0	0.0	0.6	-	-	0.6	1.4
Ped	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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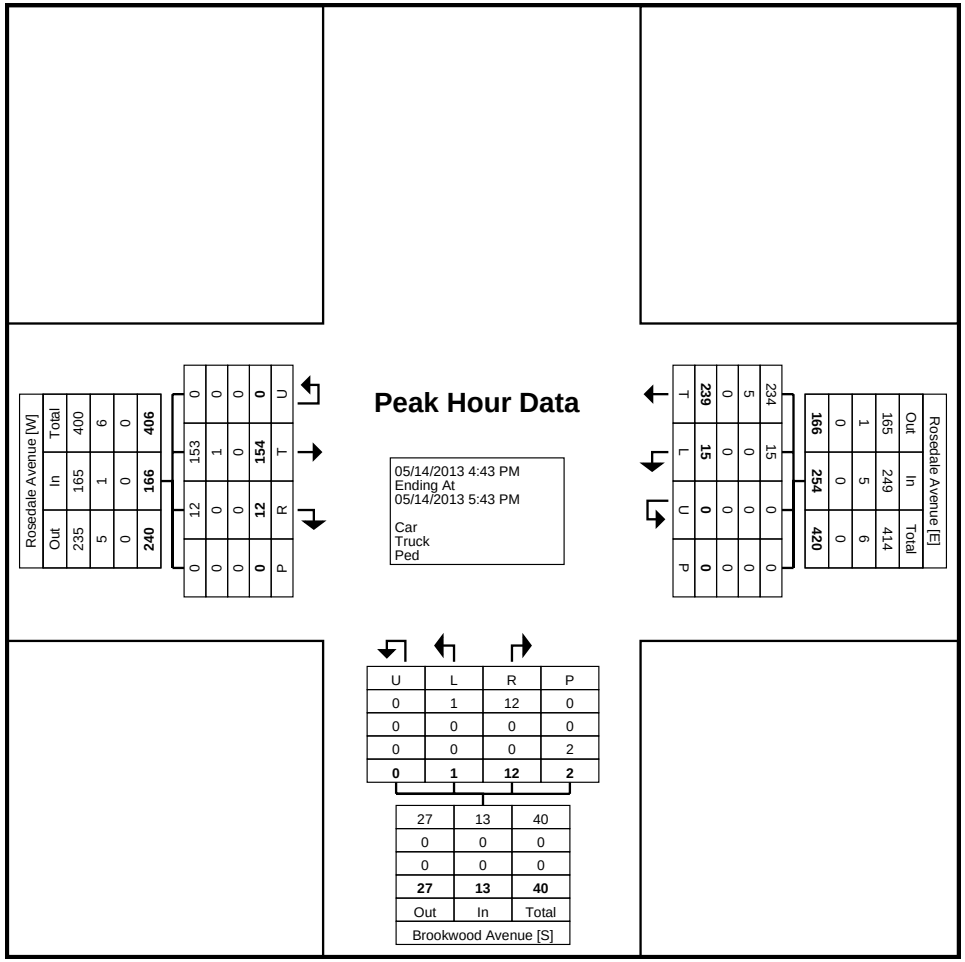
Count Name: Rosedale Ave and Brookwood Ave
Site Code: 13-03030T-EPM
Start Date: 05/14/2013



Turning Movement Peak Hour Data Plot (4:43 PM)

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Count Name: Rosedale Avenue and College Avenue
Site Code: 13-03030T-EPM
Start Date: 05/15/2013

Turning Movement Data

Start Time	College Avenue Southbound					Rosedale Avenue Westbound					Rosedale Avenue Eastbound					
	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Int. Total
5:46 PM	0	0	0	0	0	0	42	0	0	42	51	1	0	0	52	94
6:01 PM	1	0	0	0	1	0	36	0	0	36	51	0	0	0	51	88
6:16 PM	1	2	0	0	3	1	41	0	1	42	61	0	0	0	61	106
6:31 PM	0	0	0	0	0	0	32	0	0	32	48	1	0	0	49	81
Grand Total	2	2	0	0	4	1	151	0	1	152	211	2	0	0	213	369
Approach %	50.0	50.0	0.0	-	-	0.7	99.3	0.0	-	-	99.1	0.9	0.0	-	-	-
Total %	0.5	0.5	0.0	-	1.1	0.3	40.9	0.0	-	41.2	57.2	0.5	0.0	-	57.7	-
Car	2	2	0	-	4	1	150	0	-	151	211	2	0	-	213	368
% Car	100.0	100.0	-	-	100.0	100.0	99.3	-	-	99.3	100.0	100.0	-	-	100.0	99.7
Truck	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Truck	0.0	0.0	-	-	0.0	0.0	0.7	-	-	0.7	0.0	0.0	-	-	0.0	0.3
Ped	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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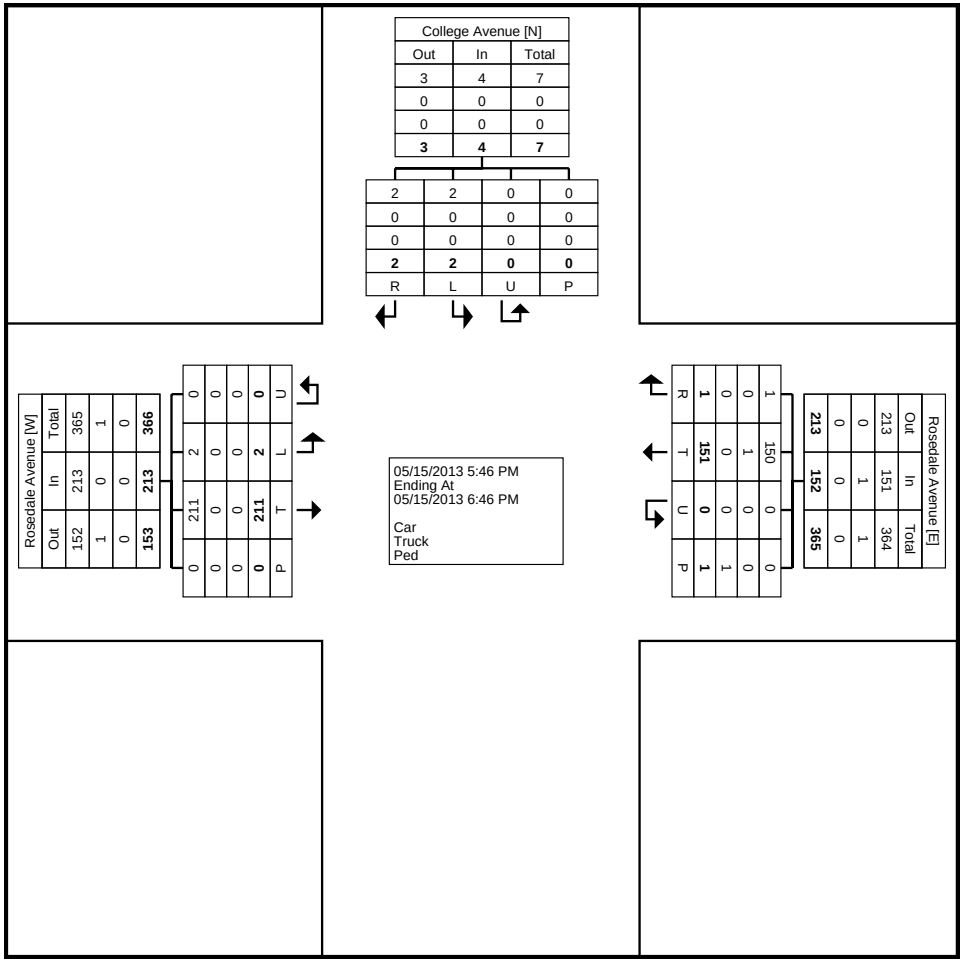
Count Name: Rosedale Avenue and College Avenue
Site Code: 13-03030T-EPM
Start Date: 05/15/2013



Turning Movement Data Plot

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Count Name: Rosedale Avenue and College Avenue
Site Code: 13-03030T-EPM
Start Date: 05/15/2013

Turning Movement Peak Hour Data (5:46 PM)

Start Time	College Avenue Southbound					Rosedale Avenue Westbound					Rosedale Avenue Eastbound					
	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Int. Total
5:46 PM	0	0	0	0	0	0	42	0	0	42	51	1	0	0	52	94
6:01 PM	1	0	0	0	1	0	36	0	0	36	51	0	0	0	51	88
6:16 PM	1	2	0	0	3	1	41	0	1	42	61	0	0	0	61	106
6:31 PM	0	0	0	0	0	0	32	0	0	32	48	1	0	0	49	81
Total	2	2	0	0	4	1	151	0	1	152	211	2	0	0	213	369
Approach %	50.0	50.0	0.0	-	-	0.7	99.3	0.0	-	-	99.1	0.9	0.0	-	-	-
Total %	0.5	0.5	0.0	-	1.1	0.3	40.9	0.0	-	41.2	57.2	0.5	0.0	-	57.7	-
PHF	0.500	0.250	0.000	-	0.333	0.250	0.899	0.000	-	0.905	0.865	0.500	0.000	-	0.873	0.870
Car	2	2	0	-	4	1	150	0	-	151	211	2	0	-	213	368
% Car	100.0	100.0	-	-	100.0	100.0	99.3	-	-	99.3	100.0	100.0	-	-	100.0	99.7
Truck	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Truck	0.0	0.0	-	-	0.0	0.0	0.7	-	-	0.7	0.0	0.0	-	-	0.0	0.3
Ped	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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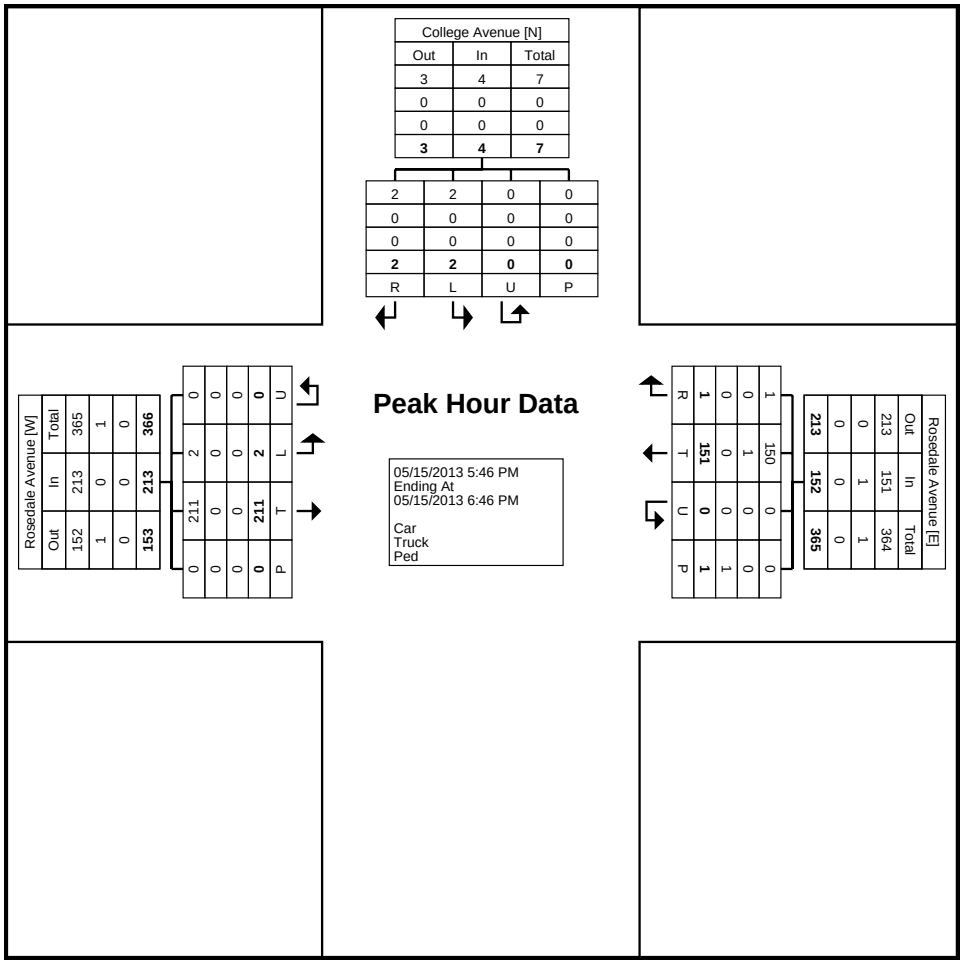

Turning Movement Peak Hour Data Plot (5:46 PM)

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Count Name: Rosedale Ave and S. Wayne Ave
Site Code: 1303030T-EPM
Start Date: 05/14/2013

Turning Movement Data

Start Time	S. Wayne Avenue Southbound					Rosedale Avenue Westbound					Rosedale Avenue Eastbound					
	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:01 PM	1	0	0	1	1	2	61	0	7	63	42	1	0	0	43	107
4:16 PM	1	1	0	0	2	1	62	0	1	63	37	1	0	0	38	103
4:31 PM	3	3	0	4	6	1	75	0	1	76	45	0	0	1	45	127
4:46 PM	0	0	0	0	0	0	64	0	3	64	45	1	0	0	46	110
Hourly Total	5	4	0	5	9	4	262	0	12	266	169	3	0	1	172	447
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5:46 PM	0	1	0	0	1	0	10	0	0	10	3	0	0	0	3	14
Hourly Total	0	1	0	0	1	0	10	0	0	10	3	0	0	0	3	14
6:01 PM	1	0	0	0	1	0	64	0	4	64	44	1	0	0	45	110
6:16 PM	1	1	0	0	2	2	56	0	2	58	46	1	0	0	47	107
6:31 PM	1	0	0	0	1	1	65	0	4	66	38	2	0	0	40	107
6:46 PM	0	1	0	0	1	2	43	0	1	45	34	1	0	0	35	81
Hourly Total	3	2	0	0	5	5	228	0	11	233	162	5	0	0	167	405
Grand Total	8	7	0	5	15	9	500	0	23	509	334	8	0	1	342	866
Approach %	53.3	46.7	0.0	-	-	1.8	98.2	0.0	-	-	97.7	2.3	0.0	-	-	-
Total %	0.9	0.8	0.0	-	1.7	1.0	57.7	0.0	-	58.8	38.6	0.9	0.0	-	39.5	-
Car	8	7	0	-	15	8	496	0	-	504	328	8	0	-	336	855
% Car	100.0	100.0	-	-	100.0	88.9	99.2	-	-	99.0	98.2	100.0	-	-	98.2	98.7
Truck	0	0	0	-	0	1	4	0	-	5	6	0	0	-	6	11
% Truck	0.0	0.0	-	-	0.0	11.1	0.8	-	-	1.0	1.8	0.0	-	-	1.8	1.3
Ped	-	-	-	5	-	-	-	-	23	-	-	-	-	1	-	-
% Ped	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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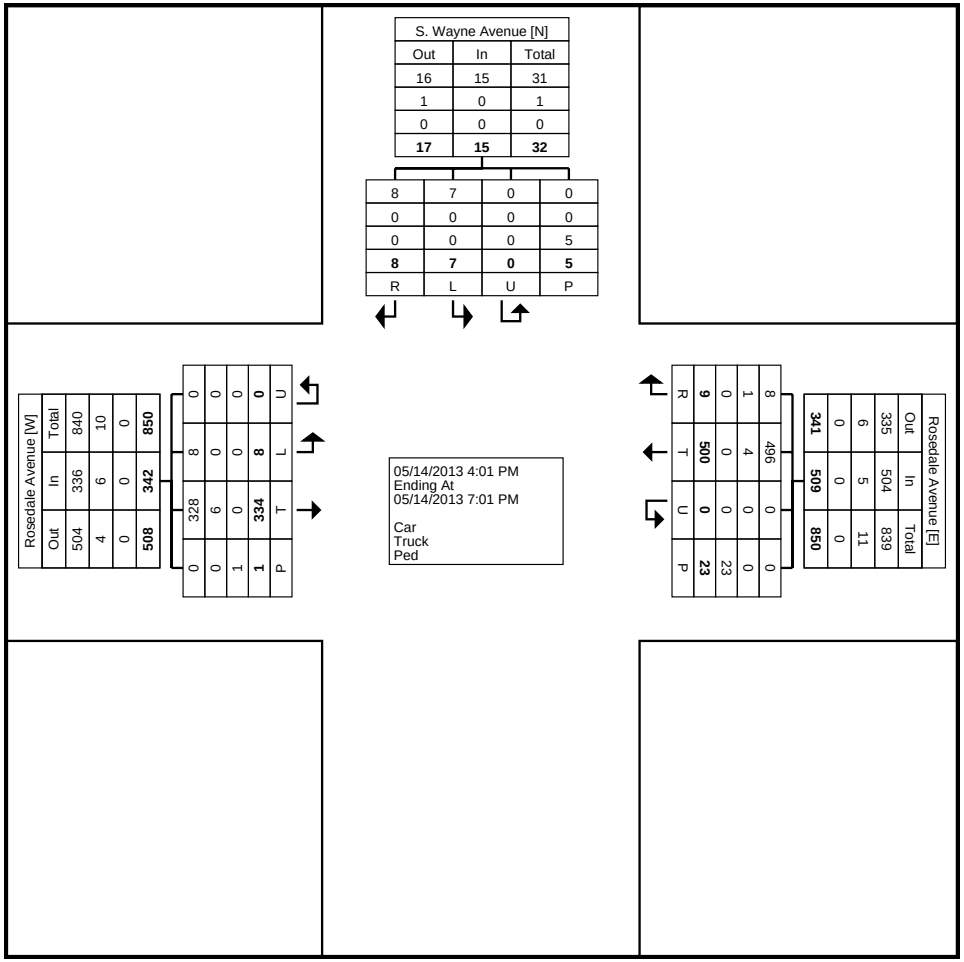
Count Name: Rosedale Ave and S. Wayne Ave
Site Code: 1303030T-EPM
Start Date: 05/14/2013



Turning Movement Data Plot

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Count Name: Rosedale Ave and S. Wayne Ave
Site Code: 1303030T-EPM
Start Date: 05/14/2013

Turning Movement Peak Hour Data (4:01 PM)

Start Time	S. Wayne Avenue Southbound					Rosedale Avenue Westbound					Rosedale Avenue Eastbound					
	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:01 PM	1	0	0	1	1	2	61	0	7	63	42	1	0	0	43	107
4:16 PM	1	1	0	0	2	1	62	0	1	63	37	1	0	0	38	103
4:31 PM	3	3	0	4	6	1	75	0	1	76	45	0	0	1	45	127
4:46 PM	0	0	0	0	0	0	64	0	3	64	45	1	0	0	46	110
Total	5	4	0	5	9	4	262	0	12	266	169	3	0	1	172	447
Approach %	55.6	44.4	0.0	-	-	1.5	98.5	0.0	-	-	98.3	1.7	0.0	-	-	-
Total %	1.1	0.9	0.0	-	2.0	0.9	58.6	0.0	-	59.5	37.8	0.7	0.0	-	38.5	-
PHF	0.417	0.333	0.000	-	0.375	0.500	0.873	0.000	-	0.875	0.939	0.750	0.000	-	0.935	0.880
Car	5	4	0	-	9	4	259	0	-	263	164	3	0	-	167	439
% Car	100.0	100.0	-	-	100.0	100.0	98.9	-	-	98.9	97.0	100.0	-	-	97.1	98.2
Truck	0	0	0	-	0	0	3	0	-	3	5	0	0	-	5	8
% Truck	0.0	0.0	-	-	0.0	0.0	1.1	-	-	1.1	3.0	0.0	-	-	2.9	1.8
Ped	-	-	-	5	-	-	-	-	12	-	-	-	-	1	-	-
% Ped	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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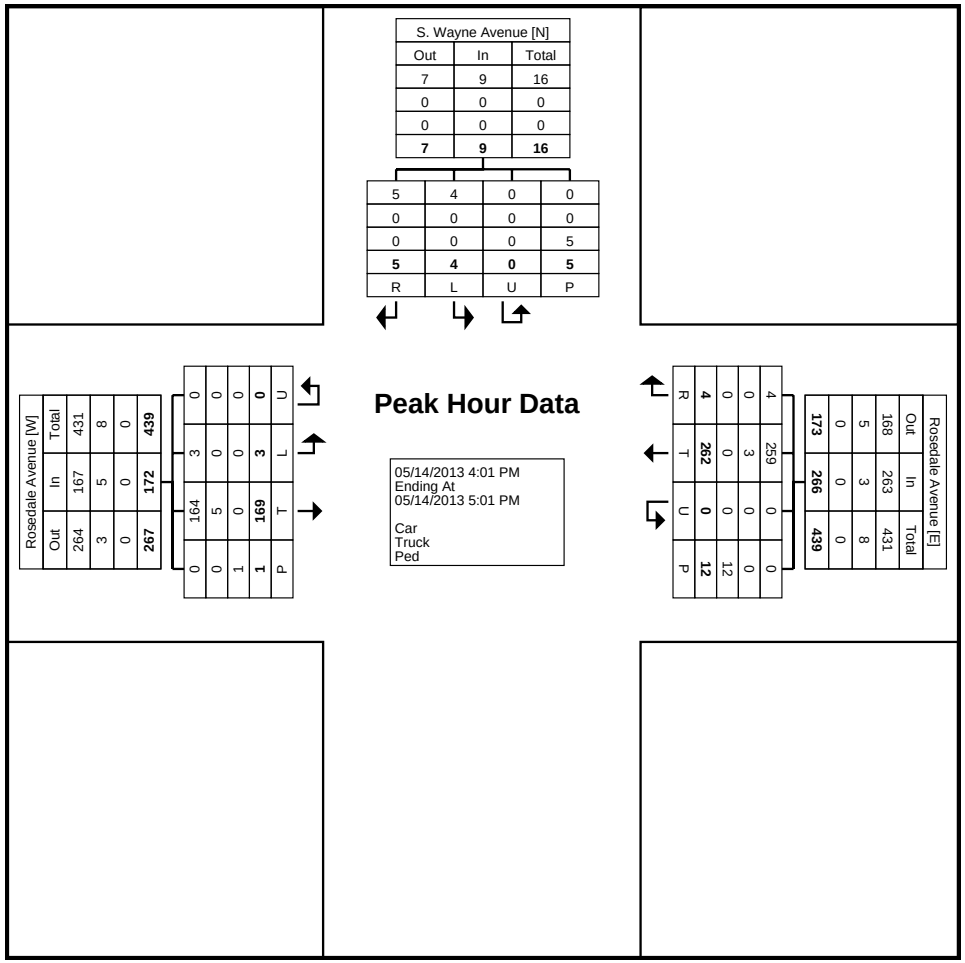

Turning Movement Peak Hour Data Plot (4:01 PM)

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Count Name: Rosedale Ave and S. Wayne Ave
Site Code: 1303030T-EPM
Start Date: 05/14/2013

Turning Movement Peak Hour Data (6:01 PM)

Start Time	S. Wayne Avenue Southbound					Rosedale Avenue Westbound					Rosedale Avenue Eastbound					
	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Thru	Left	U-Turn	Peds	App. Total	Int. Total
6:01 PM	1	0	0	0	1	0	64	0	4	64	44	1	0	0	45	110
6:16 PM	1	1	0	0	2	2	56	0	2	58	46	1	0	0	47	107
6:31 PM	1	0	0	0	1	1	65	0	4	66	38	2	0	0	40	107
6:46 PM	0	1	0	0	1	2	43	0	1	45	34	1	0	0	35	81
Total	3	2	0	0	5	5	228	0	11	233	162	5	0	0	167	405
Approach %	60.0	40.0	0.0	-	-	2.1	97.9	0.0	-	-	97.0	3.0	0.0	-	-	-
Total %	0.7	0.5	0.0	-	1.2	1.2	56.3	0.0	-	57.5	40.0	1.2	0.0	-	41.2	-
PHF	0.750	0.500	0.000	-	0.625	0.625	0.877	0.000	-	0.883	0.880	0.625	0.000	-	0.888	0.920
Car	3	2	0	-	5	4	227	0	-	231	161	5	0	-	166	402
% Car	100.0	100.0	-	-	100.0	80.0	99.6	-	-	99.1	99.4	100.0	-	-	99.4	99.3
Truck	0	0	0	-	0	1	1	0	-	2	1	0	0	-	1	3
% Truck	0.0	0.0	-	-	0.0	20.0	0.4	-	-	0.9	0.6	0.0	-	-	0.6	0.7
Ped	-	-	-	0	-	-	-	-	11	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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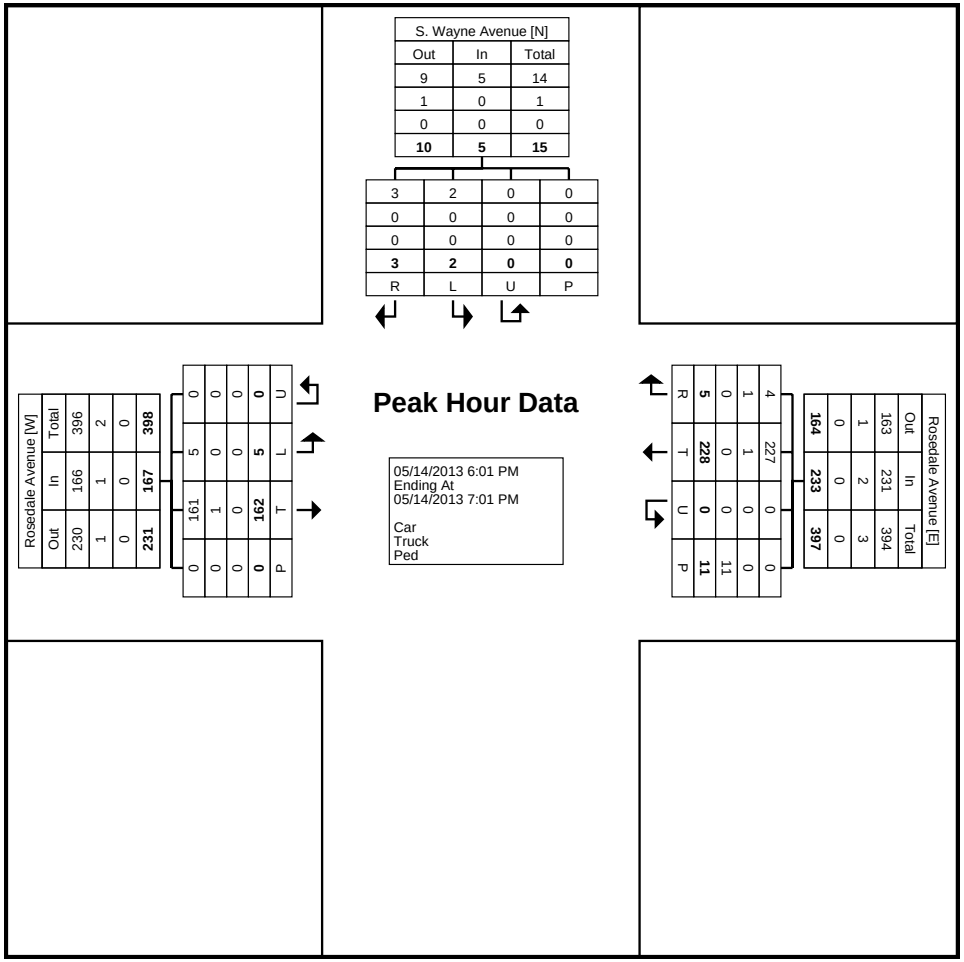
Count Name: Rosedale Ave and S. Wayne Ave
Site Code: 1303030T-EPM
Start Date: 05/14/2013



Turning Movement Peak Hour Data Plot (6:01 PM)

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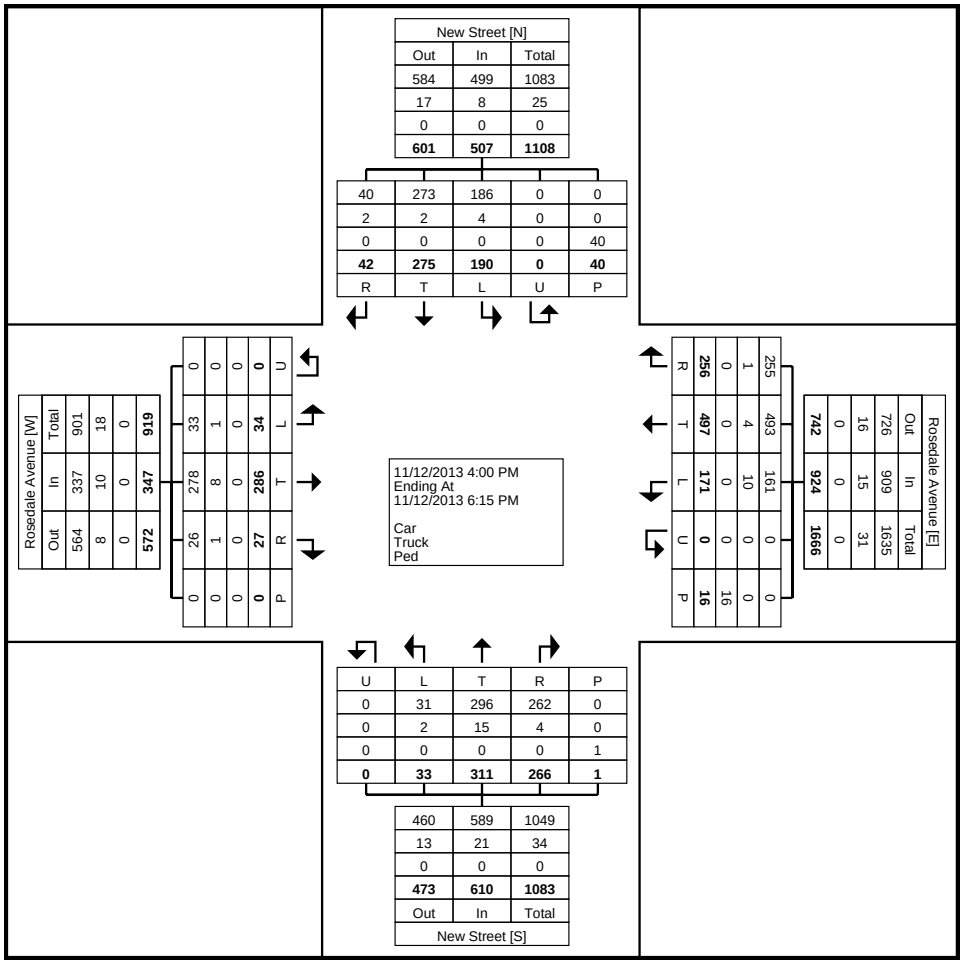
Count Name: Rosedale Avenue
Site Code: 13-03030T Rosedale and New
Start Date: 11/12/2013

Turning Movement Data

Start Time	New Street Southbound						Rosedale Avenue Westbound						New Street Northbound						Rosedale Avenue Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	7	46	27	0	13	80	20	61	30	0	11	111	25	39	3	0	1	67	3	32	8	0	0	43	301
4:15 PM	6	43	34	0	7	83	35	50	36	0	1	121	42	44	5	0	0	91	7	34	3	0	0	44	339
4:30 PM	4	39	28	0	3	71	33	82	16	0	0	131	31	32	3	0	0	66	2	45	5	0	0	52	320
4:45 PM	4	31	19	0	2	54	24	48	15	0	0	87	37	36	4	0	0	77	7	26	4	0	0	37	255
Hourly Total	21	159	108	0	25	288	112	241	97	0	12	450	135	151	15	0	1	301	19	137	20	0	0	176	1215
5:00 PM	6	25	22	0	2	53	34	67	18	0	2	119	26	41	5	0	0	72	2	36	2	0	0	40	284
5:15 PM	4	21	15	0	5	40	35	73	14	0	2	122	31	37	6	0	0	74	2	36	3	0	0	41	277
5:30 PM	6	31	21	0	7	58	37	52	18	0	0	107	38	43	1	0	0	82	3	37	5	0	0	45	292
5:45 PM	5	39	24	0	1	68	38	64	24	0	0	126	36	39	6	0	0	81	1	40	4	0	0	45	320
Hourly Total	21	116	82	0	15	219	144	256	74	0	4	474	131	160	18	0	0	309	8	149	14	0	0	171	1173
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	0	0
Grand Total	42	275	190	0	40	507	256	497	171	0	16	924	266	311	33	0	1	610	27	286	34	0	0	347	2388
Approach %	8.3	54.2	37.5	0.0	-	-	27.7	53.8	18.5	0.0	-	-	43.6	51.0	5.4	0.0	-	-	7.8	82.4	9.8	0.0	-	-	-
Total %	1.8	11.5	8.0	0.0	-	21.2	10.7	20.8	7.2	0.0	-	38.7	11.1	13.0	1.4	0.0	-	25.5	1.1	12.0	1.4	0.0	-	14.5	-
Car	40	273	186	0	-	499	255	493	161	0	-	909	262	296	31	0	-	589	26	278	33	0	-	337	2334
% Car	95.2	99.3	97.9	-	-	98.4	99.6	99.2	94.2	-	-	98.4	98.5	95.2	93.9	-	-	96.6	96.3	97.2	97.1	-	-	97.1	97.7
Truck	2	2	4	0	-	8	1	4	10	0	-	15	4	15	2	0	-	21	1	8	1	0	-	10	54
% Truck	4.8	0.7	2.1	-	-	1.6	0.4	0.8	5.8	-	-	1.6	1.5	4.8	6.1	-	-	3.4	3.7	2.8	2.9	-	-	2.9	2.3
Ped	-	-	-	-	40	-	-	-	-	-	16	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Avenue
Site Code: 13-03030T Rosedale and New
Start Date: 11/12/2013



Turning Movement Data Plot

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

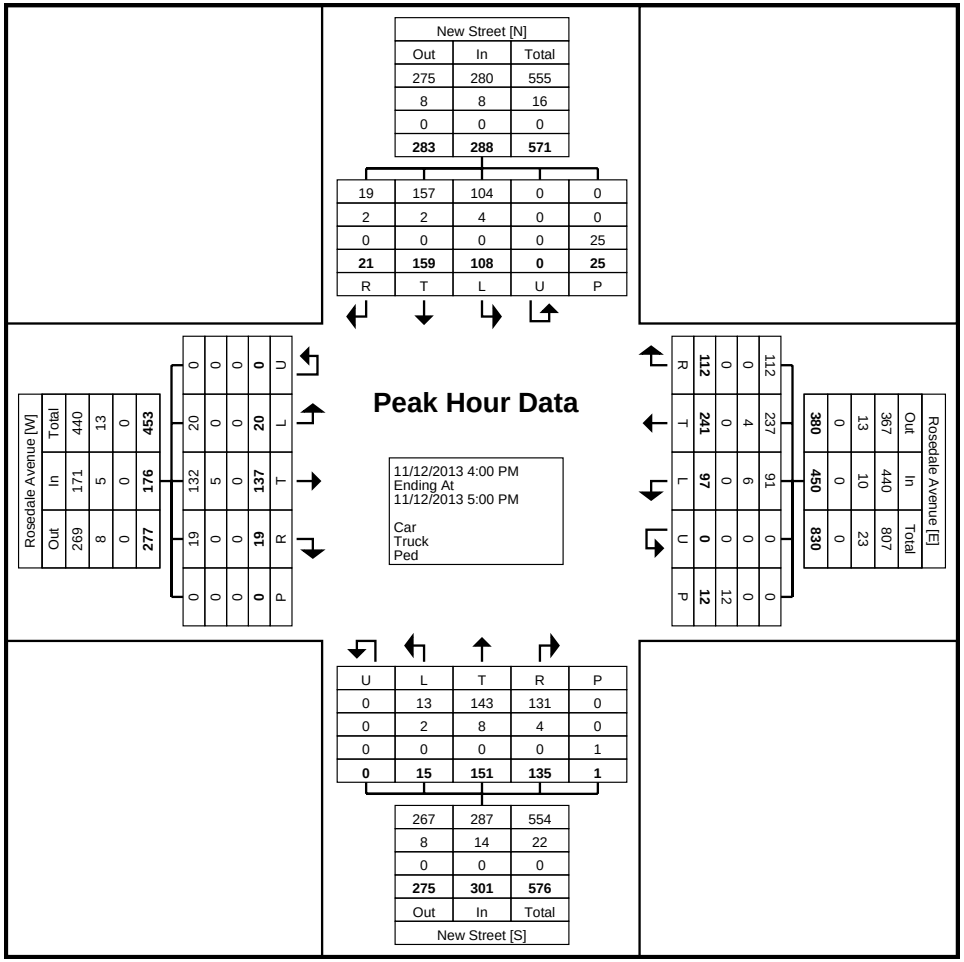
Count Name: Rosedale Avenue
Site Code: 13-03030T Rosedale and New
Start Date: 11/12/2013

Turning Movement Peak Hour Data (4:00 PM)

Start Time	New Street Southbound						Rosedale Avenue Westbound						New Street Northbound						Rosedale Avenue Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	7	46	27	0	13	80	20	61	30	0	11	111	25	39	3	0	1	67	3	32	8	0	0	43	301
4:15 PM	6	43	34	0	7	83	35	50	36	0	1	121	42	44	5	0	0	91	7	34	3	0	0	44	339
4:30 PM	4	39	28	0	3	71	33	82	16	0	0	131	31	32	3	0	0	66	2	45	5	0	0	52	320
4:45 PM	4	31	19	0	2	54	24	48	15	0	0	87	37	36	4	0	0	77	7	26	4	0	0	37	255
Total	21	159	108	0	25	288	112	241	97	0	12	450	135	151	15	0	1	301	19	137	20	0	0	176	1215
Approach %	7.3	55.2	37.5	0.0	-	-	24.9	53.6	21.6	0.0	-	-	44.9	50.2	5.0	0.0	-	-	10.8	77.8	11.4	0.0	-	-	-
Total %	1.7	13.1	8.9	0.0	-	23.7	9.2	19.8	8.0	0.0	-	37.0	11.1	12.4	1.2	0.0	-	24.8	1.6	11.3	1.6	0.0	-	14.5	-
PHF	0.750	0.864	0.794	0.000	-	0.867	0.800	0.735	0.674	0.000	-	0.859	0.804	0.858	0.750	0.000	-	0.827	0.679	0.761	0.625	0.000	-	0.846	0.896
Car	19	157	104	0	-	280	112	237	91	0	-	440	131	143	13	0	-	287	19	132	20	0	-	171	1178
% Car	90.5	98.7	96.3	-	-	97.2	100.0	98.3	93.8	-	-	97.8	97.0	94.7	86.7	-	-	95.3	100.0	96.4	100.0	-	-	97.2	97.0
Truck	2	2	4	0	-	8	0	4	6	0	-	10	4	8	2	0	-	14	0	5	0	0	-	5	37
% Truck	9.5	1.3	3.7	-	-	2.8	0.0	1.7	6.2	-	-	2.2	3.0	5.3	13.3	-	-	4.7	0.0	3.6	0.0	-	-	2.8	3.0
Ped	-	-	-	-	25	-	-	-	-	-	12	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Avenue
Site Code: 13-03030T Rosedale and New
Start Date: 11/12/2013



Turning Movement Peak Hour Data Plot (4:00 PM)

McMahon Associates, Inc.

Transportation Engineers and Planners

425 Commerce Drive, Suite 200
Fort Washington, PA 19034

Municipality: West Chester
Location: Rosedale Avenue & Roslyn Street
Counter/Countboard No.: LB

File Name : rosedale02w
Site Code : 81299902
Start Date : 9/25/2012
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

	WCU Driveway Southbound			Rosedale Ave Westbound			Roslyn Street Northbound			Rosedale Ave Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00	0	0	1	0	27	0	1	0	2	0	87	6	124
07:15	0	0	2	1	31	0	4	0	1	0	77	17	133
07:30	0	0	6	10	32	0	8	0	1	0	92	19	168
07:45	1	0	2	2	49	0	9	0	1	0	119	21	204
Total	1	0	11	13	139	0	22	0	5	0	375	63	629
08:00	1	0	5	7	39	0	5	0	1	0	110	15	183
08:15	2	0	7	3	42	0	11	0	0	0	81	9	155
08:30	1	0	4	4	40	0	5	0	1	0	86	10	151
08:45	1	0	3	7	46	0	9	0	9	0	82	22	179
Total	5	0	19	21	167	0	30	0	11	0	359	56	668
16:00	3	0	3	6	73	0	12	0	9	0	56	14	176
16:15	4	0	4	12	84	0	18	0	5	0	50	8	185
16:30	1	0	1	5	98	0	18	0	5	0	47	11	186
16:45	1	0	4	1	72	0	5	0	5	0	41	8	137
Total	9	0	12	24	327	0	53	0	24	0	194	41	684
17:00	6	0	3	5	82	0	4	0	6	0	54	16	176
17:15	0	0	4	5	106	0	12	0	4	0	74	12	217
17:30	1	0	4	11	107	0	18	0	12	0	57	8	218
17:45	2	0	3	7	90	0	16	0	6	0	82	11	217
Total	9	0	14	28	385	0	50	0	28	0	267	47	828
Grand Total	24	0	56	86	1018	0	155	0	68	0	1195	207	2809
Apprch %	30	0	70	7.8	92.2	0	69.5	0	30.5	0	85.2	14.8	
Total %	0.9	0	2	3.1	36.2	0	5.5	0	2.4	0	42.5	7.4	
Passenger Vehicles	23	0	27	84	988	0	152	0	66	0	1154	205	2699
% Passenger Vehicles	95.8	0	48.2	97.7	97.1	0	98.1	0	97.1	0	96.6	99	96.1
Heavy Vehicles	1	0	29	2	30	0	3	0	2	0	41	2	110
% Heavy Vehicles	4.2	0	51.8	2.3	2.9	0	1.9	0	2.9	0	3.4	1	3.9

McMahon Associates, Inc.

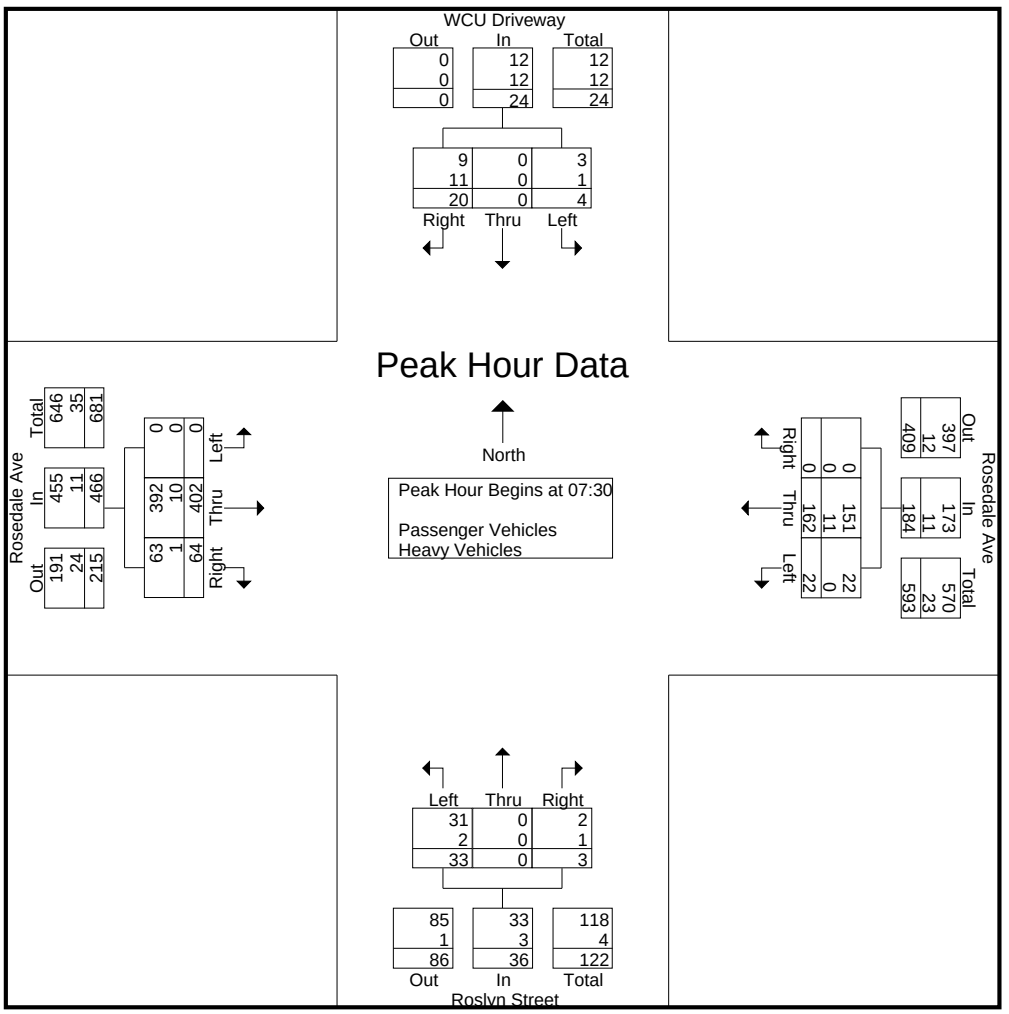
Transportation Engineers and Planners

425 Commerce Drive, Suite 200
Fort Washington, PA 19034

Municipality: West Chester
Location: Rosedale Avenue & Roslyn Street
Counter/Countboard No.: LB

File Name : rosedale02w
Site Code : 81299902
Start Date : 9/25/2012
Page No : 2

	WCU Driveway Southbound				Rosedale Ave Westbound				Roslyn Street Northbound				Rosedale Ave 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 07:00 to 11:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	6	6	**10**	32	0	42	8	0	**1**	9	0	92	19	111	168
07:45	1	0	2	3	2	**49**	0	**51**	9	0	1	10	0	**119**	**21**	**140**	**204**
08:00	1	0	5	6	7	39	0	46	5	0	1	6	0	110	15	125	183
08:15	**2**	0	**7**	**9**	3	42	0	45	**11**	0	0	**11**	0	81	9	90	155
Total Volume	4	0	20	24	22	162	0	184	33	0	3	36	0	402	64	466	710
% App. Total	16.7	0	83.3		12	88	0		91.7	0	8.3		0	86.3	13.7		
PHF	.500	.000	.714	.667	.550	.827	.000	.902	.750	.000	.750	.818	.000	.845	.762	.832	.870
Passenger Vehicles	3	0	9	12	22	151	0	173	31	0	2	33	0	392	63	455	673
% Passenger Vehicles	75.0	0	45.0	50.0	100	93.2	0	94.0	93.9	0	66.7	91.7	0	97.5	98.4	97.6	94.8
Heavy Vehicles	1	0	11	12	0	11	0	11	2	0	1	3	0	10	1	11	37
% Heavy Vehicles	25.0	0	55.0	50.0	0	6.8	0	6.0	6.1	0	33.3	8.3	0	2.5	1.6	2.4	5.2



McMahon Associates, Inc.

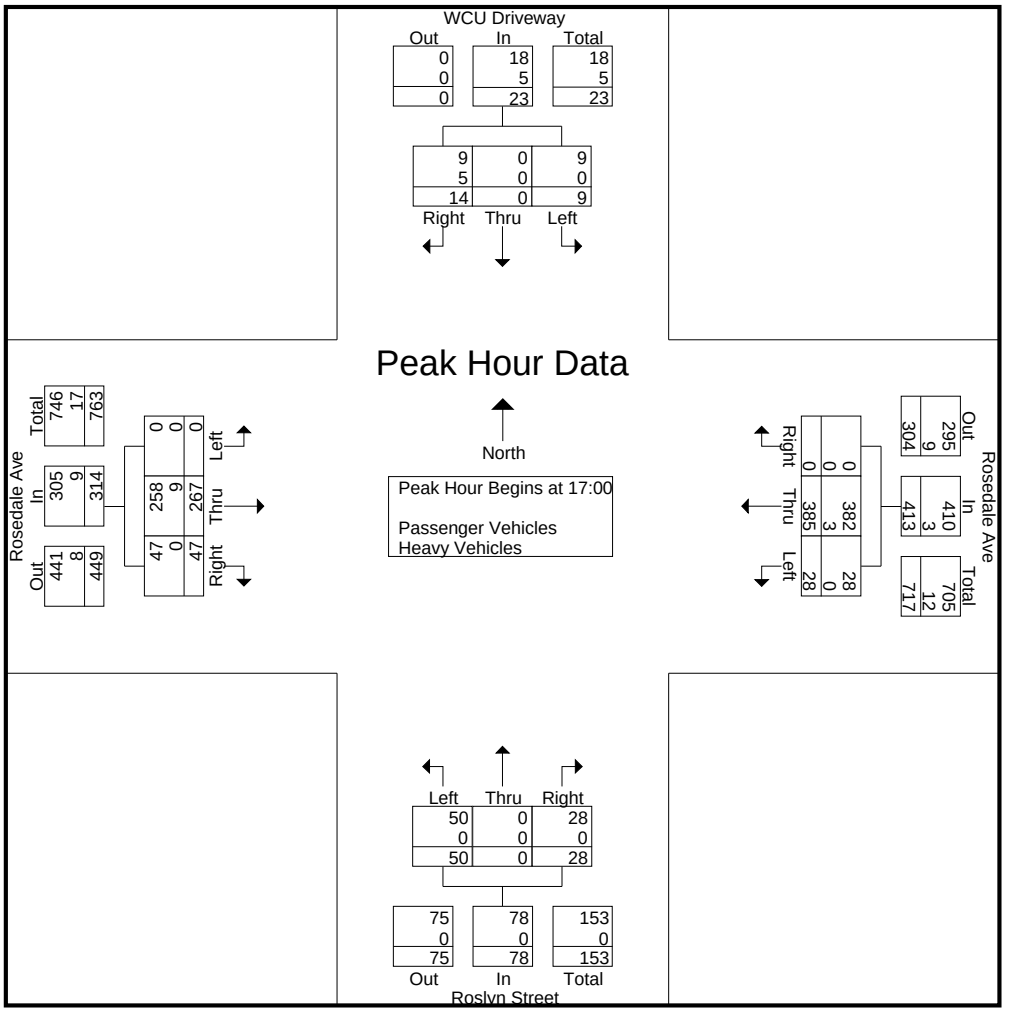
Transportation Engineers and Planners

425 Commerce Drive, Suite 200
Fort Washington, PA 19034

Municipality: West Chester
Location: Rosedale Avenue & Roslyn Street
Counter/Countboard No.: LB

File Name : rosedale02w
Site Code : 81299902
Start Date : 9/25/2012
Page No : 3

	WCU Driveway Southbound				Rosedale Ave Westbound				Roslyn Street Northbound				Rosedale Ave 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 12:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	**6**	0	3	**9**	5	82	0	87	4	0	6	10	0	54	**16**	70	176
17:15	0	0	**4**	4	5	106	0	111	12	0	4	16	0	74	12	86	217
17:30	1	0	4	5	**11**	**107**	0	**118**	**18**	0	**12**	**30**	0	57	8	65	**218**
17:45	2	0	3	5	7	90	0	97	16	0	6	22	0	**82**	11	**93**	217
Total Volume	9	0	14	23	28	385	0	413	50	0	28	78	0	267	47	314	828
% App. Total	39.1	0	60.9		6.8	93.2	0		64.1	0	35.9		0	85	15		
PHF	.375	.000	.875	.639	.636	.900	.000	.875	.694	.000	.583	.650	.000	.814	.734	.844	.950
Passenger Vehicles	9	0	9	18	28	382	0	410	50	0	28	78	0	258	47	305	811
% Passenger Vehicles	100	0	64.3	78.3	100	99.2	0	99.3	100	0	100	100	0	96.6	100	97.1	97.9
Heavy Vehicles	0	0	5	5	0	3	0	3	0	0	0	0	0	9	0	9	17
% Heavy Vehicles	0	0	35.7	21.7	0	0.8	0	0.7	0	0	0	0	0	3.4	0	2.9	2.1



McCormick Taylor, Inc.

222 Valley Creek Blvd
Exton, PA, 19343

File Name : Church and Rosedale
Site Code : 00000001
Start Date : 9/21/2010
Page No : 1

Groups Printed- Unshifted

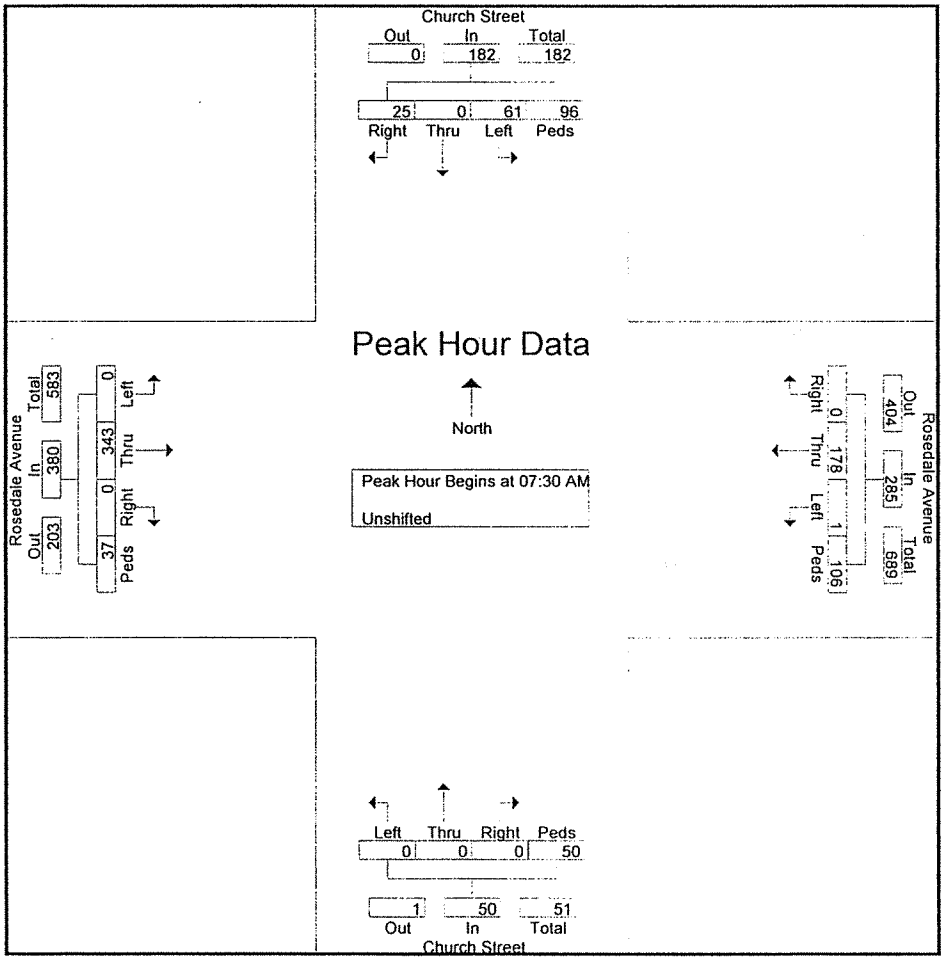
	Church Street Southbound					Rosedale Avenue Westbound					Church Street Northbound					Rosedale Avenue Eastbound					
Start Time					App. Total					App. Total					App. Total					App. Total	Int. Total
07:00 AM	3	0	2	0	5	2	62	0	1	65	1	0	2	0	3	0	67	3	6	76	149
07:15 AM	2	0	9	7	18	0	30	0	9	39	0	0	0	4	4	0	94	0	5	99	160
07:30 AM	7	0	19	25	51	0	45	0	17	62	0	0	0	14	14	0	103	0	11	114	241
07:45 AM	11	0	15	49	75	0	52	0	69	121	0	0	0	19	19	0	76	0	19	95	310
Total	23	0	45	81	149	2	189	0	96	287	1	0	2	37	40	0	340	3	41	384	860
08:00 AM	5	0	14	16	35	0	42	0	11	53	0	0	0	8	8	0	80	0	3	83	179
08:15 AM	2	0	13	6	21	0	39	1	9	49	0	0	0	9	9	0	84	0	4	88	167
08:30 AM	4	0	14	5	23	0	46	0	9	55	0	0	0	2	2	0	76	0	6	82	162
08:45 AM	6	0	24	8	38	0	54	0	20	74	0	0	0	7	7	0	76	0	8	84	203
Total	17	0	65	35	117	0	181	1	49	231	0	0	0	26	26	0	316	0	21	337	711
09:00 AM	9	0	6	12	27	0	48	0	38	86	1	0	0	12	13	0	68	0	5	73	199
09:15 AM	13	0	26	14	53	0	42	0	99	141	0	0	0	35	35	0	56	0	35	91	320
09:30 AM	8	0	10	3	21	0	28	0	32	60	0	0	0	9	9	0	42	0	10	52	142
09:45 AM	6	0	10	1	17	0	44	0	19	63	0	0	0	8	8	0	44	0	5	49	137
Total	36	0	52	30	118	0	162	0	188	350	1	0	0	64	65	0	210	0	55	265	798
*** BREAK ***																					
03:00 PM	12	0	31	25	68	1	66	0	55	122	0	0	0	39	39	0	50	0	8	58	287
03:15 PM	14	0	31	27	72	1	78	0	26	105	0	0	0	69	69	0	66	1	31	98	344
03:30 PM	12	0	20	19	51	0	81	0	21	102	0	0	0	14	14	0	57	1	5	63	230
03:45 PM	9	0	15	35	59	0	80	0	31	111	0	0	0	14	14	0	65	0	12	77	261
Total	47	0	97	106	250	2	305	0	133	440	0	0	0	136	136	0	238	2	56	296	1122
04:00 PM	19	0	31	15	65	0	82	0	40	122	0	0	0	19	19	0	46	0	9	55	261
04:15 PM	17	0	27	14	58	0	86	0	44	130	0	0	0	16	16	0	61	0	10	71	275
04:30 PM	8	1	17	18	44	0	105	0	32	137	0	0	0	14	14	0	45	0	25	70	265
04:45 PM	7	0	24	28	59	0	74	0	36	110	0	0	0	9	9	0	51	0	9	60	238
Total	51	1	99	75	226	0	347	0	152	499	0	0	0	58	58	0	203	0	53	256	1039
05:00 PM	7	0	15	12	34	0	117	0	15	132	0	0	0	11	11	0	58	0	5	63	240
05:15 PM	17	0	26	28	71	0	94	0	24	118	0	0	0	21	21	0	72	0	6	78	288
05:30 PM	17	0	23	25	65	0	94	0	43	137	0	0	0	26	26	0	64	0	12	76	304
05:45 PM	14	0	30	19	63	0	109	0	16	125	0	0	0	5	5	0	71	0	12	83	276
Total	55	0	94	84	233	0	414	0	98	512	0	0	0	63	63	0	265	0	35	300	1108
Grand Total	229	1	452	411	1093	4	1598	1	716	2319	2	0	2	384	388	0	1572	5	261	1838	5638
Apprch %	21	0.1	41.4	37.6		0.2	68.9	0	30.9		0.5	0	0.5	99		0	85.5	0.3	14.2		
Total %	4.1	0	8	7.3	19.4	0.1	28.3	0	12.7	41.1	0	0	0	6.8	6.9	0	27.9	0.1	4.6	32.6	

McCormick Taylor, Inc.

222 Valley Creek Blvd
Exton, PA, 19343

File Name : Church and Rosedale
Site Code : 00000001
Start Date : 9/21/2010
Page No : 2

	Church Street Southbound					Rosedale Avenue Westbound					Church Street Northbound					Rosedale Avenue Eastbound					
Start Time					App. Total					App. Total					App. Total					App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	7	0	19	25	51	0	45	0	17	62	0	0	0	14	14	0	103	0	11	114	241
07:45 AM	11	0	15	49	75	0	52	0	69	121	0	0	0	19	19	0	76	0	19	95	310
08:00 AM	5	0	14	16	35	0	42	0	11	53	0	0	0	8	8	0	80	0	3	83	179
08:15 AM	2	0	13	6	21	0	39	1	9	49	0	0	0	9	9	0	84	0	4	88	167
Total Volume	25	0	61	96	182	0	178	1	106	285	0	0	0	50	50	0	343	0	37	380	897
% App. Total	13.7	0	33.5	52.7		0	62.5	0.4	37.2		0	0	0	100		0	90.3	0	9.7		
PHF	.568	.000	.803	.490	.607	.000	.856	.250	.384	.589	.000	.000	.000	.658	.658	.000	.833	.000	.487	.833	.723

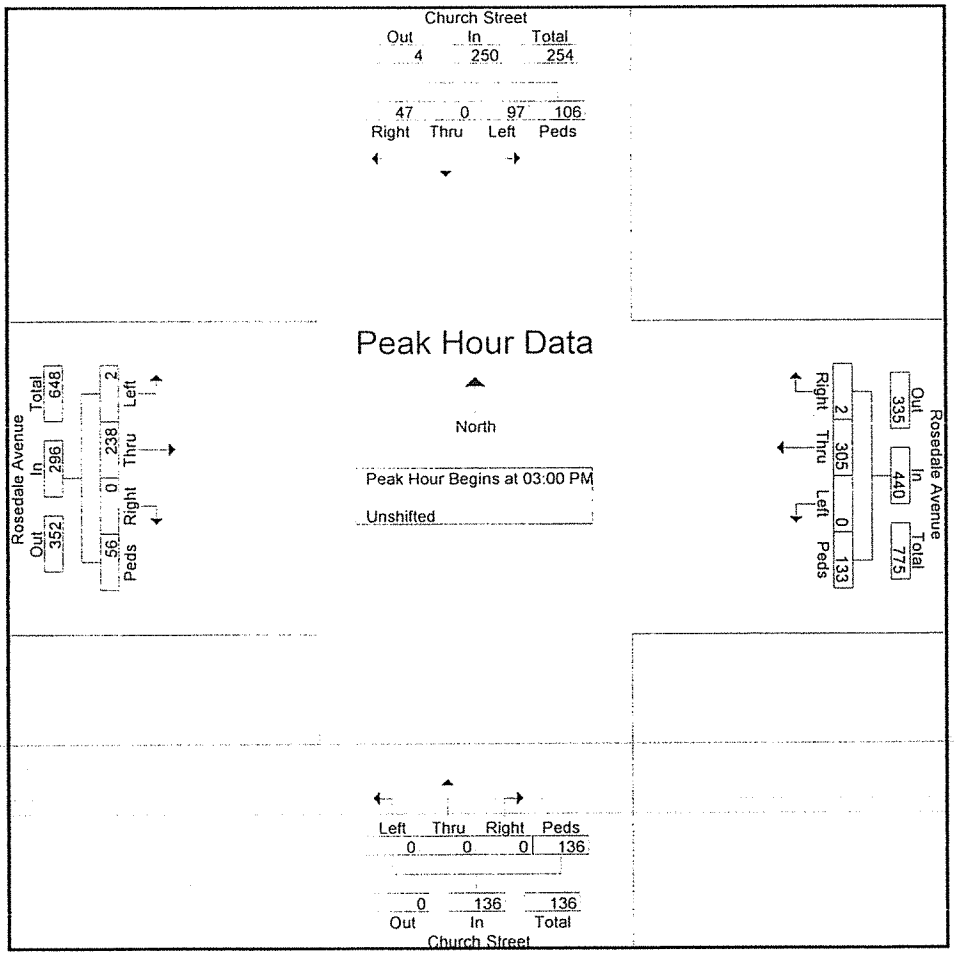


McCormick Taylor, Inc.

222 Valley Creek Blvd
Exton, PA, 19343

File Name : Church and Rosedale
Site Code : 00000001
Start Date : 9/21/2010
Page No : 3

	Church Street Southbound					Rosedale Avenue Westbound					Church Street Northbound					Rosedale Avenue Eastbound					
Start Time					App Total					App Total					App Total					App Total	Int Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	12	0	31	25	68	1	66	0	55	122	0	0	0	39	39	0	50	0	8	58	287
03:15 PM	14	0	31	27	72	1	78	0	26	105	0	0	0	69	69	0	66	1	31	98	344
03:30 PM	12	0	20	19	51	0	81	0	21	102	0	0	0	14	14	0	57	1	5	63	230
03:45 PM	9	0	15	35	59	0	80	0	31	111	0	0	0	14	14	0	65	0	12	77	261
Total Volume	47	0	97	106	250	2	305	0	133	440	0	0	0	136	136	0	238	2	56	296	1122
% App. Total	18.8	0	38.8	42.4		0.5	69.3	0	30.2		0	0	0	100		0	80.4	0.7	18.9		
PHF	.839	.000	.782	.757	.868	.500	.941	.000	.605	.902	.000	.000	.000	.493	.493	.000	.902	.500	.452	.755	.815



Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Municipality: West Chester Borough
Intersection: Rosedale Ave & S. Church
Time: 4-6 PM
Counter: DM

File Name : EPROSCHU
Site Code : 00130303
Start Date : 5/16/2013
Page No : 1

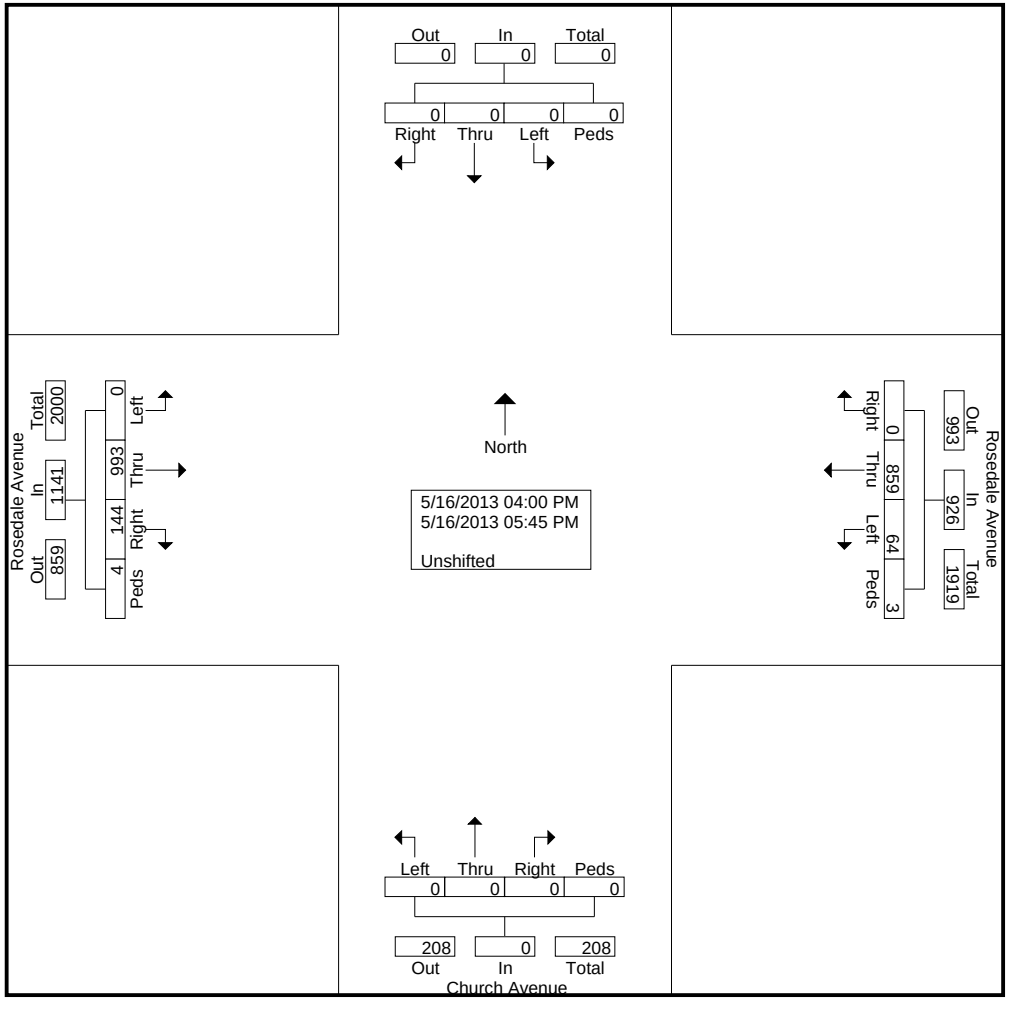
Groups Printed- Unshifted

	From North				Rosedale Avenue From East				Church Avenue From South				Rosedale Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	0	0	0	0	0	89	9	0	0	0	0	0	10	112	0	0	220
04:15 PM	0	0	0	0	0	94	6	1	0	0	0	0	20	133	0	0	254
04:30 PM	0	0	0	0	0	114	8	0	0	0	0	0	22	138	0	1	283
04:45 PM	0	0	0	0	0	107	5	0	0	0	0	0	30	123	0	0	265
Total	0	0	0	0	0	404	28	1	0	0	0	0	82	506	0	1	1022
05:00 PM	0	0	0	0	0	115	8	0	0	0	0	0	15	128	0	1	267
05:15 PM	0	0	0	0	0	118	7	2	0	0	0	0	12	117	0	0	256
05:30 PM	0	0	0	0	0	116	8	0	0	0	0	0	15	121	0	1	261
05:45 PM	0	0	0	0	0	106	13	0	0	0	0	0	20	121	0	1	261
Total	0	0	0	0	0	455	36	2	0	0	0	0	62	487	0	3	1045
Grand Total	0	0	0	0	0	859	64	3	0	0	0	0	144	993	0	4	2067
Apprch %	0	0	0	0	0	92.8	6.9	0.3	0	0	0	0	12.6	87	0	0.4	
Total %	0	0	0	0	0	41.6	3.1	0.1	0	0	0	0	7	48	0	0.2	

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EPROSCHU
Site Code : 00130303
Start Date : 5/16/2013
Page No : 2



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65 E. Butler Avenue
New Britain, PA, 18901

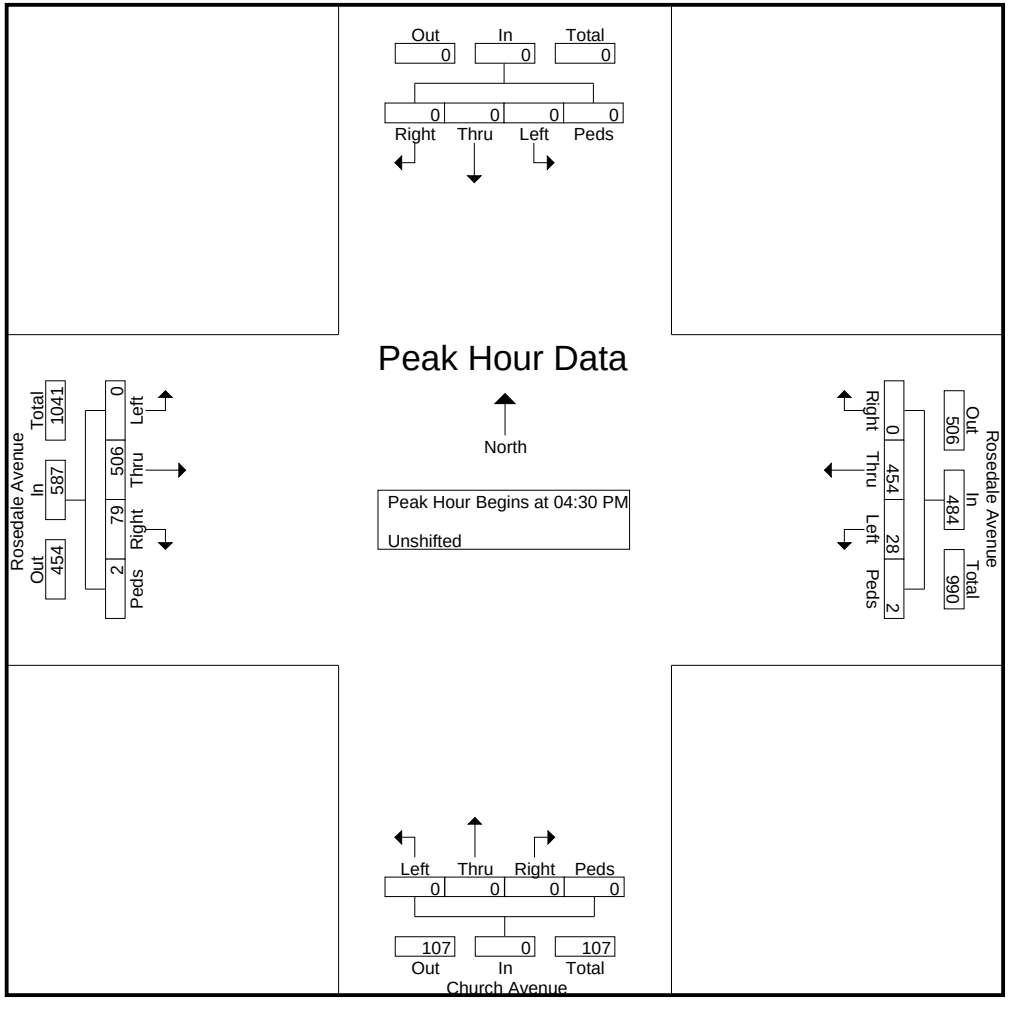
File Name : EPROSCHU
Site Code : 00130303
Start Date : 5/16/2013
Page No : 3

	From North					Rosedale Avenue From East					Church Avenue From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	114	**8**	0	122	0	0	0	0	0	22	**138**	0	**1**	**161**	**283**
04:45 PM	0	0	0	0	0	0	107	5	0	112	0	0	0	0	0	**30**	123	0	0	153	265
05:00 PM	0	0	0	0	0	0	115	8	0	123	0	0	0	0	0	15	128	0	1	144	267
05:15 PM	0	0	0	0	0	0	**118**	7	**2**	**127**	0	0	0	0	0	12	117	0	0	129	256
Total Volume	0	0	0	0	0	0	454	28	2	484	0	0	0	0	0	79	506	0	2	587	1071
% App. Total	0	0	0	0		0	93.8	5.8	0.4		0	0	0	0		13.5	86.2	0	0.3		
PHF	.000	.000	.000	.000	.000	.000	.962	.875	.250	.953	.000	.000	.000	.000	.000	.658	.917	.000	.500	.911	.946

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EPROSCHU
Site Code : 00130303
Start Date : 5/16/2013
Page No : 4



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65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
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Count Name: Rosedale Avenue and Ceredo Avenue
Site Code: 1303030T-EPM
Start Date: 05/15/2013

Turning Movement Data

Start Time	Rosedale Avenue Westbound					Ceredo Avenue Northbound					Rosedale Avenue Eastbound					Int. Total
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	
3:46 PM	98	0	0	0	98	4	0	0	23	4	0	97	0	1	97	199
Hourly Total	98	0	0	0	98	4	0	0	23	4	0	97	0	1	97	199
4:01 PM	108	0	0	0	108	4	3	0	23	7	0	106	0	0	106	221
4:16 PM	89	1	0	0	90	5	4	0	34	9	0	116	0	0	116	215
4:31 PM	127	0	0	1	127	8	0	0	20	8	0	133	0	1	133	268
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	324	1	0	1	325	17	7	0	77	24	0	355	0	1	355	704
5:46 PM	125	0	0	0	125	11	0	0	12	11	0	132	0	0	132	268
Hourly Total	125	0	0	0	125	11	0	0	12	11	0	132	0	0	132	268
6:01 PM	110	0	0	0	110	5	4	0	9	9	0	125	0	0	125	244
6:16 PM	95	0	0	0	95	2	1	0	15	3	0	118	0	0	118	216
6:31 PM	107	0	0	0	107	9	3	0	12	12	0	104	0	0	104	223
Grand Total	859	1	0	1	860	48	15	0	148	63	0	931	0	2	931	1854
Approach %	99.9	0.1	0.0	-	-	76.2	23.8	0.0	-	-	0.0	100.0	0.0	-	-	-
Total %	46.3	0.1	0.0	-	46.4	2.6	0.8	0.0	-	3.4	0.0	50.2	0.0	-	50.2	-
Car	848	1	0	-	849	48	15	0	-	63	0	910	0	-	910	1822
% Car	98.7	100.0	-	-	98.7	100.0	100.0	-	-	100.0	-	97.7	-	-	97.7	98.3
Truck	11	0	0	-	11	0	0	0	-	0	0	21	0	-	21	32
% Truck	1.3	0.0	-	-	1.3	0.0	0.0	-	-	0.0	-	2.3	-	-	2.3	1.7
Ped	-	-	-	1	-	-	-	-	148	-	-	-	-	2	-	-
% Ped	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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Suite 100
New Britain, Pennsylvania, United States 18901
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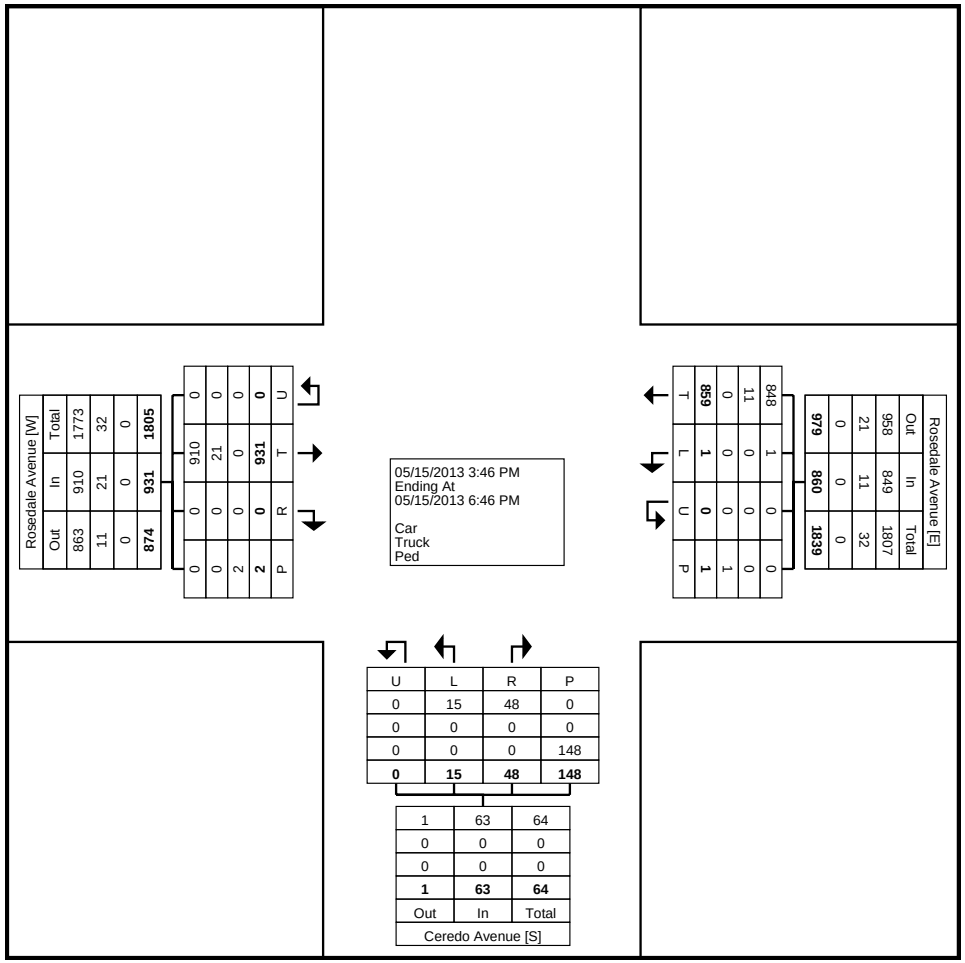
Count Name: Rosedale Avenue and Ceredo Avenue
Site Code: 1303030T-EPM
Start Date: 05/15/2013



Turning Movement Data Plot

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Suite 100
New Britain, Pennsylvania, United States 18901
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Count Name: Rosedale Avenue and Ceredo Avenue
Site Code: 1303030T-EPM
Start Date: 05/15/2013

Turning Movement Peak Hour Data (3:46 PM)

Start Time	Rosedale Avenue Westbound					Ceredo Avenue Northbound					Rosedale Avenue Eastbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
3:46 PM	98	0	0	0	98	4	0	0	23	4	0	97	0	1	97	199
4:01 PM	108	0	0	0	108	4	3	0	23	7	0	106	0	0	106	221
4:16 PM	89	1	0	0	90	5	4	0	34	9	0	116	0	0	116	215
4:31 PM	127	0	0	1	127	8	0	0	20	8	0	133	0	1	133	268
Total	422	1	0	1	423	21	7	0	100	28	0	452	0	2	452	903
Approach %	99.8	0.2	0.0	-	-	75.0	25.0	0.0	-	-	0.0	100.0	0.0	-	-	-
Total %	46.7	0.1	0.0	-	46.8	2.3	0.8	0.0	-	3.1	0.0	50.1	0.0	-	50.1	-
PHF	0.831	0.250	0.000	-	0.833	0.656	0.438	0.000	-	0.778	0.000	0.850	0.000	-	0.850	0.842
Car	414	1	0	-	415	21	7	0	-	28	0	438	0	-	438	881
% Car	98.1	100.0	-	-	98.1	100.0	100.0	-	-	100.0	-	96.9	-	-	96.9	97.6
Truck	8	0	0	-	8	0	0	0	-	0	0	14	0	-	14	22
% Truck	1.9	0.0	-	-	1.9	0.0	0.0	-	-	0.0	-	3.1	-	-	3.1	2.4
Ped	-	-	-	1	-	-	-	-	100	-	-	-	-	2	-	-
% Ped	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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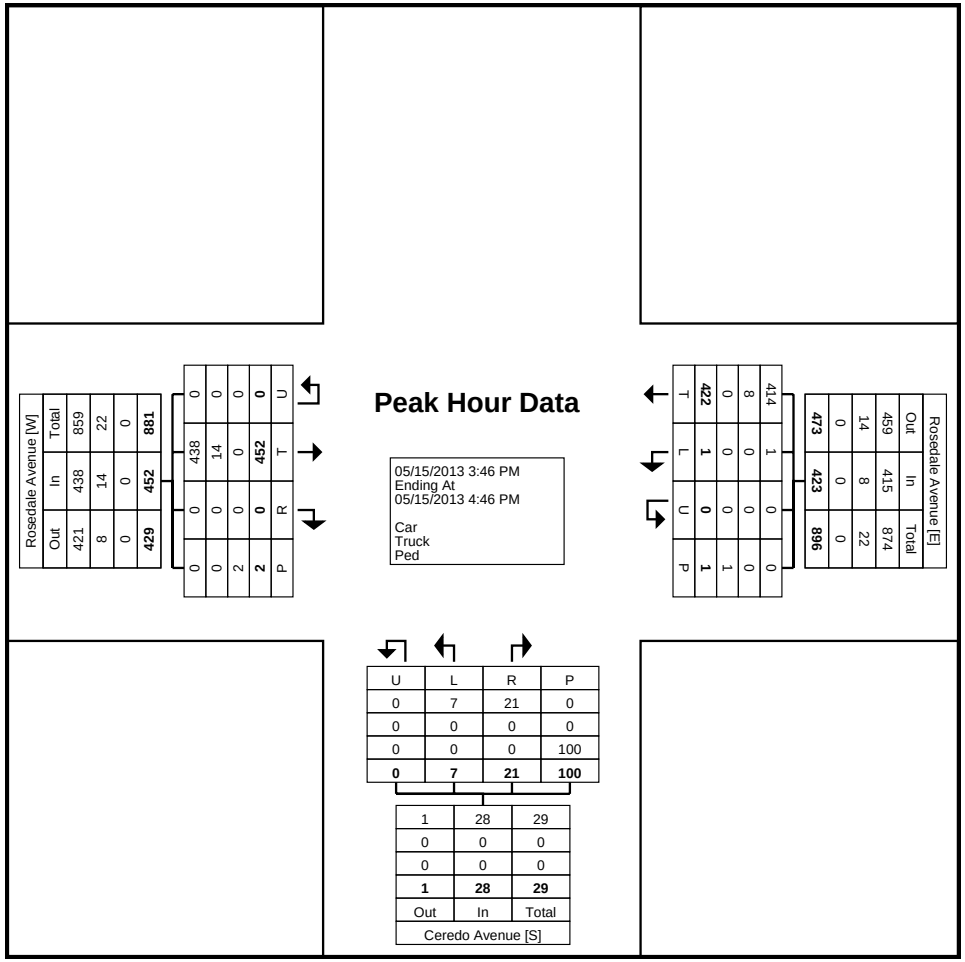
Count Name: Rosedale Avenue and Ceredo Avenue
Site Code: 1303030T-EPM
Start Date: 05/15/2013



Turning Movement Peak Hour Data Plot (3:46 PM)

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Count Name: Rosedale Avenue and Ceredo Avenue
Site Code: 1303030T-EPM
Start Date: 05/15/2013

Turning Movement Peak Hour Data (5:46 PM)

Start Time	Rosedale Avenue Westbound					Ceredo Avenue Northbound					Rosedale Avenue Eastbound					
	Thru	Left	U-Turn	Peds	App. Total	Right	Left	U-Turn	Peds	App. Total	Right	Thru	U-Turn	Peds	App. Total	Int. Total
5:46 PM	125	0	0	0	125	11	0	0	12	11	0	132	0	0	132	268
6:01 PM	110	0	0	0	110	5	4	0	9	9	0	125	0	0	125	244
6:16 PM	95	0	0	0	95	2	1	0	15	3	0	118	0	0	118	216
6:31 PM	107	0	0	0	107	9	3	0	12	12	0	104	0	0	104	223
Total	437	0	0	0	437	27	8	0	48	35	0	479	0	0	479	951
Approach %	100.0	0.0	0.0	-	-	77.1	22.9	0.0	-	-	0.0	100.0	0.0	-	-	-
Total %	46.0	0.0	0.0	-	46.0	2.8	0.8	0.0	-	3.7	0.0	50.4	0.0	-	50.4	-
PHF	0.874	0.000	0.000	-	0.874	0.614	0.500	0.000	-	0.729	0.000	0.907	0.000	-	0.907	0.887
Car	434	0	0	-	434	27	8	0	-	35	0	472	0	-	472	941
% Car	99.3	-	-	-	99.3	100.0	100.0	-	-	100.0	-	98.5	-	-	98.5	98.9
Truck	3	0	0	-	3	0	0	0	-	0	0	7	0	-	7	10
% Truck	0.7	-	-	-	0.7	0.0	0.0	-	-	0.0	-	1.5	-	-	1.5	1.1
Ped	-	-	-	0	-	-	-	-	48	-	-	-	-	0	-	-
% Ped	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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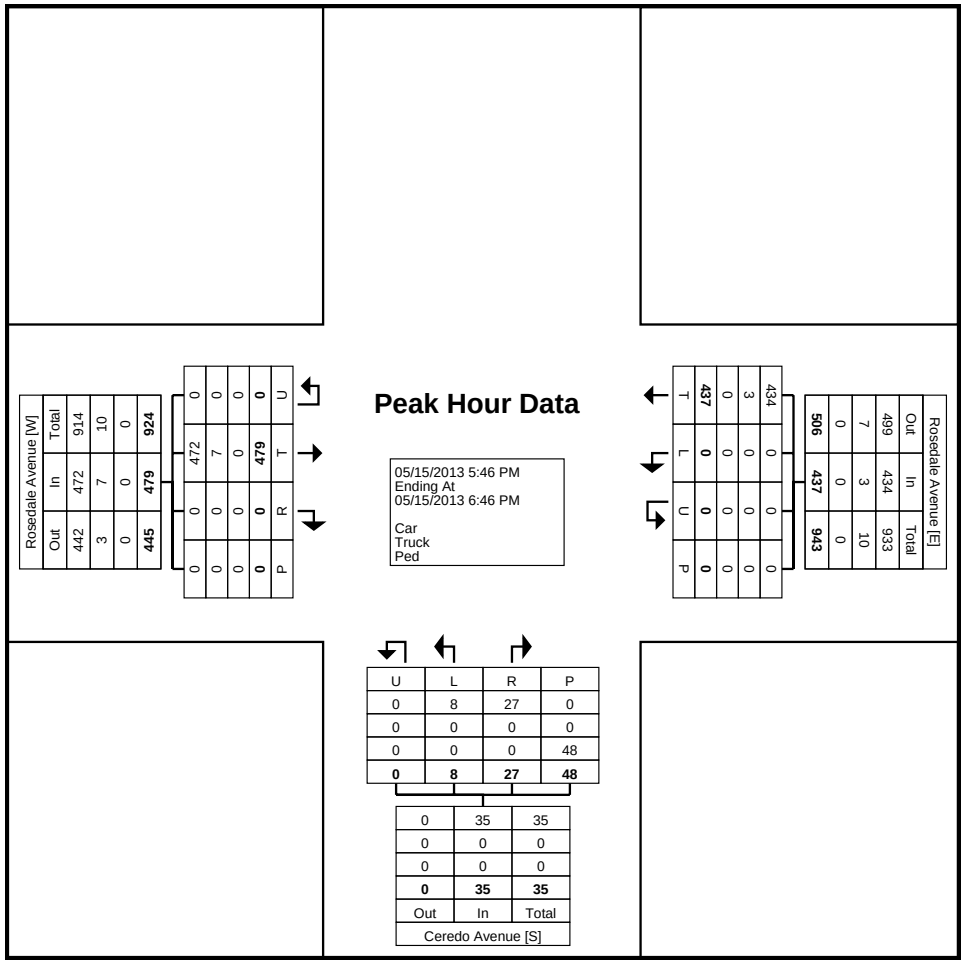
Count Name: Rosedale Avenue and Ceredo Avenue
Site Code: 1303030T-EPM
Start Date: 05/15/2013



Turning Movement Peak Hour Data Plot (5:46 PM)

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Count Name: Rosedale Avenue and High
Site Code: 13-03030T
Start Date: 11/12/2013

Turning Movement Data

Start Time	High Street Southbound						Rosedale Avenue Westbound						High Street Northbound						Rosedale Avenue Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:00 PM	20	97	13	0	85	130	24	57	14	0	58	95	19	102	29	0	66	150	24	46	19	0	42	89	464
4:15 PM	20	95	19	0	87	134	23	57	10	0	59	90	21	119	13	0	56	153	35	46	20	0	33	101	478
4:30 PM	22	92	14	0	39	128	24	64	10	0	32	98	15	115	17	0	39	147	42	62	34	0	29	138	511
4:45 PM	10	97	16	0	36	123	22	55	11	0	18	88	10	98	18	0	22	126	21	48	19	0	14	88	425
Hourly Total	72	381	62	0	247	515	93	233	45	0	167	371	65	434	77	0	183	576	122	202	92	0	118	416	1878
5:00 PM	26	96	17	0	19	139	28	67	14	0	8	109	13	103	15	0	22	131	30	36	21	0	12	87	466
5:15 PM	20	107	18	0	47	145	23	61	6	0	27	90	15	94	25	0	27	134	29	47	30	0	14	106	475
5:30 PM	11	73	16	0	98	100	23	59	9	0	48	91	20	92	23	0	64	135	25	50	26	0	37	101	427
5:45 PM	25	97	18	0	46	140	23	44	10	0	37	77	15	115	28	0	43	158	35	75	36	0	33	146	521
Hourly Total	82	373	69	0	210	524	97	231	39	0	120	367	63	404	91	0	156	558	119	208	113	0	96	440	1889
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	1	0	0
Grand Total	154	754	131	0	457	1039	190	464	84	0	287	738	128	838	168	0	339	1134	241	410	205	0	215	856	3767
Approach %	14.8	72.6	12.6	0.0	-	-	25.7	62.9	11.4	0.0	-	-	11.3	73.9	14.8	0.0	-	-	28.2	47.9	23.9	0.0	-	-	-
Total %	4.1	20.0	3.5	0.0	-	27.6	5.0	12.3	2.2	0.0	-	19.6	3.4	22.2	4.5	0.0	-	30.1	6.4	10.9	5.4	0.0	-	22.7	-
Car	154	739	129	0	-	1022	188	461	83	0	-	732	128	820	166	0	-	1114	228	398	200	0	-	826	3694
% Car	100.0	98.0	98.5	-	-	98.4	98.9	99.4	98.8	-	-	99.2	100.0	97.9	98.8	-	-	98.2	94.6	97.1	97.6	-	-	96.5	98.1
Truck	0	15	2	0	-	17	2	3	1	0	-	6	0	18	2	0	-	20	13	12	5	0	-	30	73
% Truck	0.0	2.0	1.5	-	-	1.6	1.1	0.6	1.2	-	-	0.8	0.0	2.1	1.2	-	-	1.8	5.4	2.9	2.4	-	-	3.5	1.9
Ped	-	-	-	-	457	-	-	-	-	-	287	-	-	-	-	-	339	-	-	-	-	-	215	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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New Britain, Pennsylvania, United States 18901
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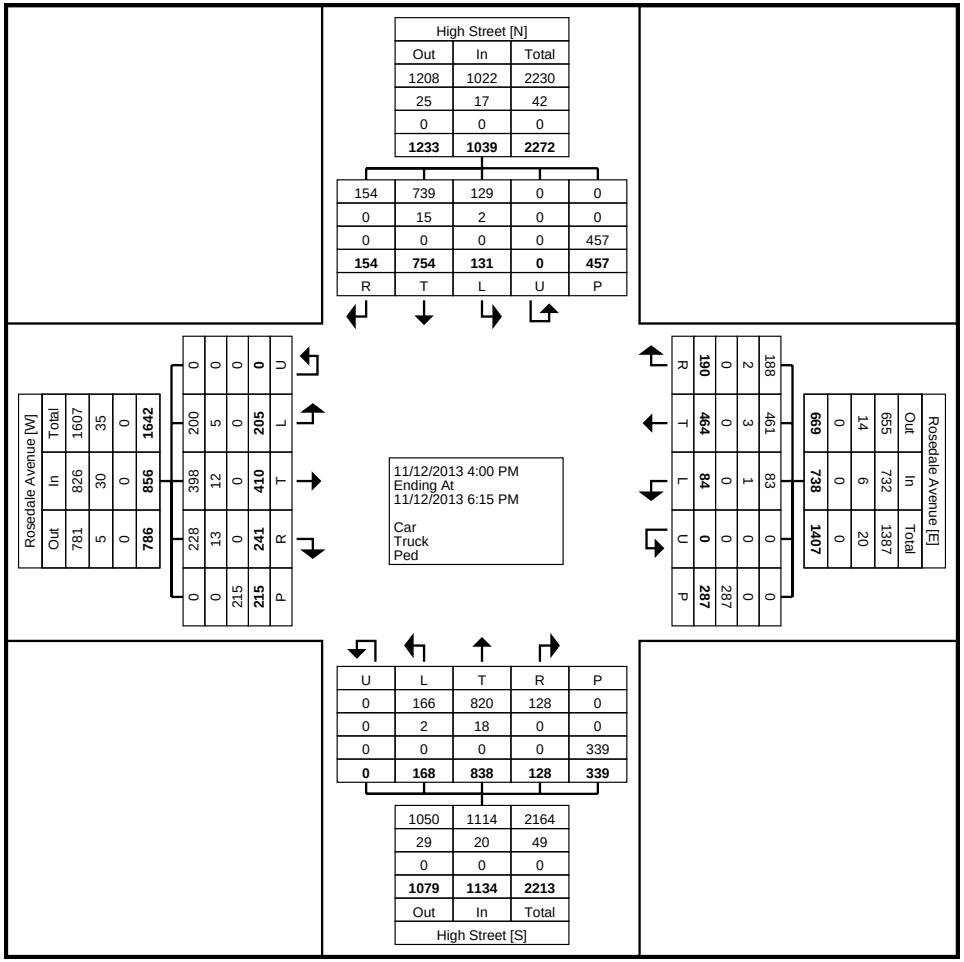
Count Name: Rosedale Avenue and High
Site Code: 13-03030T
Start Date: 11/12/2013



Turning Movement Data Plot

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Count Name: Rosedale Avenue and High
Site Code: 13-03030T
Start Date: 11/12/2013

Turning Movement Peak Hour Data (5:00 PM)

Start Time	High Street Southbound						Rosedale Avenue Westbound						High Street Northbound						Rosedale Avenue Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
5:00 PM	26	96	17	0	19	139	28	67	14	0	8	109	13	103	15	0	22	131	30	36	21	0	12	87	466
5:15 PM	20	107	18	0	47	145	23	61	6	0	27	90	15	94	25	0	27	134	29	47	30	0	14	106	475
5:30 PM	11	73	16	0	98	100	23	59	9	0	48	91	20	92	23	0	64	135	25	50	26	0	37	101	427
5:45 PM	25	97	18	0	46	140	23	44	10	0	37	77	15	115	28	0	43	158	35	75	36	0	33	146	521
Total	82	373	69	0	210	524	97	231	39	0	120	367	63	404	91	0	156	558	119	208	113	0	96	440	1889
Approach %	15.6	71.2	13.2	0.0	-	-	26.4	62.9	10.6	0.0	-	-	11.3	72.4	16.3	0.0	-	-	27.0	47.3	25.7	0.0	-	-	-
Total %	4.3	19.7	3.7	0.0	-	27.7	5.1	12.2	2.1	0.0	-	19.4	3.3	21.4	4.8	0.0	-	29.5	6.3	11.0	6.0	0.0	-	23.3	-
PHF	0.788	0.871	0.958	0.000	-	0.903	0.866	0.862	0.696	0.000	-	0.842	0.788	0.878	0.813	0.000	-	0.883	0.850	0.693	0.785	0.000	-	0.753	0.906
Car	82	371	69	0	-	522	97	231	39	0	-	367	63	397	91	0	-	551	116	206	110	0	-	432	1872
% Car	100.0	99.5	100.0	-	-	99.6	100.0	100.0	100.0	-	-	100.0	100.0	98.3	100.0	-	-	98.7	97.5	99.0	97.3	-	-	98.2	99.1
Truck	0	2	0	0	-	2	0	0	0	0	-	0	0	7	0	0	-	7	3	2	3	0	-	8	17
% Truck	0.0	0.5	0.0	-	-	0.4	0.0	0.0	0.0	-	-	0.0	0.0	1.7	0.0	-	-	1.3	2.5	1.0	2.7	-	-	1.8	0.9
Ped	-	-	-	-	210	-	-	-	-	-	120	-	-	-	-	-	156	-	-	-	-	-	96	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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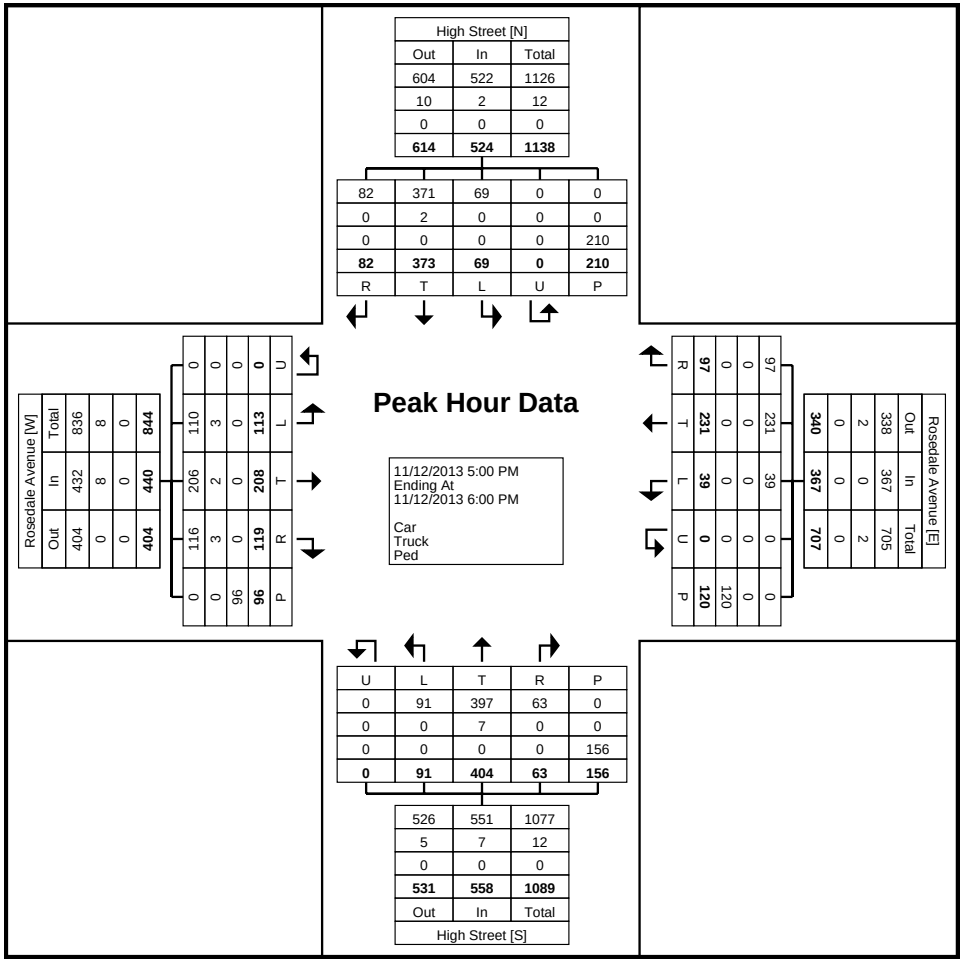
Count Name: Rosedale Avenue and High
Site Code: 13-03030T
Start Date: 11/12/2013



Turning Movement Peak Hour Data Plot (5:00 PM)

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Suite 100
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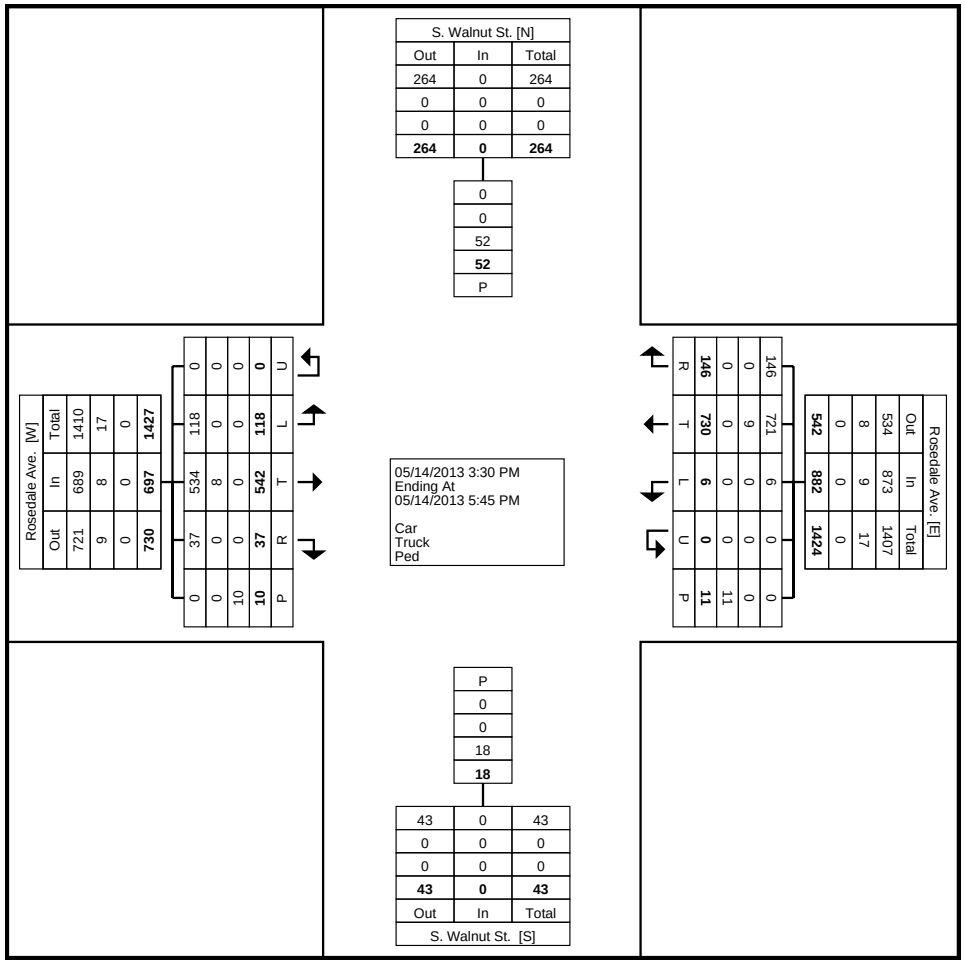
Count Name: Rosedale Ave and S. Walnut St.
Site Code: 1303030T-EPM
Start Date: 05/14/2013

Turning Movement Data

Start Time	S. Walnut St. Southbound		Rosedale Ave. Westbound						S. Walnut St. Northbound		Rosedale Ave. Eastbound						
	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
3:30 PM	2	0	9	71	2	0	1	82	1	0	5	65	13	0	3	83	165
3:45 PM	0	0	21	63	1	0	1	85	0	0	10	52	12	0	1	74	159
Hourly Total	2	0	30	134	3	0	2	167	1	0	15	117	25	0	4	157	324
4:00 PM	1	0	23	72	2	0	1	97	5	0	4	69	9	0	0	82	179
4:15 PM	7	0	16	92	0	0	1	108	4	0	6	79	16	0	1	101	209
4:30 PM	4	0	13	99	0	0	4	112	4	0	2	60	18	0	1	80	192
4:45 PM	18	0	14	114	1	0	2	129	2	0	4	85	14	0	2	103	232
Hourly Total	30	0	66	377	3	0	8	446	15	0	16	293	57	0	4	366	812
5:00 PM	9	0	32	120	0	0	0	152	2	0	3	55	20	0	2	78	230
5:15 PM	11	0	18	99	0	0	1	117	0	0	3	77	16	0	0	96	213
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	52	0	146	730	6	0	11	882	18	0	37	542	118	0	10	697	1579
Approach %	-	-	16.6	82.8	0.7	0.0	-	-	-	-	5.3	77.8	16.9	0.0	-	-	-
Total %	-	0.0	9.2	46.2	0.4	0.0	-	55.9	-	0.0	2.3	34.3	7.5	0.0	-	44.1	-
Car	-	0	146	721	6	0	-	873	-	0	37	534	118	0	-	689	1562
% Car	-	-	100.0	98.8	100.0	-	-	99.0	-	-	100.0	98.5	100.0	-	-	98.9	98.9
Truck	-	0	0	9	0	0	-	9	-	0	0	8	0	0	-	8	17
% Truck	-	-	0.0	1.2	0.0	-	-	1.0	-	-	0.0	1.5	0.0	-	-	1.1	1.1
Ped	52	-	-	-	-	-	11	-	18	-	-	-	-	-	10	-	-
% Ped	100.0	-	-	-	-	-	100.0	-	100.0	-	-	-	-	-	100.0	-	-

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Ave and S. Walnut St.
Site Code: 1303030T-EPM
Start Date: 05/14/2013



Turning Movement Data Plot

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Ave and S. Walnut St.
Site Code: 1303030T-EPM
Start Date: 05/14/2013

Turning Movement Peak Hour Data (4:30 PM)

Start Time	S. Walnut St. Southbound		Rosedale Ave. Westbound						S. Walnut St. Northbound		Rosedale Ave. Eastbound						
	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
4:30 PM	4	0	13	99	0	0	4	112	4	0	2	60	18	0	1	80	192
4:45 PM	18	0	14	114	1	0	2	129	2	0	4	85	14	0	2	103	232
5:00 PM	9	0	32	120	0	0	0	152	2	0	3	55	20	0	2	78	230
5:15 PM	11	0	18	99	0	0	1	117	0	0	3	77	16	0	0	96	213
Total	42	0	77	432	1	0	7	510	8	0	12	277	68	0	5	357	867
Approach %	-	-	15.1	84.7	0.2	0.0	-	-	-	-	3.4	77.6	19.0	0.0	-	-	-
Total %	-	0.0	8.9	49.8	0.1	0.0	-	58.8	-	0.0	1.4	31.9	7.8	0.0	-	41.2	-
PHF	-	0.000	0.602	0.900	0.250	0.000	-	0.839	-	0.000	0.750	0.815	0.850	0.000	-	0.867	0.934
Car	-	0	77	427	1	0	-	505	-	0	12	275	68	0	-	355	860
% Car	-	-	100.0	98.8	100.0	-	-	99.0	-	-	100.0	99.3	100.0	-	-	99.4	99.2
Truck	-	0	0	5	0	0	-	5	-	0	0	2	0	0	-	2	7
% Truck	-	-	0.0	1.2	0.0	-	-	1.0	-	-	0.0	0.7	0.0	-	-	0.6	0.8
Ped	42	-	-	-	-	-	7	-	8	-	-	-	-	-	5	-	-
% Ped	100.0	-	-	-	-	-	100.0	-	100.0	-	-	-	-	-	100.0	-	-

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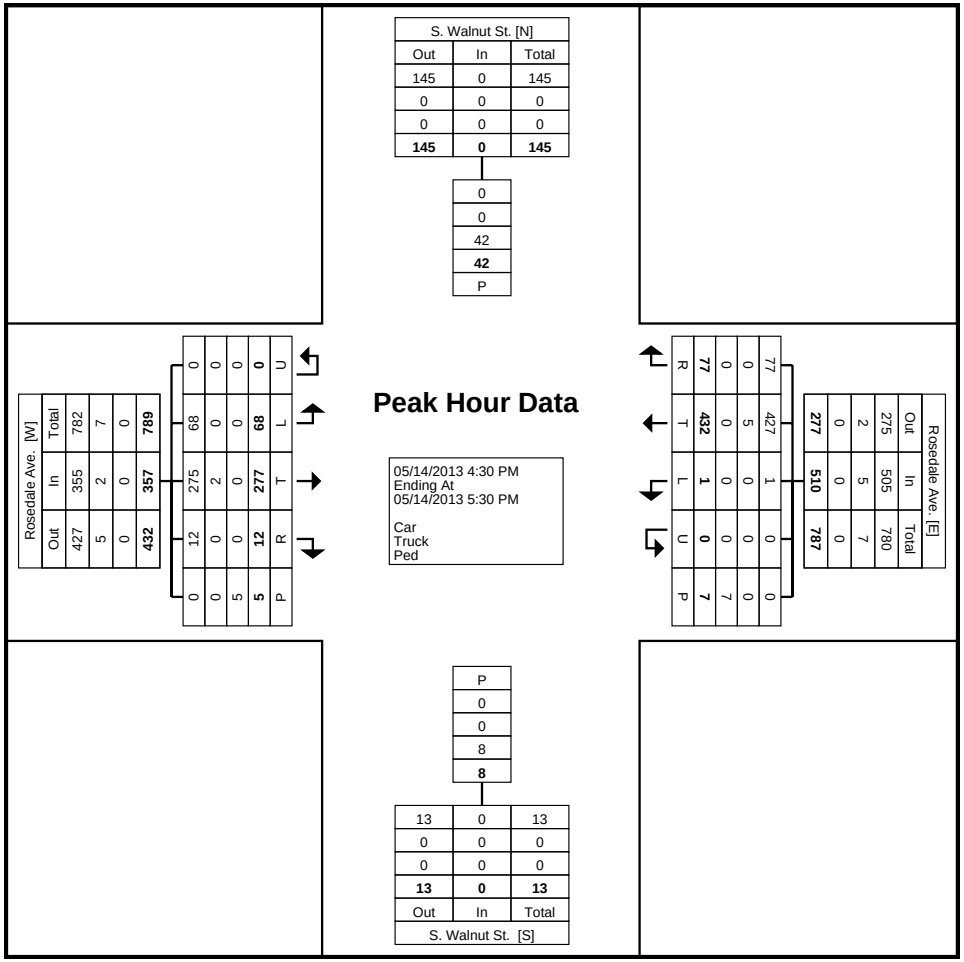
Count Name: Rosedale Ave and S. Walnut St.
Site Code: 1303030T-EPM
Start Date: 05/14/2013



Turning Movement Peak Hour Data Plot (4:30 PM)

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Intersection: Rosedale Ave & Matlack St.
Municipality: West Chester Borough
County: Chester
Engineer/Technician: DM

File Name : EPROSMAT
Site Code : 01303030
Start Date : 11/12/2013
Page No : 1

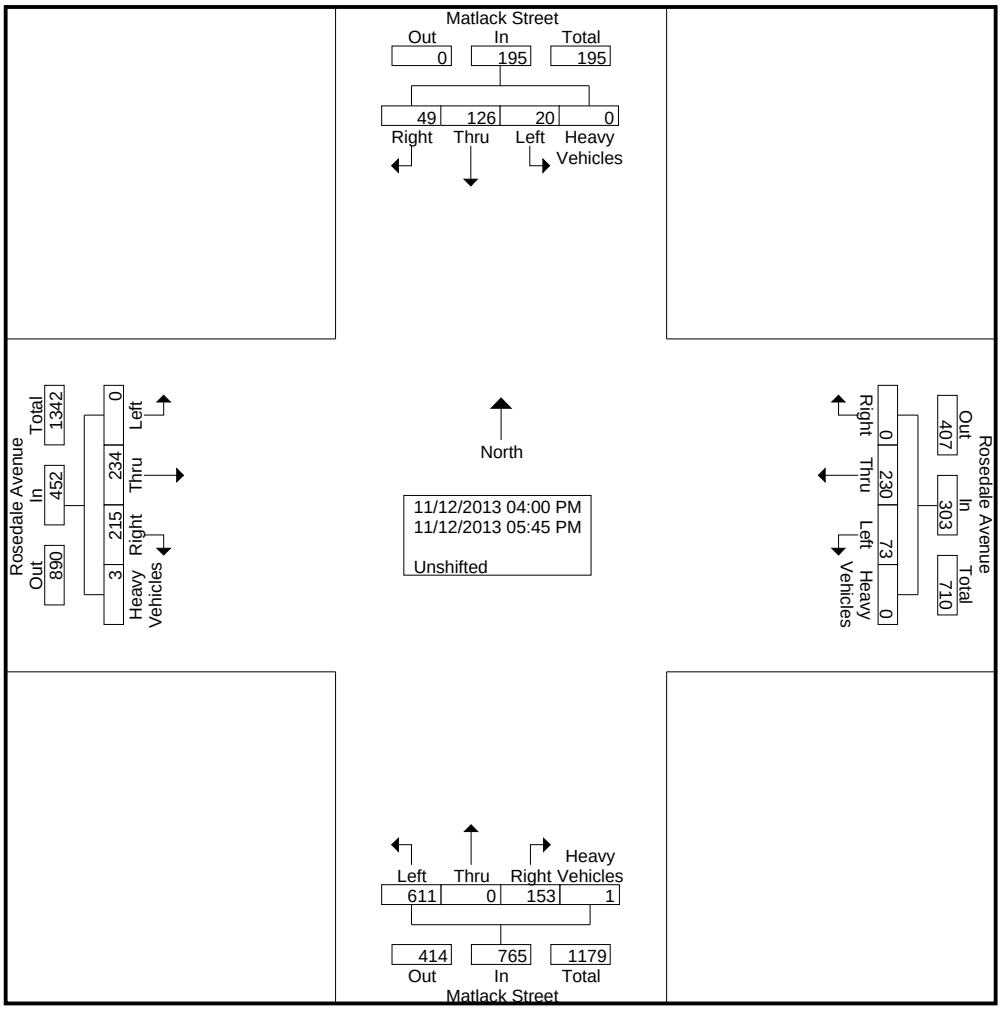
Groups Printed- Unshifted

	Matlack Street From North					Rosedale Avenue From East					Matlack Street From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Int. Total
04:00 PM	12	20	3	0	35	0	33	7	0	40	21	0	80	0	101	29	20	0	0	49	225
04:15 PM	1	11	2	0	14	0	29	12	0	41	24	0	87	0	111	33	25	0	1	59	225
04:30 PM	6	24	3	0	33	0	34	4	0	38	22	0	76	1	99	29	35	0	1	65	235
04:45 PM	7	11	4	0	22	0	28	7	0	35	12	0	67	0	79	15	28	0	1	44	180
Total	26	66	12	0	104	0	124	30	0	154	79	0	310	1	390	106	108	0	3	217	865
05:00 PM	7	18	0	0	25	0	33	18	0	51	27	0	90	0	117	24	22	0	0	46	239
05:15 PM	3	13	2	0	18	0	25	10	0	35	7	0	71	0	78	24	31	0	0	55	186
05:30 PM	9	11	1	0	21	0	25	7	0	32	18	0	76	0	94	21	35	0	0	56	203
05:45 PM	4	18	5	0	27	0	23	8	0	31	22	0	64	0	86	40	38	0	0	78	222
Total	23	60	8	0	91	0	106	43	0	149	74	0	301	0	375	109	126	0	0	235	850
Grand Total	49	126	20	0	195	0	230	73	0	303	153	0	611	1	765	215	234	0	3	452	1715
Apprch %	25.1	64.6	10.3	0		0	75.9	24.1	0		20	0	79.9	0.1		47.6	51.8	0	0.7		
Total %	2.9	7.3	1.2	0	11.4	0	13.4	4.3	0	17.7	8.9	0	35.6	0.1	44.6	12.5	13.6	0	0.2	26.4	

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EPROSMAT
Site Code : 01303030
Start Date : 11/12/2013
Page No : 2

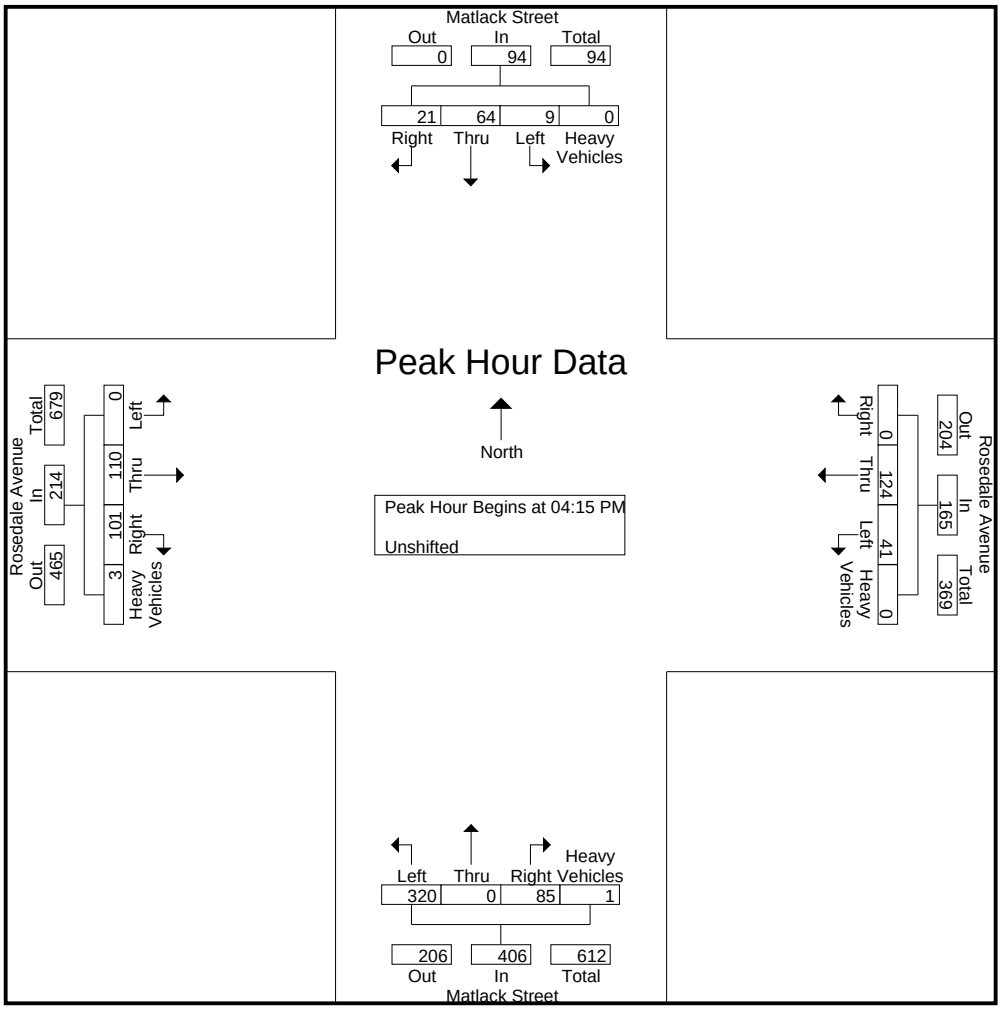


Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EPROSMAT
Site Code : 01303030
Start Date : 11/12/2013
Page No : 3

	Matlack Street From North					Rosedale Avenue From East					Matlack Street From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	1	11	2	0	14	0	29	12	0	41	24	0	87	0	111	**33**	25	0	**1**	59	225
04:30 PM	6	**24**	3	0	**33**	0	**34**	4	0	38	22	0	76	**1**	99	29	**35**	0	1	**65**	235
04:45 PM	**7**	11	**4**	0	22	0	28	7	0	35	12	0	67	0	79	15	28	0	1	44	180
05:00 PM	7	18	0	0	25	0	33	**18**	0	**51**	**27**	0	**90**	0	**117**	24	22	0	0	46	**239**
Total Volume	21	64	9	0	94	0	124	41	0	165	85	0	320	1	406	101	110	0	3	214	879
% App. Total	22.3	68.1	9.6	0		0	75.2	24.8	0		20.9	0	78.8	0.2		47.2	51.4	0	1.4		
PHF	.750	.667	.563	.000	.712	.000	.912	.569	.000	.809	.787	.000	.889	.250	.868	.765	.786	.000	.750	.823	.919



Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Intersection: Rosedale Ave & Matlack St.
Municipality: West Chester Borough
County: Chester
Engineer/Technician: DM

File Name : EPROSMAT
Site Code : 01303030
Start Date : 11/12/2013
Page No : 1

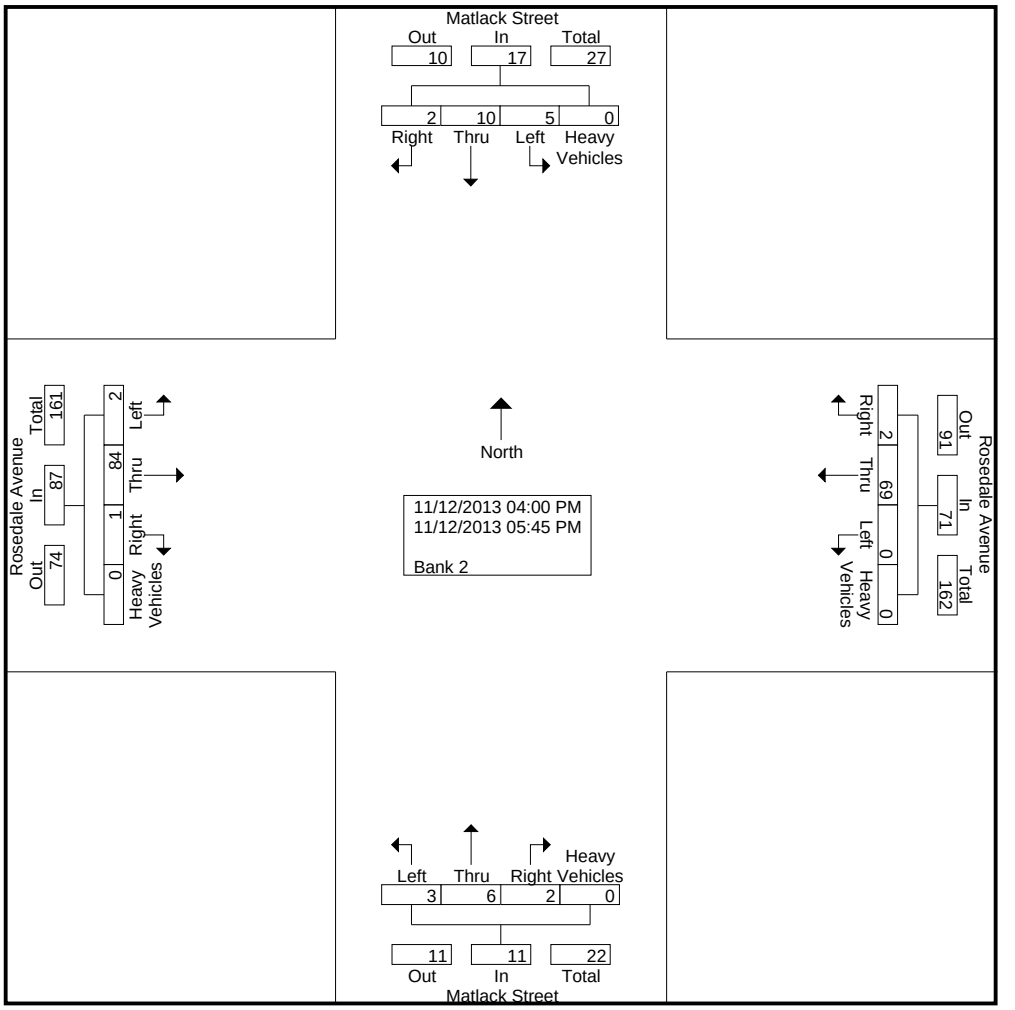
Groups Printed- Bank 2

	Matlack Street From North					Rosedale Avenue From East					Matlack Street From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	22	0	0	22	1	0	0	0	1	0	9	0	0	9	32
04:15 PM	2	0	0	0	2	0	13	0	0	13	0	0	1	0	1	0	0	0	0	0	16
04:30 PM	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	0	9	0	0	9	13
04:45 PM	0	0	1	0	1	0	7	0	0	7	0	0	0	0	0	1	9	1	0	11	19
Total	2	0	1	0	3	0	44	0	0	44	1	2	1	0	4	1	27	1	0	29	80
05:00 PM	0	2	0	0	2	0	2	0	0	2	0	1	0	0	1	0	11	1	0	12	17
05:15 PM	0	2	1	0	3	0	9	0	0	9	0	1	0	0	1	0	13	0	0	13	26
05:30 PM	0	3	1	0	4	1	7	0	0	8	1	2	2	0	5	0	19	0	0	19	36
05:45 PM	0	3	2	0	5	1	7	0	0	8	0	0	0	0	0	0	14	0	0	14	27
Total	0	10	4	0	14	2	25	0	0	27	1	4	2	0	7	0	57	1	0	58	106
Grand Total	2	10	5	0	17	2	69	0	0	71	2	6	3	0	11	1	84	2	0	87	186
Apprch %	11.8	58.8	29.4	0		2.8	97.2	0	0		18.2	54.5	27.3	0		1.1	96.6	2.3	0		
Total %	1.1	5.4	2.7	0	9.1	1.1	37.1	0	0	38.2	1.1	3.2	1.6	0	5.9	0.5	45.2	1.1	0	46.8	

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EPROSMAT
Site Code : 01303030
Start Date : 11/12/2013
Page No : 2

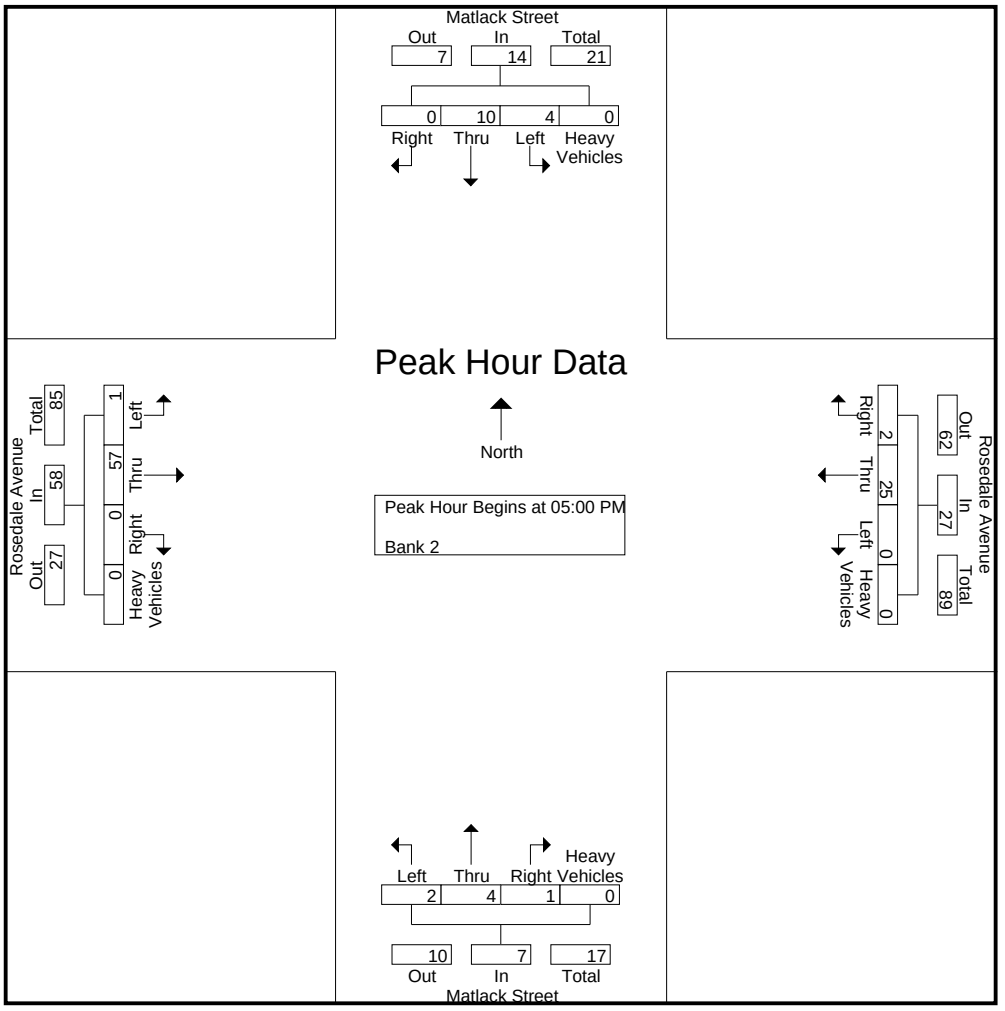


Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EPROSMAT
Site Code : 01303030
Start Date : 11/12/2013
Page No : 3

	Matlack Street From North					Rosedale Avenue From East					Matlack Street From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	2	0	0	2	0	2	0	0	2	0	1	0	0	1	0	11	**1**	0	12	17
05:15 PM	0	2	1	0	3	0	**9**	0	0	**9**	0	1	0	0	1	0	13	0	0	13	26
05:30 PM	0	**3**	1	0	4	**1**	7	0	0	8	**1**	**2**	**2**	0	**5**	0	**19**	0	0	**19**	**36**
05:45 PM	0	3	**2**	0	**5**	1	7	0	0	8	0	0	0	0	0	0	14	0	0	14	27
Total Volume	0	10	4	0	14	2	25	0	0	27	1	4	2	0	7	0	57	1	0	58	106
% App. Total	0	71.4	28.6	0		7.4	92.6	0	0		14.3	57.1	28.6	0		0	98.3	1.7	0		
PHF	.000	.833	.500	.000	.700	.500	.694	.000	.000	.750	.250	.500	.250	.000	.350	.000	.750	.250	.000	.763	.736



Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Ave and S. Franklin St.
Site Code: 1303030T-EPM
Start Date: 05/15/2013

Turning Movement Data

Start Time	S. Franklin St Southbound						Rosedale Ave Westbound						Northbound Approach Northbound						Rosedale Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
3:46 PM	24	0	4	0	2	28	4	8	1	0	1	13	0	0	0	0	1	0	0	8	42	1	0	51	92
Hourly Total	24	0	4	0	2	28	4	8	1	0	1	13	0	0	0	0	1	0	0	8	42	1	0	51	92
4:01 PM	38	0	6	0	2	44	4	6	0	1	2	11	0	0	0	0	1	0	0	3	46	0	0	49	104
4:16 PM	21	0	2	0	0	23	0	2	0	0	0	2	0	0	0	0	0	0	0	2	51	0	1	53	78
4:31 PM	41	0	3	0	3	44	4	1	0	0	0	5	0	0	0	0	0	0	0	3	51	0	1	54	103
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	100	0	11	0	5	111	8	9	0	1	2	18	0	0	0	0	1	0	0	8	148	0	2	156	285
5:46 PM	24	0	0	0	1	24	2	5	0	0	0	7	0	0	0	0	1	0	0	5	44	0	0	49	80
Hourly Total	24	0	0	0	1	24	2	5	0	0	0	7	0	0	0	0	1	0	0	5	44	0	0	49	80
6:01 PM	35	0	5	0	0	40	2	0	0	0	0	2	0	0	0	0	0	0	0	3	39	0	0	42	84
6:16 PM	30	0	5	0	0	35	5	3	0	0	0	8	0	0	0	0	0	0	0	4	51	0	0	55	98
6:31 PM	32	0	4	0	0	36	2	4	0	0	0	6	0	0	0	0	5	0	0	1	29	0	0	30	72
Grand Total	245	0	29	0	8	274	23	29	1	1	3	54	0	0	0	0	8	0	0	29	353	1	2	383	711
Approach %	89.4	0.0	10.6	0.0	-	-	42.6	53.7	1.9	1.9	-	-	NaN	NaN	NaN	NaN	-	-	0.0	7.6	92.2	0.3	-	-	-
Total %	34.5	0.0	4.1	0.0	-	38.5	3.2	4.1	0.1	0.1	-	7.6	0.0	0.0	0.0	0.0	-	0.0	0.0	4.1	49.6	0.1	-	53.9	-
Car	244	0	29	0	-	273	23	29	1	1	-	54	0	0	0	0	-	0	0	29	345	1	-	375	702
% Car	99.6	-	100.0	-	-	99.6	100.0	100.0	100.0	100.0	-	100.0	-	-	-	-	-	-	-	100.0	97.7	100.0	-	97.9	98.7
Truck	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	8	0	-	8	9
% Truck	0.4	-	0.0	-	-	0.4	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	-	0.0	2.3	0.0	-	2.1	1.3
Ped	-	-	-	-	8	-	-	-	-	-	3	-	-	-	-	-	8	-	-	-	-	-	2	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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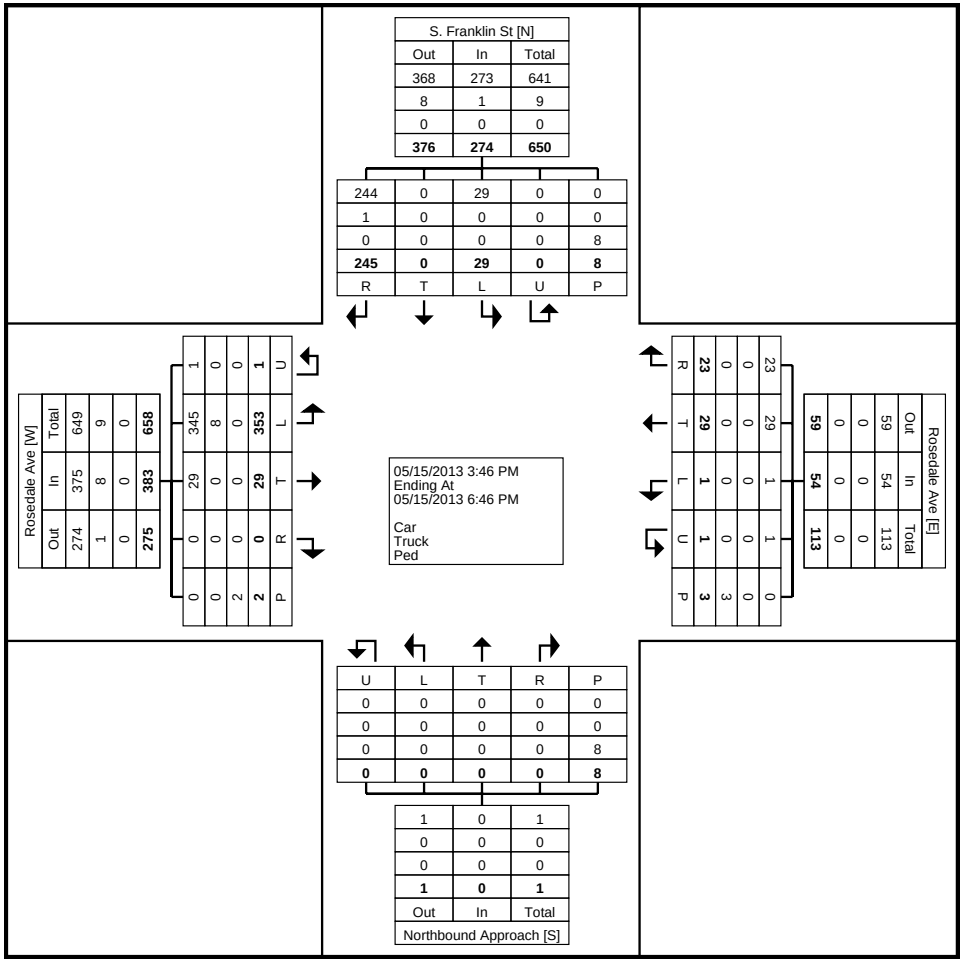
Building on a Foundation of Excellence

Count Name: Rosedale Ave and S. Franklin St.
Site Code: 1303030T-EPM
Start Date: 05/15/2013



Turning Movement Data Plot

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
Building on a Foundation of Excellence

Count Name: Rosedale Ave and S. Franklin St.
Site Code: 1303030T-EPM
Start Date: 05/15/2013

Turning Movement Peak Hour Data (3:46 PM)

Start Time	S. Franklin St Southbound						Rosedale Ave Westbound						Northbound Approach Northbound						Rosedale Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
3:46 PM	24	0	4	0	2	28	4	8	1	0	1	13	0	0	0	0	1	0	0	8	42	1	0	51	92
4:01 PM	38	0	6	0	2	44	4	6	0	1	2	11	0	0	0	0	1	0	0	3	46	0	0	49	104
4:16 PM	21	0	2	0	0	23	0	2	0	0	0	2	0	0	0	0	0	0	0	2	51	0	1	53	78
4:31 PM	41	0	3	0	3	44	4	1	0	0	0	5	0	0	0	0	0	0	0	3	51	0	1	54	103
Total	124	0	15	0	7	139	12	17	1	1	3	31	0	0	0	0	2	0	0	16	190	1	2	207	377
Approach %	89.2	0.0	10.8	0.0	-	-	38.7	54.8	3.2	3.2	-	-	NaN	NaN	NaN	NaN	-	-	0.0	7.7	91.8	0.5	-	-	-
Total %	32.9	0.0	4.0	0.0	-	36.9	3.2	4.5	0.3	0.3	-	8.2	0.0	0.0	0.0	0.0	-	0.0	0.0	4.2	50.4	0.3	-	54.9	-
PHF	0.756	0.000	0.625	0.000	-	0.790	0.750	0.531	0.250	0.250	-	0.596	0.000	0.000	0.000	0.000	-	0.000	0.000	0.500	0.931	0.250	-	0.958	0.906
Car	123	0	15	0	-	138	12	17	1	1	-	31	0	0	0	0	-	0	0	16	182	1	-	199	368
% Car	99.2	-	100.0	-	-	99.3	100.0	100.0	100.0	100.0	-	100.0	-	-	-	-	-	-	-	100.0	95.8	100.0	-	96.1	97.6
Truck	1	0	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	8	0	-	8	9
% Truck	0.8	-	0.0	-	-	0.7	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	-	0.0	4.2	0.0	-	3.9	2.4
Ped	-	-	-	-	7	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	2	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
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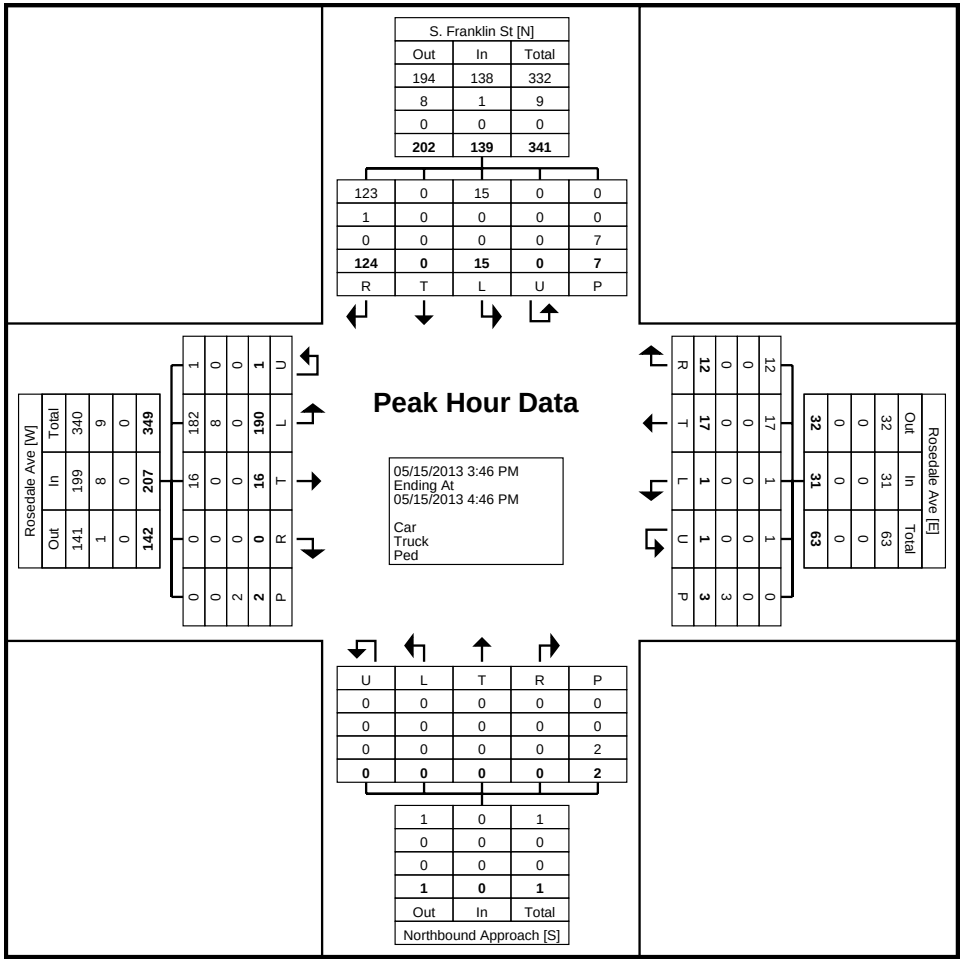
Count Name: Rosedale Ave and S. Franklin St.
Site Code: 1303030T-EPM
Start Date: 05/15/2013



Turning Movement Peak Hour Data Plot (3:46 PM)

Gilmore & Associates Inc.
65 E. Butler Avenue
Suite 100
New Britain, Pennsylvania, United States 18901
215.345.4330 dmidgley@gilmore-assoc.com
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Count Name: Rosedale Ave and S. Franklin St.
Site Code: 1303030T-EPM
Start Date: 05/15/2013

Turning Movement Peak Hour Data (5:46 PM)

Start Time	S. Franklin St Southbound						Rosedale Ave Westbound						Northbound Approach Northbound						Rosedale Ave Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
5:46 PM	24	0	0	0	1	24	2	5	0	0	0	7	0	0	0	0	1	0	0	5	44	0	0	49	80
6:01 PM	35	0	5	0	0	40	2	0	0	0	0	2	0	0	0	0	0	0	0	3	39	0	0	42	84
6:16 PM	30	0	5	0	0	35	5	3	0	0	0	8	0	0	0	0	0	0	0	4	51	0	0	55	98
6:31 PM	32	0	4	0	0	36	2	4	0	0	0	6	0	0	0	0	5	0	0	1	29	0	0	30	72
Total	121	0	14	0	1	135	11	12	0	0	0	23	0	0	0	0	6	0	0	13	163	0	0	176	334
Approach %	89.6	0.0	10.4	0.0	-	-	47.8	52.2	0.0	0.0	-	-	NaN	NaN	NaN	NaN	-	-	0.0	7.4	92.6	0.0	-	-	-
Total %	36.2	0.0	4.2	0.0	-	40.4	3.3	3.6	0.0	0.0	-	6.9	0.0	0.0	0.0	0.0	-	0.0	0.0	3.9	48.8	0.0	-	52.7	-
PHF	0.864	0.000	0.700	0.000	-	0.844	0.550	0.600	0.000	0.000	-	0.719	0.000	0.000	0.000	0.000	-	0.000	0.000	0.650	0.799	0.000	-	0.800	0.852
Car	121	0	14	0	-	135	11	12	0	0	-	23	0	0	0	0	-	0	0	13	163	0	-	176	334
% Car	100.0	-	100.0	-	-	100.0	100.0	100.0	-	-	-	100.0	-	-	-	-	-	-	-	100.0	100.0	-	-	100.0	100.0
Truck	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Truck	0.0	-	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	-	-	-	-	-	-	-	0.0	0.0	-	-	0.0	0.0
Ped	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	-	-
% Ped	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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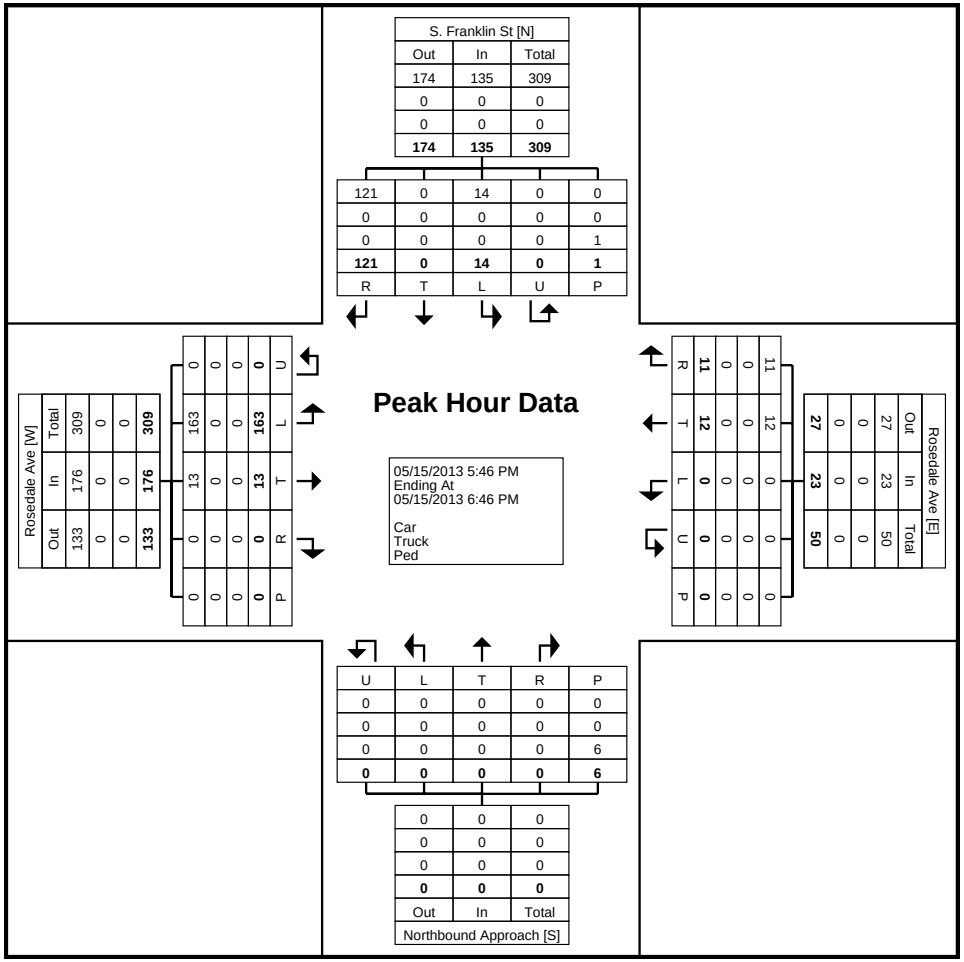


Turning Movement Peak Hour Data Plot (5:46 PM)

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Intersection: New Street & Rosedale Ave.
Project Number: 13-03030T
Municipality: West Chester Borough
Counter: MIO

File Name : New_Rosedale_04-17-2014
Site Code : 03030T-NEWROS
Start Date : 4/17/2014
Page No : 1

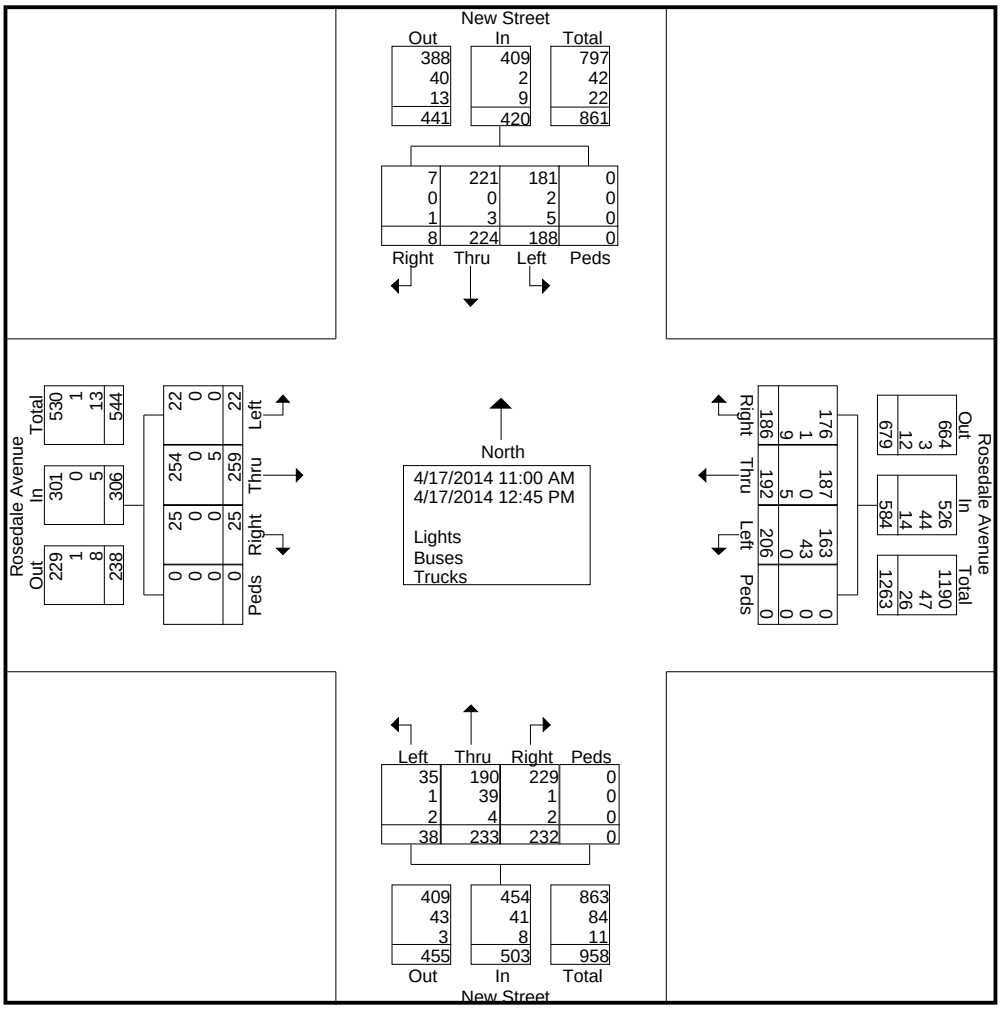
Groups Printed- Lights - Buses - Trucks

	New Street From North				Rosedale Avenue From East				New Street From South				Rosedale Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	0	16	24	0	17	32	28	0	24	21	1	0	0	30	1	0	194
11:15 AM	3	14	19	0	16	18	17	0	17	24	2	0	5	37	3	0	175
11:30 AM	0	26	16	0	23	17	18	0	23	23	2	0	3	33	1	0	185
11:45 AM	0	27	24	0	17	24	25	0	26	26	4	0	3	37	3	0	216
Total	3	83	83	0	73	91	88	0	90	94	9	0	11	137	8	0	770
12:00 PM	4	37	23	0	27	27	32	0	36	44	8	0	4	27	5	0	274
12:15 PM	0	48	22	0	30	21	46	0	59	44	11	0	4	32	4	0	321
12:30 PM	0	32	29	0	31	27	23	0	27	27	5	0	3	28	5	0	237
12:45 PM	1	24	31	0	25	26	17	0	20	24	5	0	3	35	0	0	211
Total	5	141	105	0	113	101	118	0	142	139	29	0	14	122	14	0	1043
Grand Total	8	224	188	0	186	192	206	0	232	233	38	0	25	259	22	0	1813
Apprch %	1.9	53.3	44.8	0	31.8	32.9	35.3	0	46.1	46.3	7.6	0	8.2	84.6	7.2	0	
Total %	0.4	12.4	10.4	0	10.3	10.6	11.4	0	12.8	12.9	2.1	0	1.4	14.3	1.2	0	
Lights	7	221	181	0	176	187	163	0	229	190	35	0	25	254	22	0	1690
% Lights	87.5	98.7	96.3	0	94.6	97.4	79.1	0	98.7	81.5	92.1	0	100	98.1	100	0	93.2
Buses	0	0	2	0	1	0	43	0	1	39	1	0	0	0	0	0	87
% Buses	0	0	1.1	0	0.5	0	20.9	0	0.4	16.7	2.6	0	0	0	0	0	4.8
Trucks	1	3	5	0	9	5	0	0	2	4	2	0	0	5	0	0	36
% Trucks	12.5	1.3	2.7	0	4.8	2.6	0	0	0.9	1.7	5.3	0	0	1.9	0	0	2

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : New_Rosedale_04-17-2014
Site Code : 03030T-NEWROS
Start Date : 4/17/2014
Page No : 2

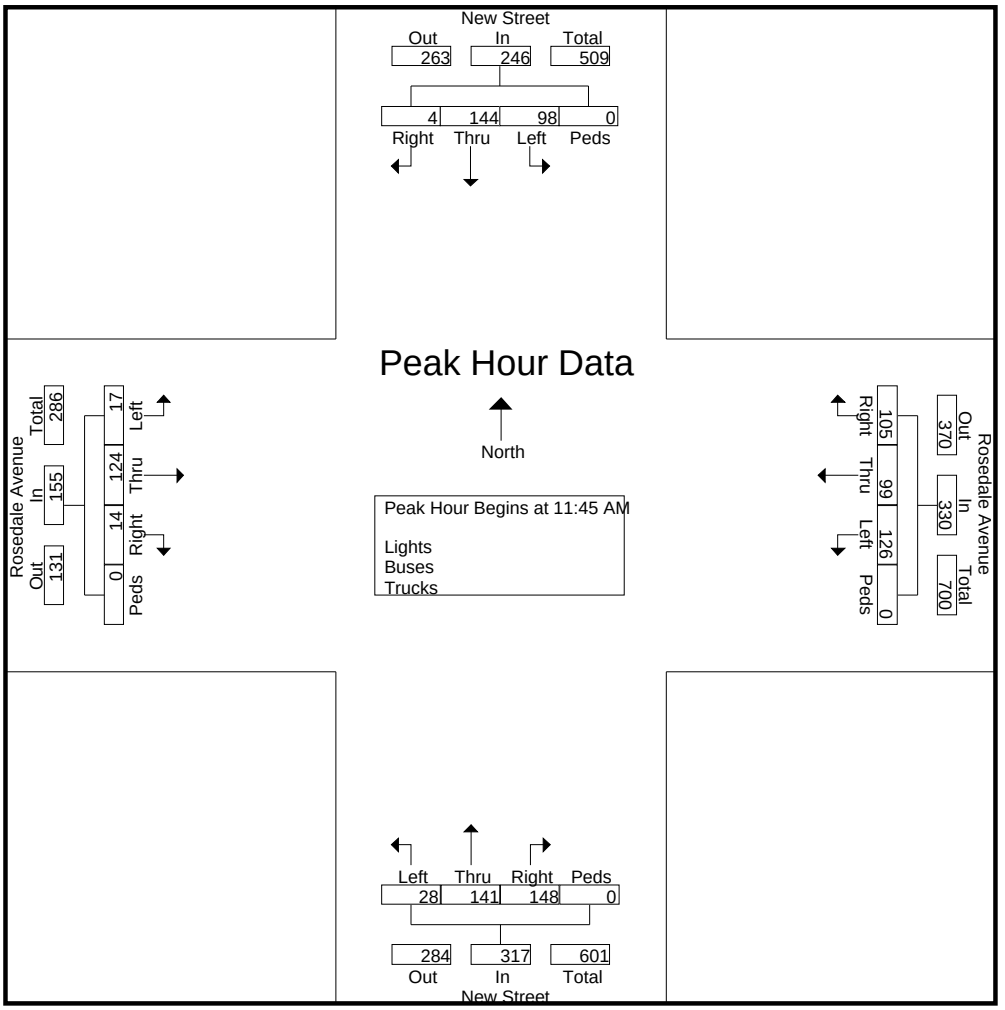


Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : New_Rosedale_04-17-2014
Site Code : 03030T-NEWROS
Start Date : 4/17/2014
Page No : 3

	New Street From North					Rosedale Avenue From East					New Street From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	0	27	24	0	51	17	24	25	0	66	26	26	4	0	56	3	**37**	3	0	**43**	216
12:00 PM	**4**	37	23	0	64	27	**27**	32	0	86	36	**44**	8	0	88	**4**	27	**5**	0	36	274
12:15 PM	0	**48**	22	0	**70**	30	21	**46**	0	**97**	**59**	44	**11**	0	**114**	4	32	4	0	40	**321**
12:30 PM	0	32	**29**	0	61	**31**	27	23	0	81	27	27	5	0	59	3	28	5	0	36	237
Total Volume	4	144	98	0	246	105	99	126	0	330	148	141	28	0	317	14	124	17	0	155	1048
% App. Total																					
PHF	.250	.750	.845	.000	.879	.847	.917	.685	.000	.851	.627	.801	.636	.000	.695	.875	.838	.850	.000	.901	.816



Gilmore & Associates, INC.
65 E. Butler Avenue
New Britain, PA, 18901

Intersection: New Street & Rosedale Ave.
Project Number: 13-03030T
Municipality: West Chester Borough
Counter: MIO

File Name : New_Rosedale_04-17-2014
Site Code : 03030T-NEWROS
Start Date : 4/17/2014

Pedestrian Count

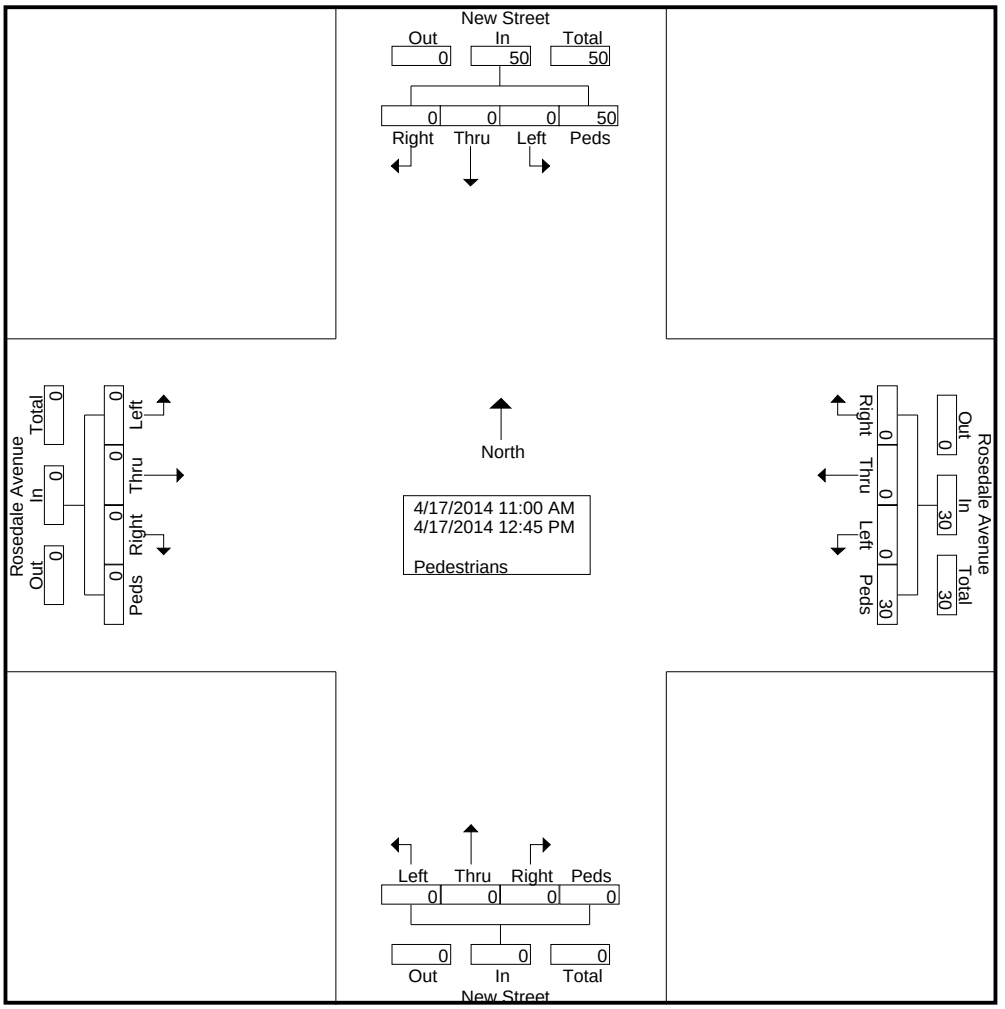
Groups Printed- Pedestrians

	New Street From North				Rosedale Avenue From East				New Street From South				Rosedale Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	0	0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	10
11:15 AM	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
11:30 AM	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	6
11:45 AM	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	8
Total	0	0	0	17	0	0	0	11	0	0	0	0	0	0	0	0	28
12:00 PM	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	18
12:15 PM	0	0	0	16	0	0	0	6	0	0	0	0	0	0	0	0	22
12:30 PM	0	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	7
12:45 PM	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	5
Total	0	0	0	33	0	0	0	19	0	0	0	0	0	0	0	0	52
Grand Total	0	0	0	50	0	0	0	30	0	0	0	0	0	0	0	0	80
Apprch %	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	0	
Total %	0	0	0	62.5	0	0	0	37.5	0	0	0	0	0	0	0	0	

Gilmore & Associates, INC.
65 E. Butler Avenue
New Britain, PA, 18901

File Name : New_Rosedale_04-17-2014
Site Code : 03030T-NEWROS
Start Date : 4/17/2014
Page No : 2

Pedestrian Count



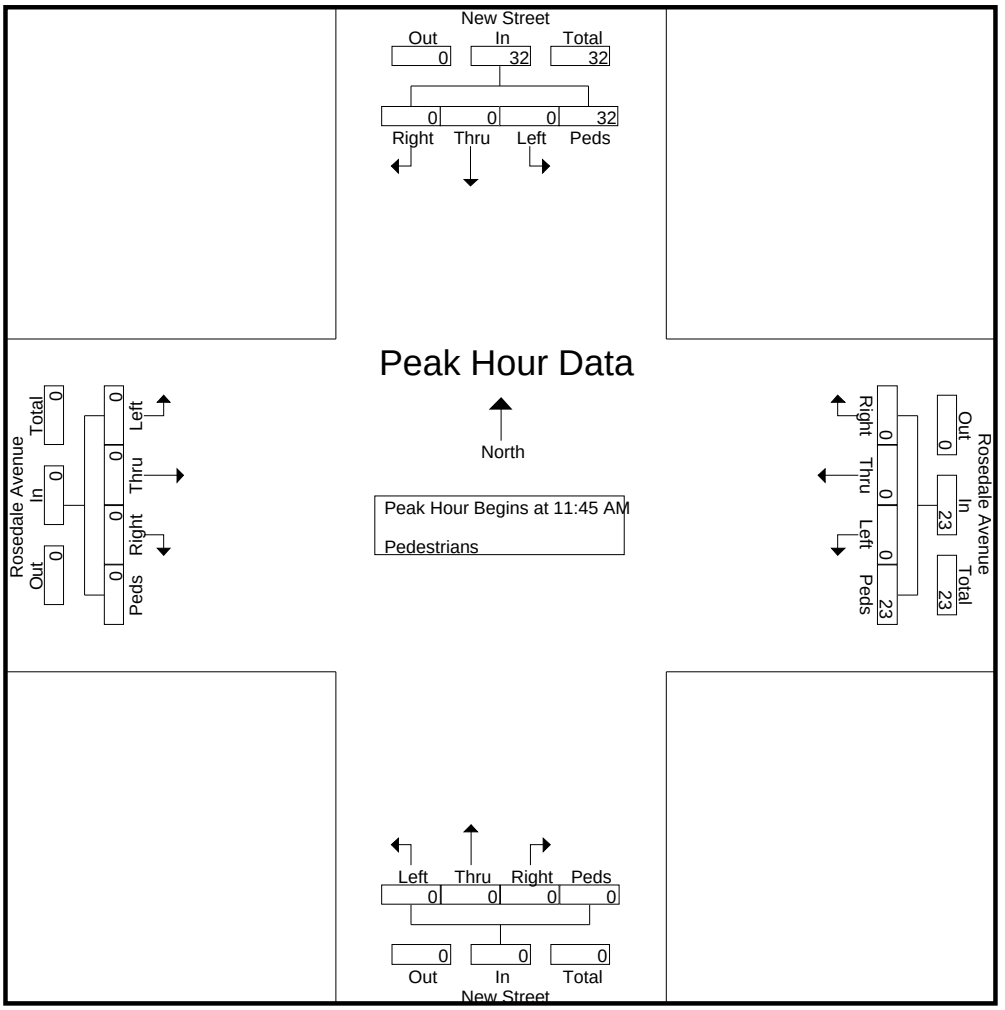
Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : New_Rosedale_04-17-2014
Site Code : 03030T-NEWROS
Start Date : 4/17/2014
Page No : 3

Pedestrian Count

	New Street From North					Rosedale Avenue From East					New Street From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	0	0	0	3	3	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	8
12:00 PM	0	0	0	9	9	0	0	0	**9**	**9**	0	0	0	0	0	0	0	0	0	0	18
12:15 PM	0	0	0	**16**	**16**	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	**22**
12:30 PM	0	0	0	4	4	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	7
Total Volume	0	0	0	32	32	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	55
% App. Total																					
PHF	.000	.000	.000	.500	.500	.000	.000	.000	.639	.639	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.625



Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Intersection: Roslyn Ave & Rosedale Ave.
Project Number: 13-03030T
Municipality: West Chester Borough
Counter: MIO

File Name : Roslyn_Rosedale_04-17-2014
Site Code : 03030T-ROSLROS
Start Date : 4/17/2014
Page No : 1

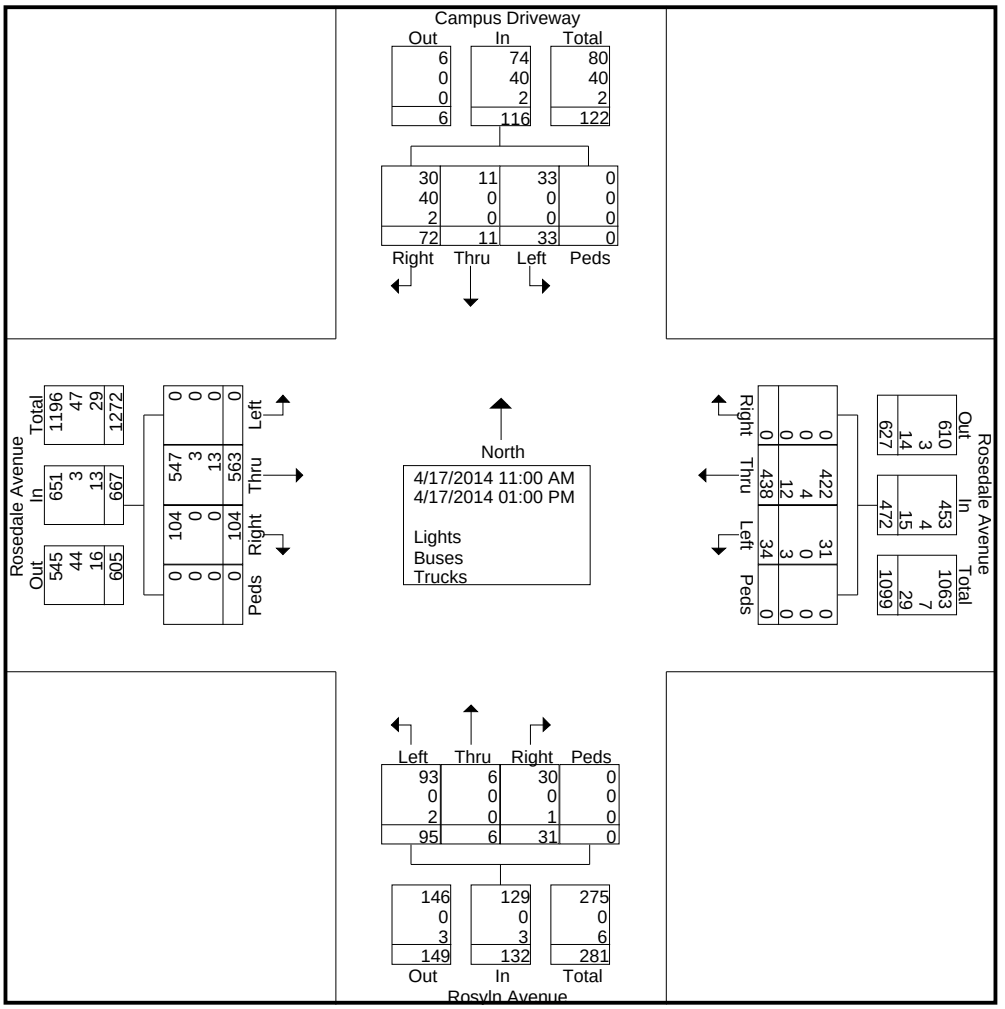
Groups Printed- Lights - Buses - Trucks

	Campus Driveway From North				Rosedale Avenue From East				Rosyln Avenue From South				Rosedale Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	11	4	7	0	0	62	4	0	6	4	9	0	10	63	0	0	180
11:15 AM	6	1	4	0	0	35	6	0	2	1	8	0	10	64	0	0	137
11:30 AM	7	0	2	0	0	47	2	0	7	0	6	0	7	66	0	0	144
11:45 AM	8	0	4	0	0	51	6	0	5	0	12	0	19	67	0	0	172
Total	32	5	17	0	0	195	18	0	20	5	35	0	46	260	0	0	633
12:00 PM	14	4	8	0	0	62	2	0	6	1	15	0	10	74	0	0	196
12:15 PM	8	1	1	0	0	68	5	0	3	0	21	0	23	88	0	0	218
12:30 PM	7	0	3	0	0	61	3	0	1	0	12	0	12	71	0	0	170
12:45 PM	11	1	4	0	0	52	6	0	1	0	12	0	13	70	0	0	170
Total	40	6	16	0	0	243	16	0	11	1	60	0	58	303	0	0	754
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	72	11	33	0	0	438	34	0	31	6	95	0	104	563	0	0	1387
Apprch %	62.1	9.5	28.4	0	0	92.8	7.2	0	23.5	4.5	72	0	15.6	84.4	0	0	
Total %	5.2	0.8	2.4	0	0	31.6	2.5	0	2.2	0.4	6.8	0	7.5	40.6	0	0	
Lights	30	11	33	0	0	422	31	0	30	6	93	0	104	547	0	0	1307
% Lights	41.7	100	100	0	0	96.3	91.2	0	96.8	100	97.9	0	100	97.2	0	0	94.2
Buses	40	0	0	0	0	4	0	0	0	0	0	0	0	3	0	0	47
% Buses	55.6	0	0	0	0	0.9	0	0	0	0	0	0	0	0.5	0	0	3.4
Trucks	2	0	0	0	0	12	3	0	1	0	2	0	0	13	0	0	33
% Trucks	2.8	0	0	0	0	2.7	8.8	0	3.2	0	2.1	0	0	2.3	0	0	2.4

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : Roslyn_Rosedale_04-17-2014
Site Code : 03030T-ROSLROS
Start Date : 4/17/2014
Page No : 2

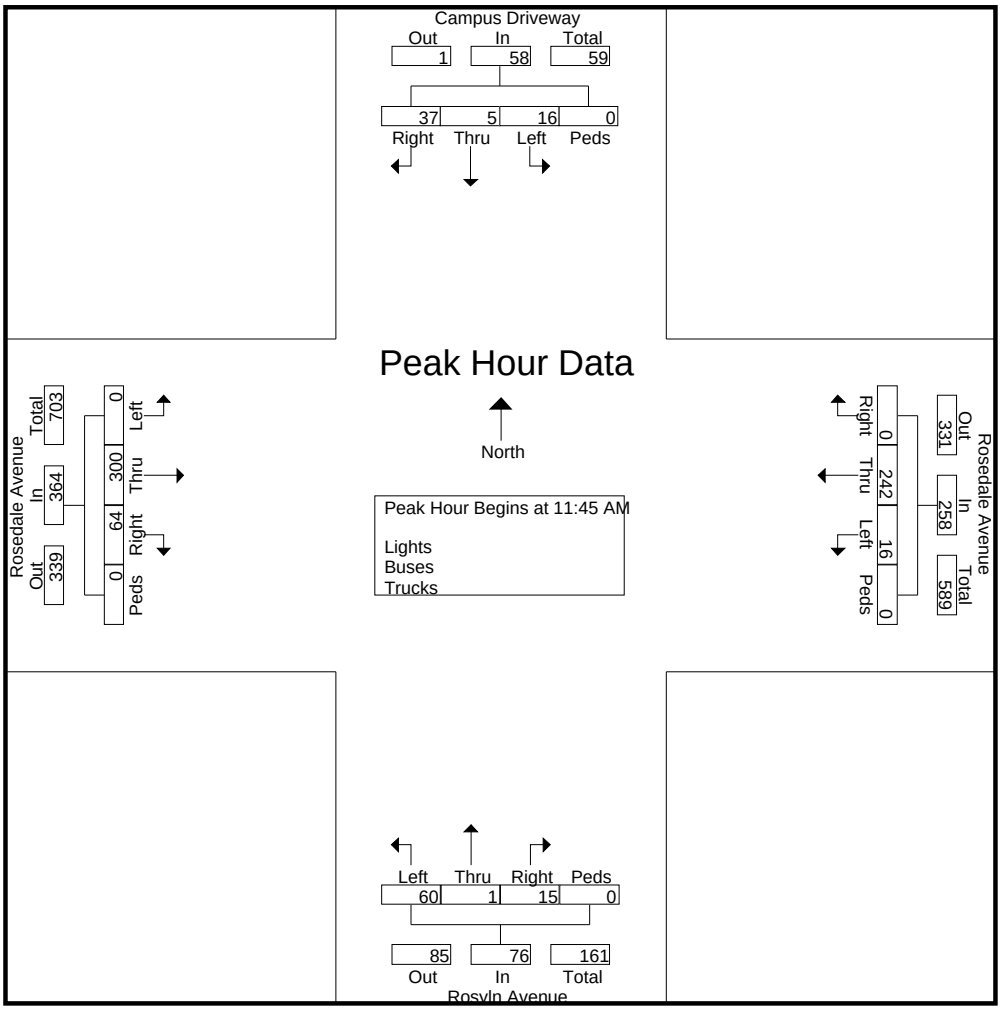


Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : Roslyn_Rosedale_04-17-2014
Site Code : 03030T-ROSLROS
Start Date : 4/17/2014
Page No : 3

	Campus Driveway From North					Rosedale Avenue From East					Rosyln Avenue From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	8	0	4	0	12	0	51	**6**	0	57	5	0	12	0	17	19	67	0	0	86	172
12:00 PM	**14**	**4**	**8**	0	**26**	0	62	2	0	64	**6**	**1**	15	0	22	10	74	0	0	84	196
12:15 PM	8	1	1	0	10	0	**68**	5	0	**73**	3	0	**21**	0	**24**	**23**	**88**	0	0	**111**	**218**
12:30 PM	7	0	3	0	10	0	61	3	0	64	1	0	12	0	13	12	71	0	0	83	170
Total Volume	37	5	16	0	58	0	242	16	0	258	15	1	60	0	76	64	300	0	0	364	756
% App. Total																					
PHF	.661	.313	.500	.000	.558	.000	.890	.667	.000	.884	.625	.250	.714	.000	.792	.696	.852	.000	.000	.820	.867



Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Intersection: Roslyn Ave & Rosedale Ave.
Project Number: 13-03030T
Municipality: West Chester Borough
Counter: MIO

File Name : Roslyn_Rosedale_04-17-2014
Site Code : 03030T-ROSLROS
Start Date : 4/17/2014
Page No : 1

Pedestrian Count

Groups Printed- Pedestrians

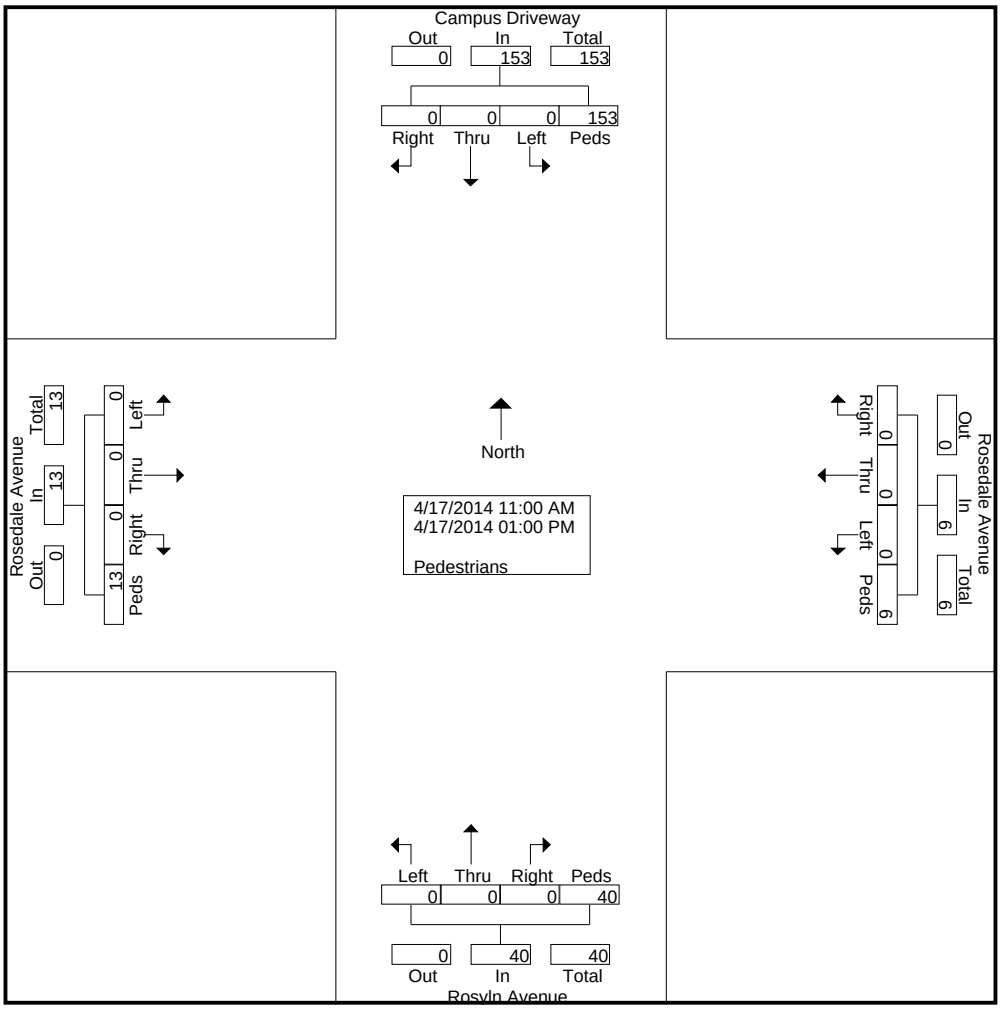
	Campus Driveway From North				Rosedale Avenue From East				Rosyln Avenue From South				Rosedale Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	0	0	0	20	0	0	0	2	0	0	0	4	0	0	0	0	26
11:15 AM	0	0	0	10	0	0	0	2	0	0	0	2	0	0	0	0	14
11:30 AM	0	0	0	12	0	0	0	0	0	0	0	4	0	0	0	1	17
11:45 AM	0	0	0	17	0	0	0	0	0	0	0	4	0	0	0	4	25
Total	0	0	0	59	0	0	0	4	0	0	0	14	0	0	0	5	82
12:00 PM	0	0	0	29	0	0	0	0	0	0	0	10	0	0	0	7	46
12:15 PM	0	0	0	33	0	0	0	2	0	0	0	11	0	0	0	0	46
12:30 PM	0	0	0	11	0	0	0	0	0	0	0	5	0	0	0	1	17
12:45 PM	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21
Total	0	0	0	94	0	0	0	2	0	0	0	26	0	0	0	8	130
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	153	0	0	0	6	0	0	0	40	0	0	0	13	212
Apprch %	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	
Total %	0	0	0	72.2	0	0	0	2.8	0	0	0	18.9	0	0	0	6.1	

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : Roslyn_Rosedale_04-17-2014
Site Code : 03030T-ROSLROS
Start Date : 4/17/2014
Page No : 2

Pedestrian Count



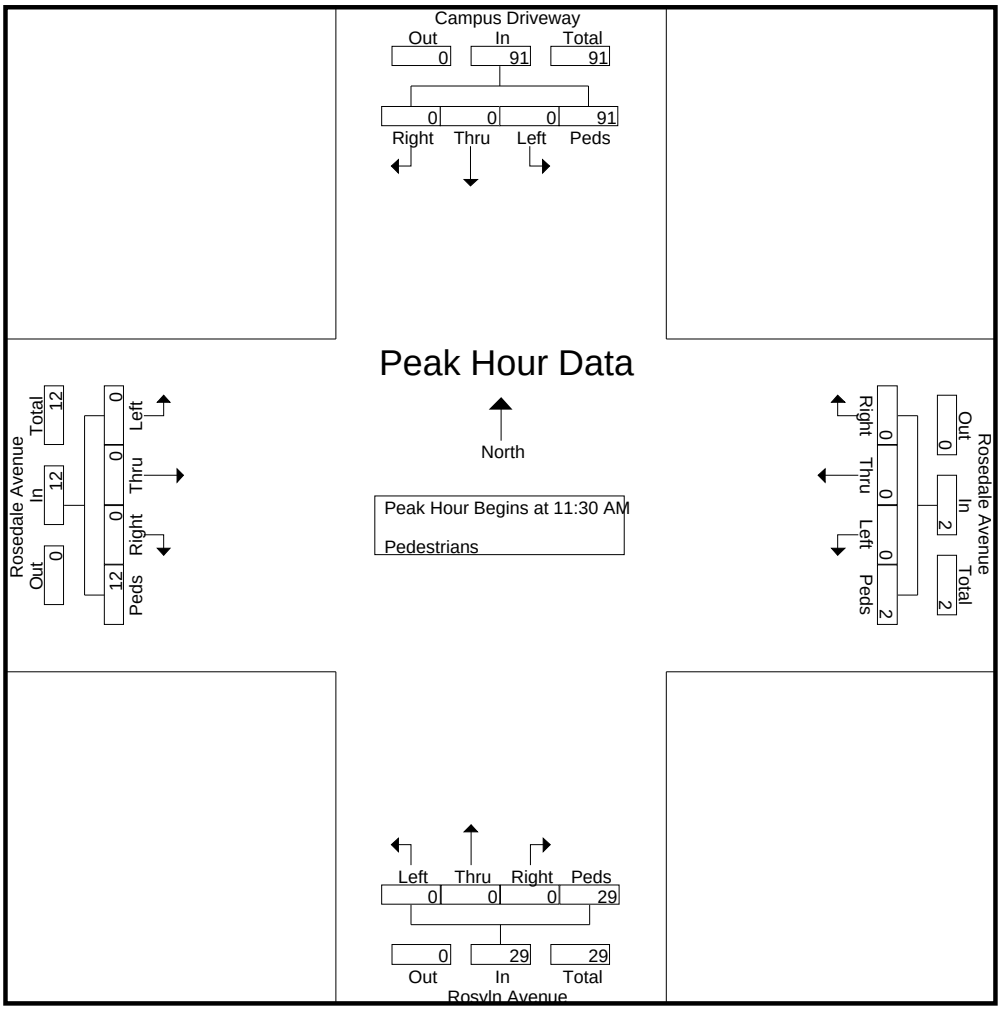
Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : Roslyn_Rosedale_04-17-2014
Site Code : 03030T-ROSLROS
Start Date : 4/17/2014
Page No : 3

Pedestrian Count

	Campus Driveway From North					Rosedale Avenue From East					Rosyln Avenue From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	0	0	0	12	12	0	0	0	0	0	0	0	0	4	4	0	0	0	1	1	17
11:45 AM	0	0	0	17	17	0	0	0	0	0	0	0	0	4	4	0	0	0	4	4	25
12:00 PM	0	0	0	29	29	0	0	0	0	0	0	0	0	10	10	0	0	0	**7**	**7**	**46**
12:15 PM	0	0	0	**33**	**33**	0	0	0	**2**	**2**	0	0	0	**11**	**11**	0	0	0	0	0	46
Total Volume	0	0	0	91	91	0	0	0	2	2	0	0	0	29	29	0	0	0	12	12	134
% App. Total																					
PHF	.000	.000	.000	.689	.689	.000	.000	.000	.250	.250	.000	.000	.000	.659	.659	.000	.000	.000	.429	.429	.728



Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Intersection: Church Street & Rosedale Ave.
Project: 13-03030T
Municipality: West Chester Borough
Counter: MIO

File Name : Church_Rosedale_04-17-2014
Site Code : 03030T-CHUROS
Start Date : 4/17/2014
Page No : 1

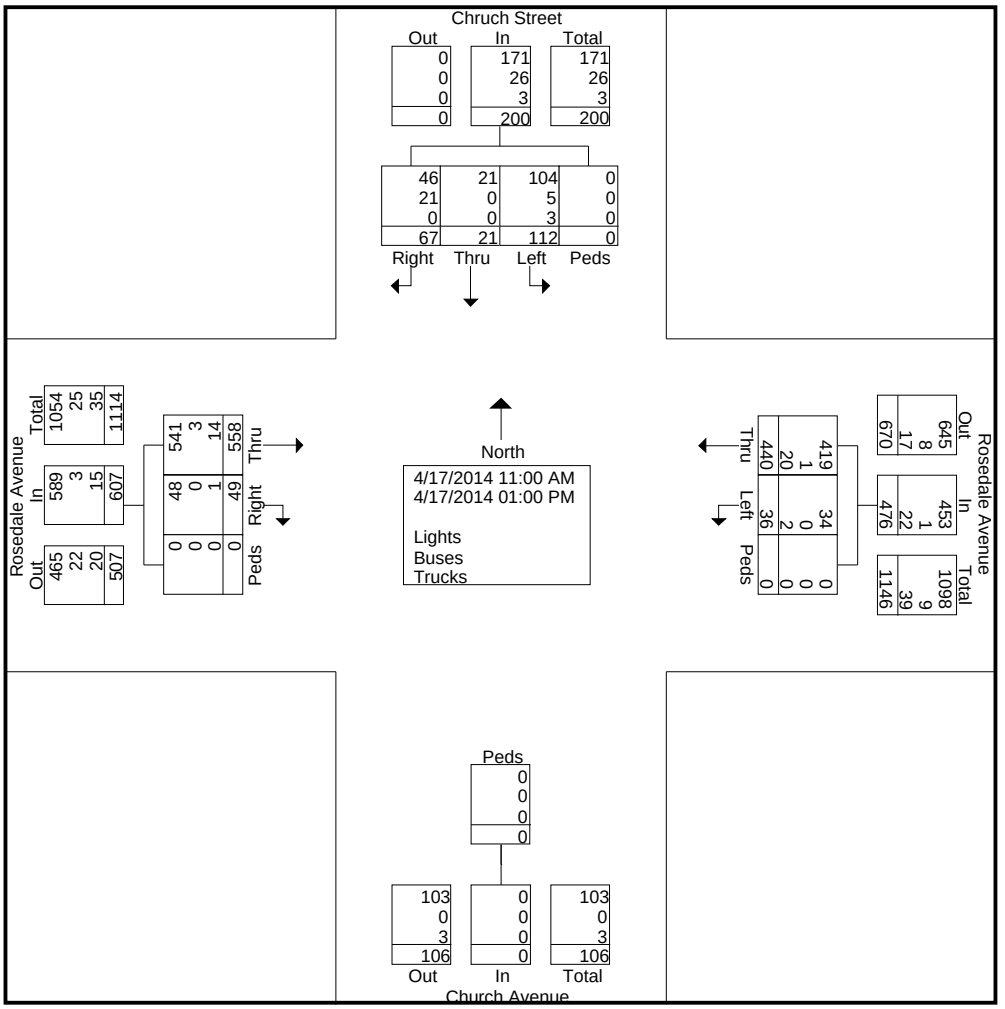
Groups Printed- Lights - Buses - Trucks

	Chruch Street From North				Rosedale Avenue From East			Church Avenue From South	Rosedale Avenue From West			
Start Time	Right	Thru	Left	Peds	Thru	Left	Peds	Peds	Right	Thru	Peds	Int. Total
11:00 AM	0	3	15	0	59	6	0	0	6	64	0	153
11:15 AM	0	0	14	0	37	1	0	0	2	65	0	119
11:30 AM	0	2	9	0	53	3	0	0	9	74	0	150
11:45 AM	0	2	11	0	51	1	0	0	6	65	0	136
Total	0	7	49	0	200	11	0	0	23	268	0	558
12:00 PM	16	5	14	0	58	8	0	0	9	64	0	174
12:15 PM	19	4	23	0	64	9	0	0	6	85	0	210
12:30 PM	16	4	12	0	65	4	0	0	6	72	0	179
12:45 PM	16	1	14	0	53	4	0	0	5	69	0	162
Total	67	14	63	0	240	25	0	0	26	290	0	725
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	67	21	112	0	440	36	0	0	49	558	0	1283
Apprch %	33.5	10.5	56	0	92.4	7.6	0	0	8.1	91.9	0	
Total %	5.2	1.6	8.7	0	34.3	2.8	0	0	3.8	43.5	0	
Lights	46	21	104	0	419	34	0	0	48	541	0	1213
% Lights	68.7	100	92.9	0	95.2	94.4	0	0	98	97	0	94.5
Buses	21	0	5	0	1	0	0	0	0	3	0	30
% Buses	31.3	0	4.5	0	0.2	0	0	0	0	0.5	0	2.3
Trucks	0	0	3	0	20	2	0	0	1	14	0	40
% Trucks	0	0	2.7	0	4.5	5.6	0	0	2	2.5	0	3.1

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : Church_Rosedale_04-17-2014
Site Code : 03030T-CHUROS
Start Date : 4/17/2014
Page No : 2

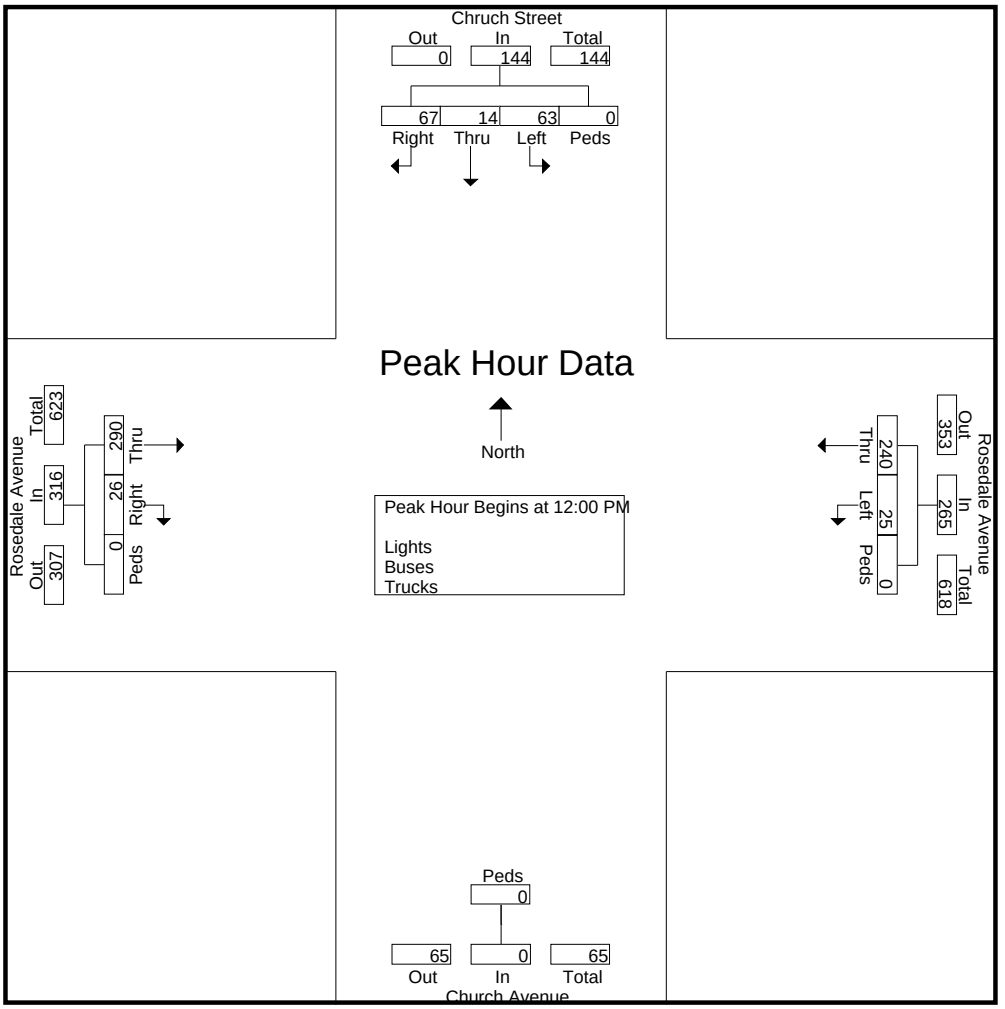


Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : Church_Rosedale_04-17-2014
Site Code : 03030T-CHUROS
Start Date : 4/17/2014
Page No : 3

	Chruch Street From North					Rosedale Avenue From East				Church Avenue From South		Rosedale Avenue From West				
Start Time	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:00 PM - Peak 1 of 1																
Peak Hour for Entire Intersection Begins at 12:00 PM																
12:00 PM	16	**5**	14	0	35	58	8	0	66	0	0	**9**	64	0	73	174
12:15 PM	**19**	4	**23**	0	**46**	64	**9**	0	**73**	0	0	6	**85**	0	**91**	**210**
12:30 PM	16	4	12	0	32	**65**	4	0	69	0	0	6	72	0	78	179
12:45 PM	16	1	14	0	31	53	4	0	57	0	0	5	69	0	74	162
Total Volume	67	14	63	0	144	240	25	0	265	0	0	26	290	0	316	725
% App. Total	46.5	9.7	43.8	0		90.6	9.4	0		0		8.2	91.8	0		
PHF	.882	.700	.685	.000	.783	.923	.694	.000	.908	.000	.000	.722	.853	.000	.868	.863



Gilmore & Associates, INC.
65 E. Butler Avenue
New Britain, PA, 18901

Intersection: Church Street & Rosedale Ave.
Project: 13-03030T
Municipality: West Chester Borough
Counter: MIO

File Name : Church_Rosedale_04-17-2014
Site Code : 03030T-CHUROS
Start Date : 4/17/2014

Pedestrian Count

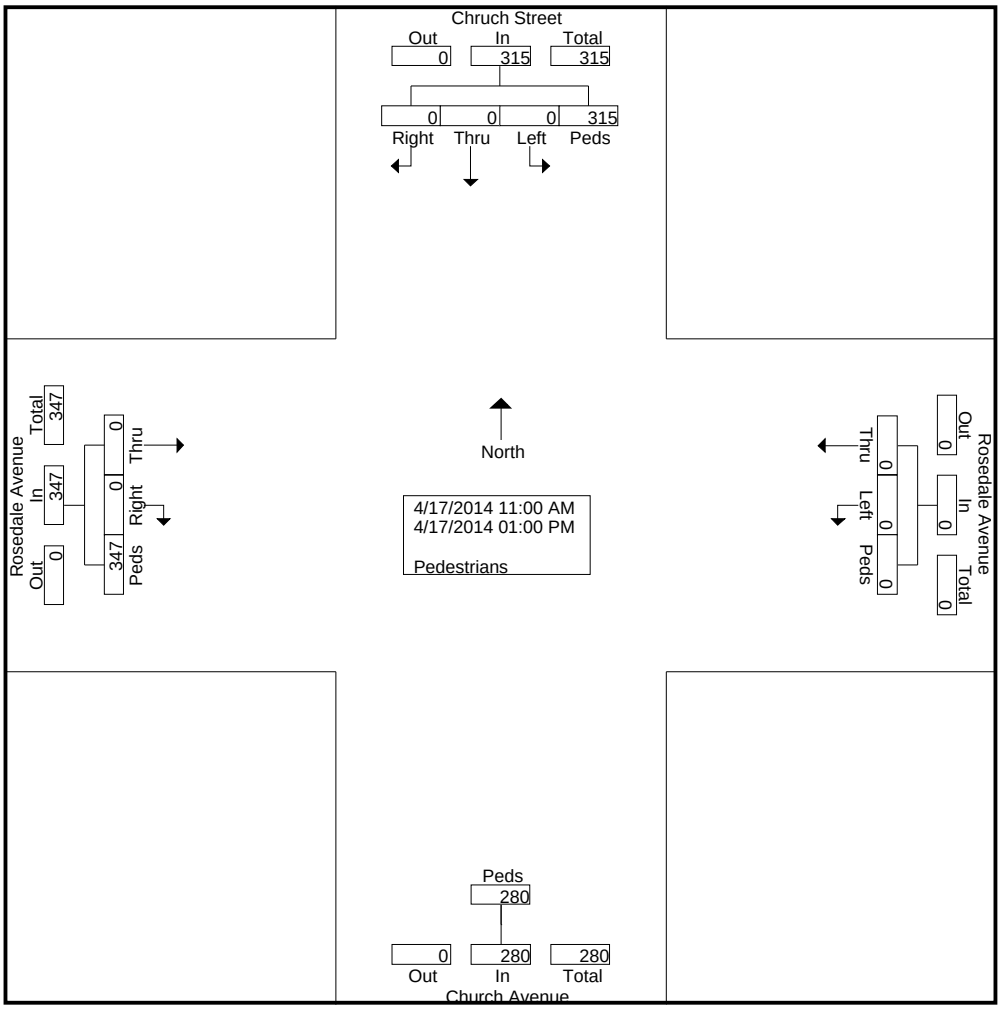
Groups Printed- Pedestrians

	Chruch Street From North				Rosedale Avenue From East			Church Avenue From South	Rosedale Avenue From West			
Start Time	Right	Thru	Left	Peds	Thru	Left	Peds	Peds	Right	Thru	Peds	Int. Total
11:00 AM	0	0	0	42	0	0	0	30	0	0	28	100
11:15 AM	0	0	0	29	0	0	0	23	0	0	28	80
11:30 AM	0	0	0	58	0	0	0	19	0	0	35	112
11:45 AM	0	0	0	40	0	0	0	26	0	0	26	92
Total	0	0	0	169	0	0	0	98	0	0	117	384
12:00 PM	0	0	0	58	0	0	0	52	0	0	53	163
12:15 PM	0	0	0	40	0	0	0	66	0	0	95	201
12:30 PM	0	0	0	26	0	0	0	33	0	0	47	106
12:45 PM	0	0	0	22	0	0	0	31	0	0	35	88
Total	0	0	0	146	0	0	0	182	0	0	230	558
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	315	0	0	0	280	0	0	347	942
Apprch %	0	0	0	100	0	0	0	100	0	0	100	
Total %	0	0	0	33.4	0	0	0	29.7	0	0	36.8	

Gilmore & Associates, INC.
65 E. Butler Avenue
New Britain, PA, 18901

File Name : Church_Rosedale_04-17-2014
Site Code : 03030T-CHUROS
Start Date : 4/17/2014
Page No : 2

Pedestrian Count

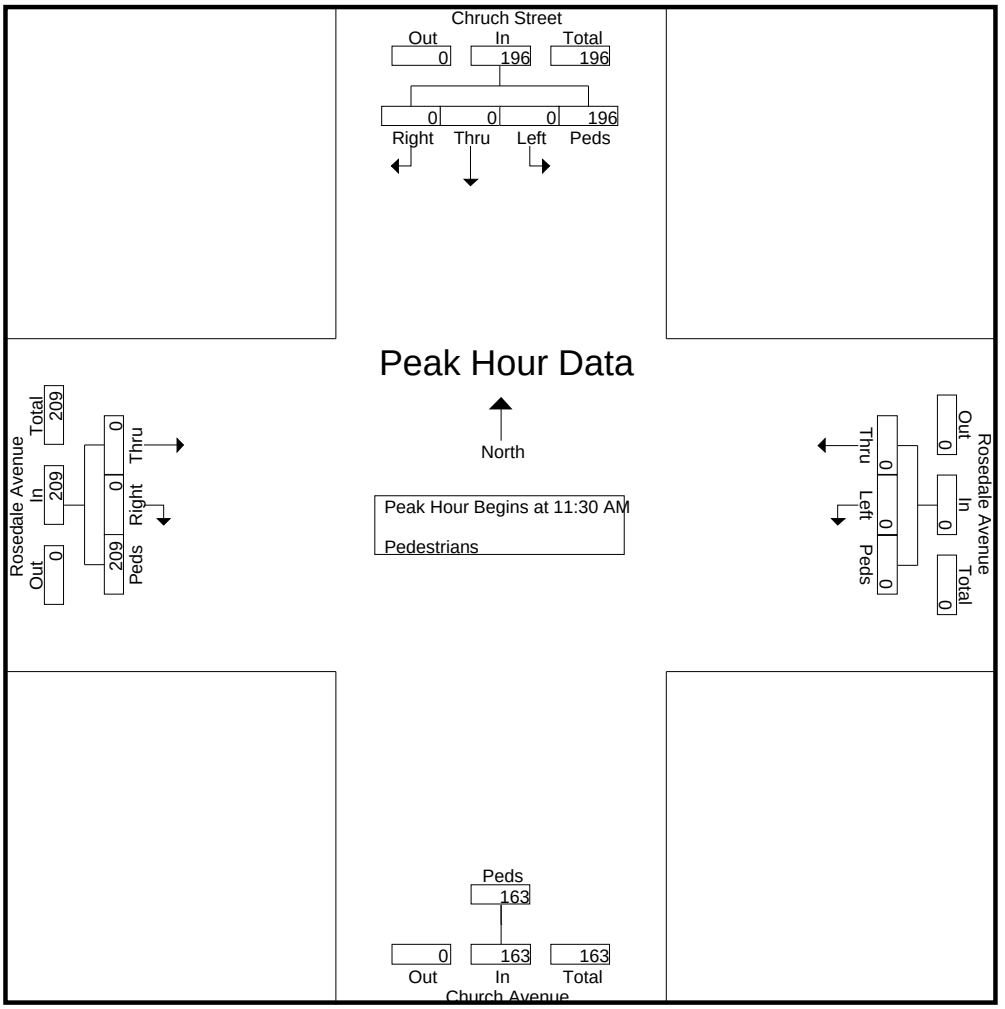


Gilmore & Associates, INC.
65 E. Butler Avenue
New Britain, PA, 18901

File Name : Church_Rosedale_04-17-2014
Site Code : 03030T-CHUROS
Start Date : 4/17/2014
Page No : 3

Pedestrian Count

	Chruch Street From North					Rosedale Avenue From East				Church Avenue From South		Rosedale Avenue From West				
Start Time	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:00 PM - Peak 1 of 1																
Peak Hour for Entire Intersection Begins at 11:30 AM																
11:30 AM	0	0	0	**58**	**58**	0	0	0	0	19	19	0	0	35	35	112
11:45 AM	0	0	0	40	40	0	0	0	0	26	26	0	0	26	26	92
12:00 PM	0	0	0	58	58	0	0	0	0	52	52	0	0	53	53	163
12:15 PM	0	0	0	40	40	0	0	0	0	**66**	**66**	0	0	**95**	**95**	**201**
Total Volume	0	0	0	196	196	0	0	0	0	163	163	0	0	209	209	568
% App. Total	0	0	0	100		0	0	0		100		0	0	100		
PHF	.000	.000	.000	.845	.845	.000	.000	.000	.000	.617	.617	.000	.000	.550	.550	.706



Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

Intersection: Rosedale Ave & High St.
Municipality: West Chester Borough
County: Chester
Engineer/Technician: DM/BM

File Name : EMROSHIG
Site Code : 01303030
Start Date : 4/17/2014
Page No : 1

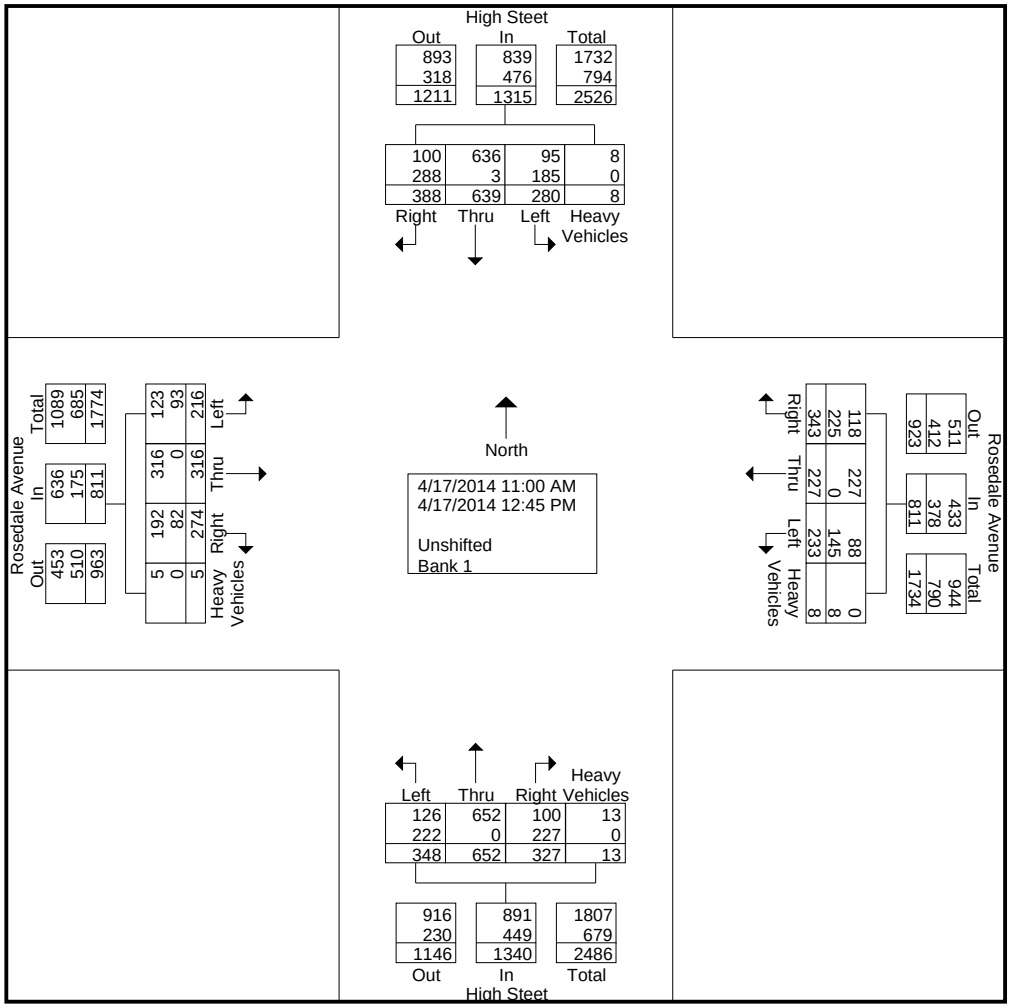
Groups Printed- Unshifted - Bank 1

	High Steet From North				Rosedale Avenue From East				High Steet From South				Rosedale Avenue From West				
Start Time	Rig	Thr	Left	Heavy Vehicles	Right	Thru	Left	Heavy Vehicles	Right	Thru	Left	Heavy Vehicles	Right	Thru	Left	Heavy Vehicles	Int. Total
11:00 AM	36	77	25	0	39	26	19	2	44	73	40	2	22	34	27	0	466
11:15 AM	26	93	13	1	24	14	23	5	14	81	25	2	29	42	16	1	409
11:30 AM	36	89	19	1	30	26	12	0	22	80	28	1	34	34	16	2	430
11:45 AM	38	74	32	3	44	31	36	1	35	83	42	4	32	43	24	0	522
Total	136	333	89	5	137	97	90	8	115	317	135	9	117	153	83	3	1827
12:00 PM	67	90	48	1	81	31	42	0	25	87	92	0	29	31	45	1	670
12:15 PM	124	73	92	1	70	28	55	0	88	77	65	1	48	56	45	1	824
12:30 PM	25	75	29	0	27	38	24	0	56	80	33	2	41	43	24	0	497
12:45 PM	36	68	22	1	28	33	22	0	43	91	23	1	39	33	19	0	459
Total	252	306	191	3	206	130	143	0	212	335	213	4	157	163	133	2	2450
Grand Total	388	639	280	8	343	227	233	8	327	652	348	13	274	316	216	5	4277
Apprch %	29.5	48.6	21.3	0.6	42.3	28	28.7	1	24.4	48.7	26	1	33.8	39	26.6	0.6	
Total %	9.1	14.9	6.5	0.2	8	5.3	5.4	0.2	7.6	15.2	8.1	0.3	6.4	7.4	5.1	0.1	
Unshifted	100	636	95	8	118	227	88	0	100	652	126	13	192	316	123	5	2799
% Unshifted	25.8	99.5	33.9	100	34.4	100	37.8	0	30.6	100	36.2	100	70.1	100	56.9	100	65.4
Bank 1	288	3	185	0	225	0	145	8	227	0	222	0	82	0	93	0	1478
% Bank 1	74.2	0.5	66.1	0	65.6	0	62.2	100	69.4	0	63.8	0	29.9	0	43.1	0	34.6

Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EMROSHIG
Site Code : 01303030
Start Date : 4/17/2014
Page No : 2

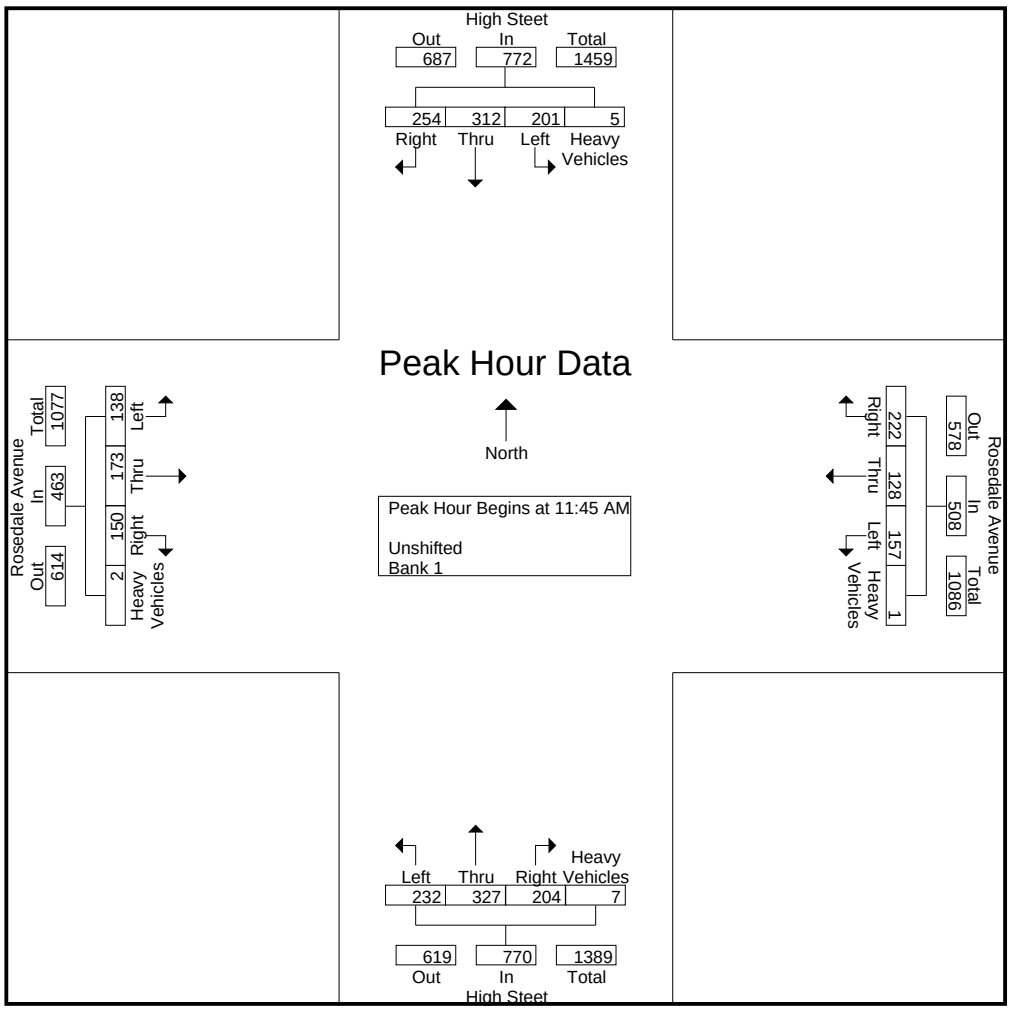


Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EMROSHIG
Site Code : 01303030
Start Date : 4/17/2014
Page No : 3

	High Steet From North					Rosedale Avenue From East					High Steet From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	38	74	32	**3**	147	44	31	36	**1**	112	35	83	42	**4**	164	32	43	24	0	99	522
12:00 PM	67	**90**	48	1	206	**81**	31	42	0	**154**	25	**87**	**92**	0	204	29	31	**45**	**1**	106	670
12:15 PM	**124**	73	**92**	1	**290**	70	28	**55**	0	153	**88**	77	65	1	**231**	**48**	**56**	45	1	**150**	**824**
12:30 PM	25	75	29	0	129	27	**38**	24	0	89	56	80	33	2	171	41	43	24	0	108	497
Total Volume	254	312	201	5	772	222	128	157	1	508	204	327	232	7	770	150	173	138	2	463	2513
% App. Total	32.9	40.4	26	0.6		43.7	25.2	30.9	0.2		26.5	42.5	30.1	0.9		32.4	37.4	29.8	0.4		
PHF	.512	.867	.546	.417	.666	.685	.842	.714	.250	.825	.580	.940	.630	.438	.833	.781	.772	.767	.500	.772	.762



Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EMROSHIG
Site Code : 01303030
Start Date : 4/17/2014
Page No : 1

Pedestrian Count

Groups Printed- Bank 1

	High Steet From North				Rosedale Avenue From East				High Steet From South				Rosedale Avenue From West				
Start Time	Right	Thru	Left	Heavy Vehicles	Right	Thru	Left	Heavy Vehicles	Right	Thru	Left	Heavy Vehicles	Right	Thru	Left	Heavy Vehicles	Int. Total
11:00 AM	23	0	12	0	26	0	7	2	30	0	15	0	9	0	7	0	131
11:15 AM	12	0	7	0	10	0	10	5	7	0	14	0	3	0	2	0	70
11:30 AM	26	0	9	0	20	0	4	0	11	0	17	0	3	0	4	0	94
11:45 AM	29	0	23	0	31	0	17	1	21	0	29	0	12	0	9	0	172
Total	90	0	51	0	87	0	38	8	69	0	75	0	27	0	22	0	467
12:00 PM	52	3	38	0	62	0	30	0	14	0	71	0	5	0	27	0	302
12:15 PM	106	0	79	0	54	0	47	0	73	0	50	0	26	0	29	0	464
12:30 PM	17	0	10	0	12	0	20	0	43	0	14	0	13	0	8	0	137
12:45 PM	23	0	7	0	10	0	10	0	28	0	12	0	11	0	7	0	108
Total	198	3	134	0	138	0	107	0	158	0	147	0	55	0	71	0	1011
Grand Total	288	3	185	0	225	0	145	8	227	0	222	0	82	0	93	0	1478
Apprch %	60.5	0.6	38.9	0	59.5	0	38.4	2.1	50.6	0	49.4	0	46.9	0	53.1	0	
Total %	19.5	0.2	12.5	0	15.2	0	9.8	0.5	15.4	0	15	0	5.5	0	6.3	0	

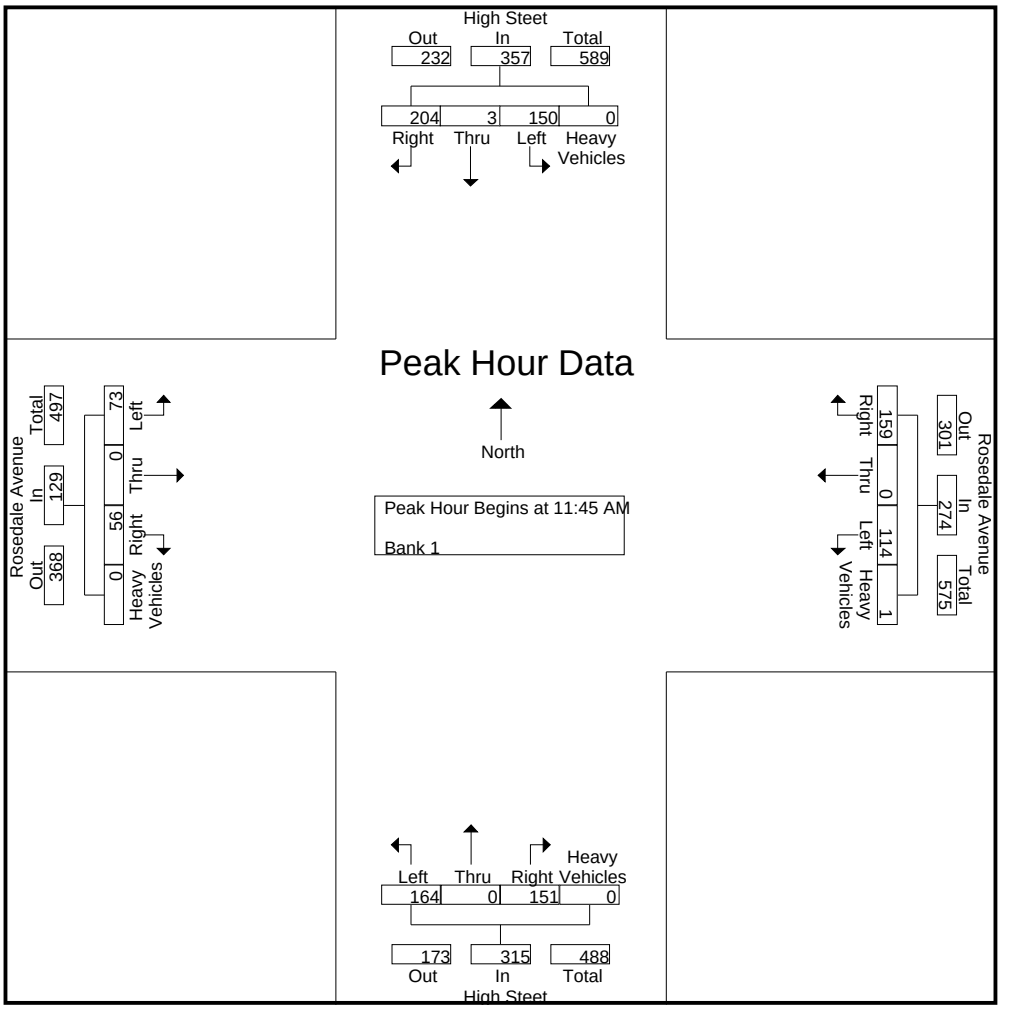
Gilmore & Associates, INC.

65 E. Butler Avenue
New Britain, PA, 18901

File Name : EMROSHIG
Site Code : 01303030
Start Date : 4/17/2014
Page No : 2

Pedestrian Count

	High Steet From North					Rosedale Avenue From East					High Steet From South					Rosedale Avenue From West					
Start Time	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Right	Thru	Left	Heavy Vehicles	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	29	0	23	0	52	31	0	17	**1**	49	21	0	29	0	50	12	0	9	0	21	172
12:00 PM	52	**3**	38	0	93	**62**	0	30	0	92	14	0	**71**	0	85	5	0	27	0	32	302
12:15 PM	**106**	0	**79**	0	**185**	54	0	**47**	0	**101**	**73**	0	50	0	**123**	**26**	0	**29**	0	**55**	**464**
12:30 PM	17	0	10	0	27	12	0	20	0	32	43	0	14	0	57	13	0	8	0	21	137
Total Volume	204	3	150	0	357	159	0	114	1	274	151	0	164	0	315	56	0	73	0	129	1075
% App. Total	57.1	0.8	42	0		58	0	41.6	0.4		47.9	0	52.1	0		43.4	0	56.6	0		
PHF	.481	.250	.475	.000	.482	.641	.000	.606	.250	.678	.517	.000	.577	.000	.640	.538	.000	.629	.000	.586	.579



APPENDIX B

Level of Service (LOS) Methodology

LEVEL OF SERVICE METHODOLOGY

As defined, vehicle capacity means “the maximum number of vehicles that can pass a given point during a specified period under prevailing roadway, traffic and control conditions.” The level at which an intersection or section of a lane or roadway functions can be expressed in terms of level of service. Level of service is defined as “qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists and passengers.” Some measures that are included are “speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.”

The concept of stop-controlled or yield-controlled intersection analysis is based on the estimate of average total delay on minor streets. The methodology of the analysis relies on three elements: the distribution and size of gaps available in the major street traffic flow; the usefulness of these gaps to the minor stream drivers; and, the relative priority of the various traffic movements at the intersection. The results of the analysis provide an estimate of total average delay for the various critical movements at the unsignalized intersections. Correlation between average total delay and the respective levels of service are provided in ***Table 1: Level of Service Criteria***.

Table 1: Level of Service Criteria

Level of Service	Unsignalized Intersections Control Delay per Vehicle (seconds)	Signalized Intersections Control Delay per Vehicle (seconds)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

At signalized intersections, additional elements must be considered. These elements are green time allocations and volume/capacity relationships. Level of service is based primarily on the average control delay per vehicle for various movements within an intersection. Thus, both volume/capacity and delay are considered to evaluate the overall operation of a signalized intersection. Correlation between average delay per vehicle and the respective levels of service are provided for signalized intersections in ***Table 1: Level of Service Criteria***.

APPENDIX C

LOS Results – Existing (2013)

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	207	27	360	124	27	552
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.998
Satd. Flow (perm)	1791	0	1818	1546	0	1833
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.85	0.85	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	211	28	424	146	29	600
Shared Lane Traffic (%)						
Lane Group Flow (vph)	239	0	424	146	0	629
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	14.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	207	27	360	124	27	552
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	85	85	92	92
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	211	28	424	146	29	600

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1083	424	0	0	424	0
Stage 1	424	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	243	634	-	-	1146	-
Stage 1	664	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	234	634	-	-	1146	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	498	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	86.4	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	252	1146	-
HCM Lane V/C Ratio	-	-	0.948	0.026	-
HCM Control Delay (s)	-	-	86.4	8.2	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	8.7	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	154	12	15	239	1	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.878	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1862	0	0	1857	1660	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1862	0	0	1857	1660	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	164	13	17	272	2	18
Shared Lane Traffic (%)						
Lane Group Flow (vph)	177	0	0	289	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

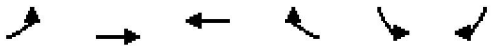
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	154	12	15	239	1	12
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	164	13	17	272	2	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	179	0	478	172
Stage 1	-	-	-	-	172	-
Stage 2	-	-	-	-	306	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1397	-	550	877
Stage 1	-	-	-	-	863	-
Stage 2	-	-	-	-	751	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1397	-	541	876
Mov Capacity-2 Maneuver	-	-	-	-	541	-
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	740	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.4
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	836	-	-	1397	-
HCM Lane V/C Ratio	0.024	-	-	0.012	-
HCM Control Delay (s)	9.4	-	-	7.609	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.073	-	-	0.037	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	211	151	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	243	166	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	245	167	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

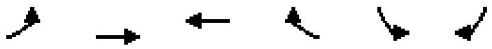
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	211	151	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	243	166	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.6	8.2	7.6
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	213	152	4
LT Vol	211	151	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	245	167	12
Geometry Grp	1	1	1
Degree of Util (X)	0.275	0.191	0.015
Departure Headway (Hd)	4.047	4.117	4.573
Convergence, Y/N	Yes	Yes	Yes
Cap	884	865	787
Service Time	2.092	2.173	2.573
HCM Lane V/C Ratio	0.277	0.193	0.015
HCM Control Delay	8.6	8.2	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.1	0.7	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	169	262	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1877	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1877	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	180	298	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	183	303	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	169	262	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	180	298	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	307	0	-	0	491	306
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	186	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1248	-	-	-	540	739
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	851	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1247	-	-	-	534	735
Mov Capacity-2 Maneuver	-	-	-	-	534	-
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	845	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.9
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1247	-	-	-	630
HCM Lane V/C Ratio	0.003	-	-	-	0.038
HCM Control Delay (s)	7.894	0	-	-	10.9
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.008	-	-	-	0.117

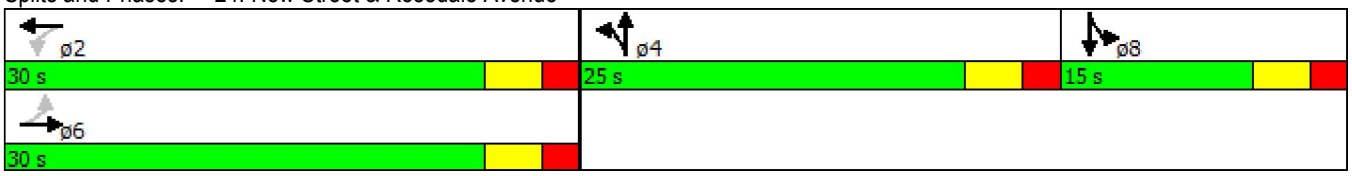
Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	137	19	97	241	112	15	151	135	108	159	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
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
Ped Bike Factor					0.98						0.97	
Frt		0.986			0.966			0.939			0.990	
Flt Protected		0.994			0.989			0.998			0.982	
Satd. Flow (prot)	0	1887	0	0	1795	0	0	1629	0	0	1833	0
Flt Permitted		0.929			0.883			0.998			0.982	
Satd. Flow (perm)	0	1763	0	0	1596	0	0	1629	0	0	1797	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		10									5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)				12		12				25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	24	161	22	113	280	130	18	182	163	124	183	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	207	0	0	523	0	0	363	0	0	331	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	0.96	0.96	0.96	0.85	0.97	0.85	1.09	1.09	1.09	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		5.0			5.0			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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	0	0		0	0							
Act Effct Green (s)		25.0			25.0			18.2			10.0	
Actuated g/C Ratio		0.37			0.37			0.27			0.15	
v/c Ratio		0.32			0.89			0.84			1.21	
Control Delay		16.9			42.2			42.5			154.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.9			42.2			42.5			154.7	
LOS		B			D			D			F	
Approach Delay		16.9			42.2			42.5			154.7	
Approach LOS		B			D			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 68.2			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 64.8		Intersection LOS: E	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	137	19	97	241	112	15	151	135	108	159	21
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		0.95
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	139	794	101	219	479	201	23	229	205	167	246	32
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	104	1511	192	242	913	382	85	863	773	631	931	122
Grp Volume(v), veh/h	207	0	0	523	0	0	363	0	0	331	0	0
Grp Sat Flow(s),veh/h/ln	1807	0	0	1536	0	0	1722	0	0	1683	0	0
Q Serve(g_s), s	0.0	0.0	0.0	4.8	0.0	0.0	9.3	0.0	0.0	8.6	0.0	0.0
Cycle Q Clear(g_c), s	2.8	0.0	0.0	11.1	0.0	0.0	9.3	0.0	0.0	8.6	0.0	0.0
Prop In Lane	0.12		0.11	0.22		0.25	0.05		0.45	0.37		0.07
Lane Grp Cap(c), veh/h	1033	0	0	899	0	0	456	0	0	446	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.58	0.00	0.00	0.80	0.00	0.00	0.74	0.00	0.00
Avail Cap(c_a), veh/h	1033	0	0	899	0	0	723	0	0	446	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	0.0	7.9	0.0	0.0	16.3	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	2.7	0.0	0.0	3.3	0.0	0.0	6.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.1	0.0	0.0	4.0	0.0	0.0	3.9	0.0	0.0	4.1	0.0	0.0
Lane Grp Delay (d), s/veh	6.5	0.0	0.0	10.6	0.0	0.0	19.6	0.0	0.0	22.6	0.0	0.0
Lane Grp LOS	A			B			B			C		
Approach Vol, veh/h		207			523			363			331	
Approach Delay, s/veh		6.5			10.6			19.6			22.6	
Approach LOS		A			B			B			C	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			17.6			17.6	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		4.8			13.1			11.3			10.6	
Green Ext Time (p_c), s		4.8			3.8			1.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			15.1									
HCM 2010 LOS			B									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	328	53	30	472	43	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.954	
Flt Protected				0.997	0.968	
Satd. Flow (prot)	1827	0	0	1857	1720	0
Flt Permitted				0.997	0.968	
Satd. Flow (perm)	1827	0	0	1857	1720	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	357	58	33	513	47	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	415	0	0	546	71	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.5

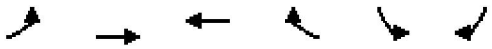
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	328	53	30	472	43	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	357	58	33	513	47	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	414	0	963	385
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	578	-
Follow-up Headway	-	-	2.218	-	3.518	3.318
Pot Capacity-1 Maneuver	-	-	1145	-	284	663
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	561	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1145	-	273	663
Mov Capacity-2 Maneuver	-	-	-	-	273	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	18.3
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	341	-	-	1145	-
HCM Lane V/C Ratio	0.207	-	-	0.028	-
HCM Control Delay (s)	18.3	-	-	8.236	0
HCM Lane LOS	C			A	A
HCM 95th %tile Q(veh)	0.767	-	-	0.088	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	264	329	0	111	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	1863	1863	0	1720	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1863	1863	0	1720	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	287	358	0	121	62
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	287	358	0	183	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	264	329	0	111	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	287	358	0	121	62
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	11	12.1	10.4
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	66%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	34%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	264	329	168
LT Vol	264	329	0
Through Vol	0	0	57
RT Vol	0	0	111
Lane Flow Rate	287	358	183
Geometry Grp	1	1	1
Degree of Util (X)	0.386	0.474	0.27
Departure Headway (Hd)	4.845	4.767	5.328
Convergence, Y/N	Yes	Yes	Yes
Cap	737	751	667
Service Time	2.916	2.833	3.417
HCM Lane V/C Ratio	0.389	0.477	0.274
HCM Control Delay	11	12.1	10.4
HCM Lane LOS	B	B	B
HCM 95th-tile Q	1.8	2.6	1.1

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	506	79	28	454	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982					
Flt Protected				0.997		
Satd. Flow (prot)	1847	0	0	1894	1900	0
Flt Permitted				0.997		
Satd. Flow (perm)	1847	0	0	1894	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	556	87	29	478	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	643	0	0	507	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	506	79	28	454	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	556	87	29	478	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	643	0	1136	599
Stage 1	-	-	-	-	599	-
Stage 2	-	-	-	-	537	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	951	-	225	505
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	590	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	951	-	216	505
Mov Capacity-2 Maneuver	-	-	-	-	216	-
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	565	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	0	-	-	951	-
HCM Lane V/C Ratio	+	-	-	0.031	-
HCM Control Delay (s)	0	-	-	8.907	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	+	-	-	0.096	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	472	0	0	434	8	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.896	
Flt Protected					0.989	
Satd. Flow (prot)	1863	0	0	1881	1658	0
Flt Permitted					0.989	
Satd. Flow (perm)	1863	0	0	1881	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	519	0	0	499	11	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	519	0	0	499	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	472	0	0	434	8	27
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	519	0	0	499	11	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	619	0	1118	620
Stage 1	-	-	-	-	619	-
Stage 2	-	-	-	-	499	-
Follow-up Headway	-	-	2.218	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	961	-	231	488
Stage 1	-	-	-	-	541	-
Stage 2	-	-	-	-	614	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	960	-	211	447
Mov Capacity-2 Maneuver	-	-	-	-	211	-
Stage 1	-	-	-	-	496	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.7
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	356	-	-	960	-
HCM Lane V/C Ratio	0.135	-	-	-	-
HCM Control Delay (s)	16.7	-	-	0	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	0.461	-	-	0	-

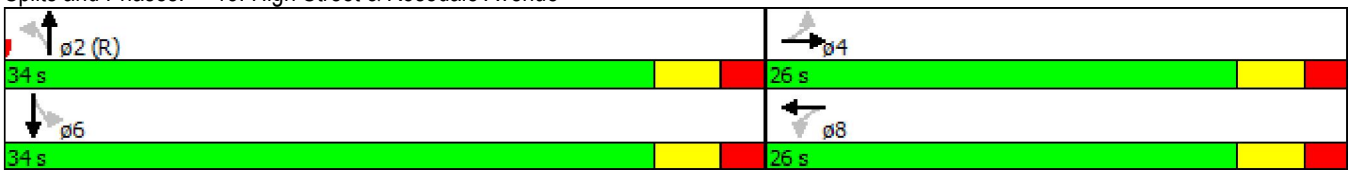
Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	208	119	39	231	97	91	404	63	69	373	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.93	0.94		0.92	0.94		0.90	0.96		0.87	0.93	
Frt		0.945			0.956			0.980			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1657	0	1805	1654	0	1668	1893	0	1685	1613	0
Flt Permitted	0.366			0.306			0.374			0.352		
Satd. Flow (perm)	612	1657	0	535	1654	0	589	1893	0	543	1613	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					39						26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	156		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	190	277	159	56	275	115	112	459	72	72	414	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	436	0	56	390	0	112	531	0	72	505	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
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	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		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	None	None		None	None		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	19.7	19.7		19.7	19.7		30.3	30.3		30.3	30.3	
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.50	0.50		0.50	0.50	
v/c Ratio	0.95	0.80		0.32	0.69		0.38	0.56		0.26	0.61	
Control Delay	76.5	31.5		20.2	22.4		14.7	13.6		12.5	14.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	76.5	31.5		20.2	22.4		14.7	13.6		12.5	14.5	
LOS	E	C		C	C		B	B		B	B	
Approach Delay		45.2			22.1			13.8			14.3	
Approach LOS		D			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 24.1		Intersection LOS: C	
Intersection Capacity Utilization 76.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: High Street & Rosedale Avenue

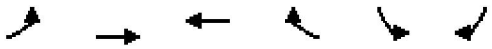


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	208	119	39	231	97	91	404	63	69	373	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.86	0.95		0.83	0.92		0.84	0.94		0.78
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	188.1	195.6	197.6	190.0	190.0	190.0
Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Cap, veh/h	262	366	210	226	417	174	344	775	122	350	690	152
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	919	1045	600	920	1192	499	823	1604	252	833	1428	314
Grp Volume(v), veh/h	190	0	436	56	0	390	112	0	531	72	0	505
Grp Sat Flow(s),veh/h/ln	919	0	1645	920	0	1691	823	0	1855	833	0	1742
Q Serve(g_s), s	9.3	0.0	14.1	3.4	0.0	11.7	6.9	0.0	12.4	4.1	0.0	12.7
Cycle Q Clear(g_c), s	21.0	0.0	14.1	17.5	0.0	11.7	19.5	0.0	12.4	16.5	0.0	12.7
Prop In Lane	1.00		0.36	1.00		0.29	1.00		0.14	1.00		0.18
Lane Grp Cap(c), veh/h	262	0	576	226	0	592	344	0	897	350	0	842
V/C Ratio(X)	0.72	0.00	0.76	0.25	0.00	0.66	0.33	0.00	0.59	0.21	0.00	0.60
Avail Cap(c_a), veh/h	262	0	576	226	0	592	344	0	897	350	0	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	17.2	25.0	0.0	16.5	18.4	0.0	11.2	17.2	0.0	11.3
Incr Delay (d2), s/veh	9.5	0.0	5.7	0.6	0.0	2.7	2.5	0.0	2.9	0.3	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.4	0.0	6.1	0.8	0.0	4.9	1.5	0.0	5.6	0.8	0.0	4.9
Lane Grp Delay (d), s/veh	36.0	0.0	23.0	25.6	0.0	19.2	20.9	0.0	14.1	17.5	0.0	12.5
Lane Grp LOS	D		C	C		B	C		B	B		B
Approach Vol, veh/h		626			446			643			577	
Approach Delay, s/veh		26.9			20.0			15.3			13.1	
Approach LOS		C			B			B			B	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		26.0			26.0			34.0			34.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		21.0			21.0			29.0			29.0	
Max Q Clear Time (g_c+I1), s		23.0			19.5			21.5			18.5	
Green Ext Time (p_c), s		0.0			0.9			4.2			5.4	

Intersection Summary												
HCM 2010 Ctrl Delay			18.8									
HCM 2010 LOS			B									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	14	368	383	13	8	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1892	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1892	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	400	416	14	9	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	415	430	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	14	368	383	13	8	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	15	400	416	14	9	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	430	0	-	0	853	423
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	430	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1140	-	-	-	332	635
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	660	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1140	-	-	-	326	635
Mov Capacity-2 Maneuver	-	-	-	-	326	-
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	649	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.9
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1140	-	-	-	422
HCM Lane V/C Ratio	0.013	-	-	-	0.039
HCM Control Delay (s)	8.201	0	-	-	13.9
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.041	-	-	-	0.12

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	277	12	1	432	77	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.995			0.980							
Flt Protected		0.991										
Satd. Flow (prot)	0	1855	0	0	1844	0	0	1900	0	0	0	0
Flt Permitted		0.991										
Satd. Flow (perm)	0	1855	0	0	1844	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	78	318	14	1	514	92	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	410	0	0	607	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	68	277	12	1	432	77	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	78	318	14	1	514	92	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	606	0	0	340	0	0	1053	1098	340
Stage 1	-	-	-	-	-	-	490	490	-
Stage 2	-	-	-	-	-	-	563	608	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	977	-	-	1225	-	-	253	215	707
Stage 1	-	-	-	-	-	-	620	552	-
Stage 2	-	-	-	-	-	-	574	489	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	977	-	-	1218	-	-	226	0	698
Mov Capacity-2 Maneuver	-	-	-	-	-	-	226	0	-
Stage 1	-	-	-	-	-	-	556	0	-
Stage 2	-	-	-	-	-	-	573	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.7	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	977	-	-	1218	-	-
HCM Lane V/C Ratio	+	0.08	-	-	0.001	-	-
HCM Control Delay (s)	0	9.005	0	-	7.959	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.26	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	110	101	41	124	0	320	0	85	9	64	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.935							0.850		0.970	
Flt Protected					0.988		0.950				0.995	
Satd. Flow (prot)	0	1759	0	0	1877	0	1805	0	1615	0	1834	0
Flt Permitted					0.988		0.950				0.995	
Satd. Flow (perm)	0	1759	0	0	1877	0	1805	0	1615	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	134	123	51	153	0	360	0	108	13	90	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	257	0	0	204	0	360	0	108	0	133	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

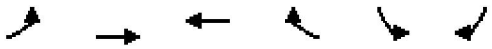
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	110	101	41	124	0	320	0	85	9	64	21
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	134	123	51	153	0	360	0	108	13	90	30
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	12.8	12.6	18.5	11
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	25%	10%
Vol Thru, %	0%	0%	52%	75%	68%
Vol Right, %	0%	100%	48%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	320	85	211	165	94
LT Vol	0	0	110	124	64
Through Vol	0	85	101	0	21
RT Vol	320	0	0	41	9
Lane Flow Rate	360	108	257	204	132
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.659	0.161	0.411	0.349	0.225
Departure Headway (Hd)	6.594	5.376	5.752	6.161	6.122
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	547	664	620	579	581
Service Time	4.358	3.14	3.831	4.245	4.212
HCM Lane V/C Ratio	0.658	0.163	0.415	0.352	0.227
HCM Control Delay	21.3	9.2	12.8	12.6	11
HCM Lane LOS	C	A	B	B	B
HCM 95th-tile Q	4.8	0.6	2	1.6	0.9

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	163	13	12	11	14	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.936		0.879	
Flt Protected		0.956			0.995	
Satd. Flow (prot)	0	1747	1778	0	1645	0
Flt Permitted		0.956			0.995	
Satd. Flow (perm)	0	1747	1778	0	1645	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		466	313		498	
Travel Time (s)		10.6	7.1		11.3	
Confl. Peds. (#/hr)	2			3	7	7
Peak Hour Factor	0.96	0.96	0.60	0.60	0.79	0.79
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Adj. Flow (vph)	170	14	20	18	18	153
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	184	38	0	171	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.5

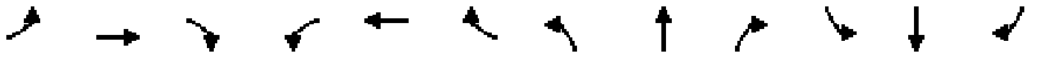
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	163	13	12	11	14	121
Conflicting Peds, #/hr	2	0	0	3	7	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	60	60	79	79
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	170	14	20	18	18	153

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	45	0	-	0	389	38
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	353	-
Follow-up Headway	2.236	-	-	-	3.509	3.309
Pot Capacity-1 Maneuver	1550	-	-	-	617	1037
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	713	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1547	-	-	-	542	1029
Mov Capacity-2 Maneuver	-	-	-	-	542	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	9.7
HCM LOS			A

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1547	-	-	-	941
HCM Lane V/C Ratio	0.11	-	-	-	0.182
HCM Control Delay (s)	7.614	0	-	-	9.7
HCM Lane LOS	A	A			A
HCM 95th %tile Q(veh)	0.369	-	-	-	0.661

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	124	14	126	99	105	28	141	148	98	144	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	15	15	15	16	16	16	12	12	12	16	16	16
Grade (%)		-1%			0%			6%			4%	
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
Ped Bike Factor		1.00			0.98			0.97			0.98	
Frt		0.988			0.957			0.937			0.998	
Flt Protected		0.995			0.981			0.996			0.981	
Satd. Flow (prot)	0	1918	0	0	1526	0	0	1456	0	0	1717	0
Flt Permitted		0.943			0.813			0.996			0.981	
Satd. Flow (perm)	0	1813	0	0	1265	0	0	1456	0	0	1690	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					38			64				
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		10.1			9.6			10.7			11.3	
Confl. Peds. (#/hr)	32					32			23	23		
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.70	0.70	0.70	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	21%	3%	5%	5%	17%	2%	3%	2%	13%
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	19	138	16	148	116	124	40	201	211	111	164	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	173	0	0	388	0	0	452	0	0	280	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	0.94	0.94	0.94	0.91	1.05	0.91	1.11	1.11	1.11	0.94	1.07	0.94
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	

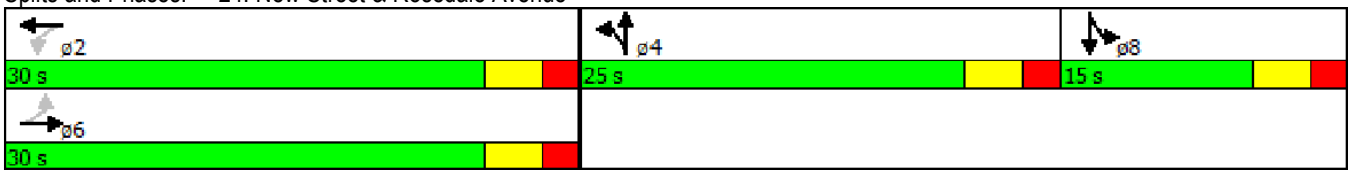
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		-1.0			-1.0			-1.0			-1.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	11	11		11	11							
Act Effct Green (s)		26.0			26.0			20.9			11.0	
Actuated g/C Ratio		0.37			0.37			0.30			0.16	
v/c Ratio		0.26			0.79			0.94			1.04	
Control Delay		16.6			31.4			52.4			98.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.6			31.4			52.4			98.6	
LOS		B			C			D			F	
Approach Delay		16.6			31.4			52.4			98.6	
Approach LOS		B			C			D			F	
Queue Length 50th (ft)		51			131			164			~133	
Queue Length 95th (ft)		93			#246			#197			#262	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		674			494			482			269	
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		0.26			0.79			0.94			1.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.9			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 51.3		Intersection LOS: D	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
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: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	17	124	14	126	99	105	28	141	148	98	144	4
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.97		0.96	1.00		0.96	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	188.1	184.4	188.1	187.2	169.4	187.2	174.6	160.3	174.6	183.5	178.8	183.5
Adj Flow Rate, veh/h	19	138	16	148	116	124	40	201	211	111	164	5
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.70	0.70	0.70	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	3	3	3	17	17	17	2	2	2
Cap, veh/h	91	548	59	224	159	146	38	193	202	98	145	4
Arrive On Green	0.36	0.37	0.36	0.36	0.37	0.36	0.29	0.30	0.29	0.14	0.16	0.14
Sat Flow, veh/h	91	1475	160	412	427	394	128	642	674	623	920	28
Grp Volume(v), veh/h	173	0	0	388	0	0	452	0	0	280	0	0
Grp Sat Flow(s),veh/h/ln	1725	0	0	1233	0	0	1444	0	0	1570	0	0
Q Serve(g_s), s	0.0	0.0	0.0	15.6	0.0	0.0	21.0	0.0	0.0	11.0	0.0	0.0
Cycle Q Clear(g_c), s	4.7	0.0	0.0	20.3	0.0	0.0	21.0	0.0	0.0	11.0	0.0	0.0
Prop In Lane	0.11		0.09	0.38		0.32	0.09		0.47	0.40		0.02
Lane Grp Cap(c), veh/h	673	0	0	511	0	0	433	0	0	247	0	0
V/C Ratio(X)	0.26	0.00	0.00	0.76	0.00	0.00	1.04	0.00	0.00	1.13	0.00	0.00
Avail Cap(c_a), veh/h	673	0	0	511	0	0	433	0	0	247	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.4	0.0	0.0	20.2	0.0	0.0	24.8	0.0	0.0	29.7	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	10.1	0.0	0.0	55.0	0.0	0.0	98.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	0.0	0.0	13.3	0.0	0.0	26.9	0.0	0.0	20.7	0.0	0.0
LnGrp Delay(d),s/veh	16.3	0.0	0.0	30.3	0.0	0.0	79.7	0.0	0.0	128.1	0.0	0.0
LnGrp LOS	B			C			F			F		
Approach Vol, veh/h		173			388			452			280	
Approach Delay, s/veh		16.3			30.3			79.7			128.1	
Approach LOS		B			C			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		25.0		30.0		15.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		25.0		20.0		25.0		10.0
Max Q Clear Time (g_c+I1), s		22.3		23.0		6.7		13.0
Green Ext Time (p_c), s		1.0		0.0		3.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.9
HCM 2010 LOS	E

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	300	64	16	242	60	15
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.976				0.973	
Flt Protected				0.997	0.962	
Satd. Flow (prot)	1722	0	0	1563	1649	0
Flt Permitted				0.997	0.962	
Satd. Flow (perm)	1722	0	0	1563	1649	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	351			1056	303	
Travel Time (s)	9.6			28.8	8.3	
Confl. Peds. (#/hr)		29	29		12	2
Peak Hour Factor	0.82	0.82	0.88	0.88	0.79	0.79
Heavy Vehicles (%)	2%	2%	9%	3%	2%	3%
Parking (#/hr)			0	0		
Adj. Flow (vph)	366	78	18	275	76	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	444	0	0	293	95	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.22	1.07	1.07
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	300	64	16	242	60	15
Conflicting Peds, #/hr	0	29	29	0	12	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	88	88	79	79
Heavy Vehicles, %	2	2	9	3	2	3
Mvmt Flow	366	78	18	275	76	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	456	0	728	446
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	311	-
Critical Hdwy	-	-	4.3	-	7.1	6.23
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	3	-	3	3.1
Pot Cap-1 Maneuver	-	-	837	-	381	646
Stage 1	-	-	-	-	758	-
Stage 2	-	-	-	-	853	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	817	-	359	624
Mov Cap-2 Maneuver	-	-	-	-	359	-
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	811	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	392	-	-	817	-
HCM Lane V/C Ratio	0.242	-	-	0.022	-
HCM Control Delay (s)	17.1	-	-	9.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	316	240	0	77	67
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.937	
Flt Protected					0.974	
Satd. Flow (prot)	0	1748	1765	0	1263	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1748	1765	0	1263	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1056	452		257	
Travel Time (s)		28.8	12.3		7.0	
Confl. Peds. (#/hr)					196	209
Peak Hour Factor	0.87	0.87	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	2%	3%	2%	5%	5%	31%
Parking (#/hr)					0	0
Adj. Flow (vph)	0	363	264	0	99	86
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	363	264	0	185	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.22	1.07
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

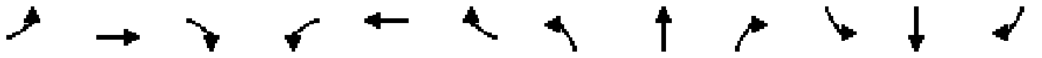
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	316	0	240	0	0	77	67
Peak Hour Factor	0.92	0.87	0.87	0.92	0.91	0.91	0.92	0.78	0.78
Heavy Vehicles, %	2	2	3	2	2	5	2	5	31
Mvmt Flow	0	0	363	0	264	0	0	99	86
Number of Lanes	0	0	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	12.2	10.6	10.3
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	53%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	47%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	316	240	144
LT Vol	316	240	0
Through Vol	0	0	67
RT Vol	0	0	77
Lane Flow Rate	363	264	185
Geometry Grp	1	1	1
Degree of Util (X)	0.48	0.355	0.269
Departure Headway (Hd)	4.755	4.851	5.244
Convergence, Y/N	Yes	Yes	Yes
Cap	752	736	679
Service Time	2.818	2.92	3.326
HCM Lane V/C Ratio	0.483	0.359	0.272
HCM Control Delay	12.2	10.6	10.3
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.6	1.6	1.1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	138	173	150	157	128	222	232	327	204	201	312	254
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	10	15	15	11	11	11
Grade (%)		1%			2%			3%			-3%	
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.77	0.78		0.79	0.67			0.82		0.88	0.90	
Frt		0.930			0.905			0.942			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1668	1267	0	1660	1063	0	1541	1477	0	1645	1448	0
Flt Permitted	0.338			0.339			0.133			0.245		
Satd. Flow (perm)	458	1267	0	466	1063	0	216	1477	0	372	1448	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		452			184			385			523	
Travel Time (s)		12.3			5.0			10.5			14.3	
Confl. Peds. (#/hr)	357		315	315		357	129		274	274		129
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.83	0.83	0.83	0.67	0.67	0.67
Adj. Flow (vph)	179	225	195	189	154	267	280	394	246	300	466	379
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	420	0	189	421	0	280	640	0	300	845	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			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.08	1.08	1.08	1.09	1.09	1.09	1.19	0.97	0.97	1.10	1.10	1.10
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	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	26.0	26.0		26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%		43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)	-1.0	-1.0		-1.0	-1.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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	Max	Max		Max	Max		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	45	45		45	45		45	45		45	45	
Act Effct Green (s)	22.0	22.0		22.0	22.0		30.0	30.0		30.0	30.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.50	0.50		0.50	0.50	
v/c Ratio	1.07	0.91		1.11	1.08		2.59	0.87		1.61	1.17	
Control Delay	116.7	45.6		128.4	93.3		759.3	28.8		320.1	109.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	116.7	45.6		128.4	93.3		759.3	28.8		320.1	109.3	
LOS	F	D		F	F		F	C		F	F	
Approach Delay		66.8			104.2			251.1			164.6	
Approach LOS		E			F			F			F	
Queue Length 50th (ft)	~74	140		~81	~176		~142	189		~161	~376	
Queue Length 95th (ft)	#144	#227		#169	#289		#246	#334		#199	#352	
Internal Link Dist (ft)		372			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	167	464		170	389		108	738		186	724	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.07	0.91		1.11	1.08		2.59	0.87		1.61	1.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.59			
Intersection Signal Delay: 159.8		Intersection LOS: F	

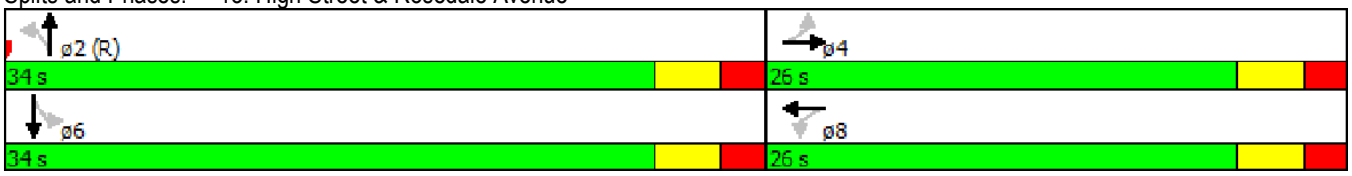
Intersection Capacity Utilization 98.9% ICU Level of Service F

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: 13: High Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	138	173	150	157	128	222	232	327	204	201	312	254
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.52	1.00		0.52	1.00		0.72	1.00		0.72
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	175.6	175.6	179.1	174.7	174.7	178.2	173.8	180.8	184.4	179.1	179.1	182.7
Adj Flow Rate, veh/h	179	225	195	189	154	267	280	394	246	300	466	379
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.83	0.83	0.83	0.67	0.67	0.67
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	217	188	128	130	225	125	446	279	205	383	312
Arrive On Green	0.37	0.37	0.35	0.37	0.37	0.35	0.50	0.50	0.48	0.50	0.50	0.48
Sat Flow, veh/h	907	591	512	903	353	613	606	893	557	756	767	624
Grp Volume(v), veh/h	179	0	420	189	0	421	280	0	640	300	0	845
Grp Sat Flow(s),veh/h/ln	907	0	1103	903	0	966	606	0	1450	756	0	1391
Q Serve(g_s), s	0.5	0.0	22.0	0.5	0.0	22.0	0.5	0.0	23.8	6.7	0.0	30.0
Cycle Q Clear(g_c), s	22.0	0.0	22.0	22.0	0.0	22.0	30.0	0.0	23.8	30.0	0.0	30.0
Prop In Lane	1.00		0.46	1.00		0.63	1.00		0.38	1.00		0.45
Lane Grp Cap(c), veh/h	128	0	404	128	0	354	125	0	725	205	0	695
V/C Ratio(X)	1.40	0.00	1.04	1.48	0.00	1.19	2.24	0.00	0.88	1.46	0.00	1.22
Avail Cap(c_a), veh/h	128	0	404	128	0	354	125	0	725	205	0	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	19.2	30.0	0.0	19.3	30.0	0.0	13.6	28.6	0.0	15.2
Incr Delay (d2), s/veh	221.7	0.0	55.1	254.0	0.0	109.7	582.5	0.0	14.6	234.0	0.0	109.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.9	0.0	23.1	20.0	0.0	29.9	40.1	0.0	17.9	30.0	0.0	58.7
LnGrp Delay(d),s/veh	251.7	0.0	74.4	284.0	0.0	129.0	612.5	0.0	28.2	262.6	0.0	124.9
LnGrp LOS	F		F	F		F	F		C	F		F
Approach Vol, veh/h		599			610			920			1145	
Approach Delay, s/veh		127.3			177.1			206.1			161.0	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		34.0		26.0		34.0		26.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		29.0		21.0		29.0		21.0
Max Q Clear Time (g_c+I1), s		32.5		24.5		32.5		24.5
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	170.5
HCM 2010 LOS	F

APPENDIX D

LOS Results – Future (2018) No Build

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	337	52	358	140	63	636
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982			0.850		
Flt Protected	0.958					0.996
Satd. Flow (prot)	1752	0	1863	1583	0	1855
Flt Permitted	0.958					0.996
Satd. Flow (perm)	1752	0	1863	1583	0	1855
Link Speed (mph)	30		30			30
Link Distance (ft)	319		405			403
Travel Time (s)	7.3		9.2			9.2
Peak Hour Factor	0.98	0.98	0.85	0.85	0.92	0.92
Adj. Flow (vph)	344	53	421	165	68	691
Shared Lane Traffic (%)						
Lane Group Flow (vph)	397	0	421	165	0	759
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 87.6%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	124

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	337	52	358	140	63	636
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	85	85	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	344	53	421	165	68	691

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1249	421	0	0	421	0
Stage 1	421	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 191	632	-	-	1138	-
Stage 1	662	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 172	632	-	-	1138	-
Mov Cap-2 Maneuver	~ 172	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	387	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 543	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	191	1138	-
HCM Lane V/C Ratio	-	-	2.078	0.06	-
HCM Control Delay (s)	-	-	$ 543	8.4	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	30.6	0.2	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	169	13	16	263	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.877	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1862	0	0	1857	1658	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1862	0	0	1857	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	180	14	18	299	2	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	0	0	317	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

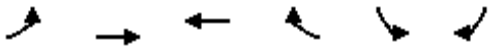
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	169	13	16	263	1	13
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	180	14	18	299	2	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	196	0	524	189
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	335	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1377	-	517	858
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	729	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1377	-	508	857
Mov Capacity-2 Maneuver	-	-	-	-	508	-
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	717	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.5
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	817	-	-	1377	-
HCM Lane V/C Ratio	0.026	-	-	0.013	-
HCM Control Delay (s)	9.5	-	-	7.649	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.081	-	-	0.04	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	232	166	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	267	182	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	269	183	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

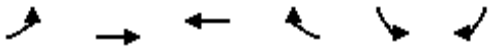
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	232	166	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	267	182	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	8.3	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	234	167	4
LT Vol	232	166	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	269	184	12
Geometry Grp	1	1	1
Degree of Util (X)	0.303	0.211	0.016
Departure Headway (Hd)	4.06	4.135	4.659
Convergence, Y/N	Yes	Yes	Yes
Cap	880	861	773
Service Time	2.11	2.199	2.659
HCM Lane V/C Ratio	0.306	0.214	0.016
HCM Control Delay	8.9	8.3	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	0.8	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	186	288	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1877	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1877	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	198	327	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	201	332	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.5

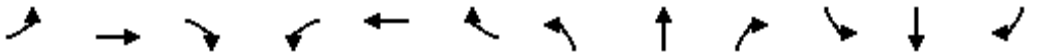
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	186	288	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	198	327	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	337	0	-	0	539	336
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	204	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1217	-	-	-	507	711
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	835	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1216	-	-	-	501	707
Mov Capacity-2 Maneuver	-	-	-	-	501	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	829	-

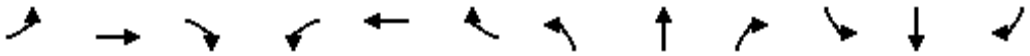
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.3
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1216	-	-	-	598
HCM Lane V/C Ratio	0.003	-	-	-	0.04
HCM Control Delay (s)	7.968	0	-	-	11.3
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.008	-	-	-	0.124

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	151	21	107	265	123	16	166	148	119	175	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
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
Ped Bike Factor		0.99									0.97	
Frt		0.985			0.966			0.939			0.990	
Flt Protected		0.994			0.989			0.998			0.982	
Satd. Flow (prot)	0	1875	0	0	1815	0	0	1629	0	0	1833	0
Flt Permitted		0.917			0.863			0.998			0.982	
Satd. Flow (perm)	0	1729	0	0	1584	0	0	1629	0	0	1798	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		10									5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)	12		12							25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	26	178	25	124	308	143	19	200	178	137	201	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	575	0	0	397	0	0	364	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	0.96	0.96	0.96	0.85	0.97	0.85	1.09	1.09	1.09	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								



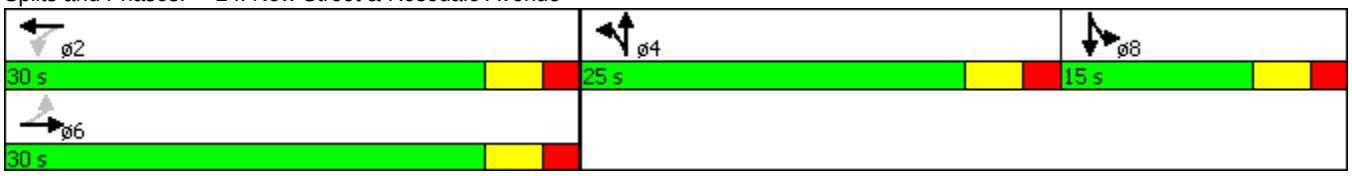
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		5.0			5.0			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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	0	0		0	0							
Act Effct Green (s)		25.0			25.0			19.1			10.0	
Actuated g/C Ratio		0.36			0.36			0.28			0.14	
v/c Ratio		0.36			1.00			0.88			1.35	
Control Delay		17.8			64.3			47.7			208.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.8			64.3			47.7			208.6	
LOS		B			E			D			F	
Approach Delay		17.8			64.3			47.7			208.6	
Approach LOS		B			E			D			F	
Queue Length 50th (ft)		68			~251			161			~212	
Queue Length 95th (ft)		114			#418			#268			#352	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		632			573			471			270	
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		0.36			1.00			0.84			1.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.1			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay: 86.9		Intersection LOS: F	
Intersection Capacity Utilization 93.4%		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: 24: New Street & Rosedale Avenue



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Protected Phases		6		2	4	8
Permitted Phases	6		2			
Minimum Initial (s)	15.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	30.0	30.0	30.0	30.0	25.0	15.0
Total Split (s)	30.0	30.0	30.0	30.0	25.0	15.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	35.7%	21.4%
Maximum Green (s)	25.0	25.0	25.0	25.0	20.0	10.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	None	None
Walk Time (s)	5.0	5.0	5.0	5.0		
Flash Dont Walk (s)	11.0	11.0	11.0	11.0		
Pedestrian Calls (#/hr)	0	0	0	0		
90th %ile Green (s)	25.0	25.0	25.0	25.0	20.0	10.0
90th %ile Term Code	MaxR	MaxR	MaxR	MaxR	Max	Max
70th %ile Green (s)	25.0	25.0	25.0	25.0	20.0	10.0
70th %ile Term Code	MaxR	MaxR	MaxR	MaxR	Max	Max
50th %ile Green (s)	25.0	25.0	25.0	25.0	20.0	10.0
50th %ile Term Code	MaxR	MaxR	MaxR	MaxR	Max	Max
30th %ile Green (s)	25.0	25.0	25.0	25.0	20.0	10.0
30th %ile Term Code	MaxR	MaxR	MaxR	MaxR	Max	Max
10th %ile Green (s)	25.0	25.0	25.0	25.0	15.5	10.0
10th %ile Term Code	MaxR	MaxR	MaxR	MaxR	Gap	Max

Intersection Summary
Cycle Length: 70
Actuated Cycle Length: 69.1
Control Type: Semi Act-Uncoord
90th %ile Actuated Cycle: 70
70th %ile Actuated Cycle: 70
50th %ile Actuated Cycle: 70
30th %ile Actuated Cycle: 70
10th %ile Actuated Cycle: 65.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	151	21	107	265	123	16	166	148	119	175	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	134	778	102	217	461	195	23	245	218	179	262	34
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	102	1517	198	249	899	380	82	868	772	634	930	120
Grp Volume(v), veh/h	229	0	0	575	0	0	397	0	0	364	0	0
Grp Sat Flow(s),veh/h/ln	1817	0	0	1527	0	0	1722	0	0	1684	0	0
Q Serve(g_s), s	0.0	0.0	0.0	8.3	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	3.3	0.0	0.0	13.9	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.11		0.11	0.22		0.25	0.05		0.45	0.38		0.07
Lane Grp Cap(c), veh/h	1014	0	0	873	0	0	486	0	0	475	0	0
V/C Ratio(X)	0.23	0.00	0.00	0.66	0.00	0.00	0.82	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	1014	0	0	873	0	0	706	0	0	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	9.0	0.0	0.0	16.3	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	3.9	0.0	0.0	4.9	0.0	0.0	7.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.4	0.0	0.0	5.1	0.0	0.0	4.6	0.0	0.0	4.6	0.0	0.0
Lane Grp Delay (d), s/veh	7.1	0.0	0.0	12.9	0.0	0.0	21.2	0.0	0.0	23.4	0.0	0.0
Lane Grp LOS	A			B			C			C		
Approach Vol, veh/h		229			575			397			364	
Approach Delay, s/veh		7.1			12.9			21.2			23.4	
Approach LOS		A			B			C			C	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			18.8			18.8	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		5.3			15.9			12.5			11.7	
Green Ext Time (p_c), s		5.4			3.6			1.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			16.6									
HCM 2010 LOS			B									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	361	58	33	519	47	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.954	
Flt Protected				0.997	0.968	
Satd. Flow (prot)	1827	0	0	1857	1720	0
Flt Permitted				0.997	0.968	
Satd. Flow (perm)	1827	0	0	1857	1720	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	63	36	564	51	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	455	0	0	600	77	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.7

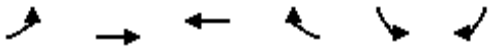
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	361	58	33	519	47	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	392	63	36	564	51	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	455	0	1060	424
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	636	-
Follow-up Headway	-	-	2.218	-	3.518	3.318
Pot Capacity-1 Maneuver	-	-	1106	-	248	630
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	527	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1106	-	236	630
Mov Capacity-2 Maneuver	-	-	-	-	236	-
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	502	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	21.2
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	299	-	-	1106	-
HCM Lane V/C Ratio	0.258	-	-	0.032	-
HCM Control Delay (s)	21.2	-	-	8.364	0
HCM Lane LOS	C			A	A
HCM 95th %tile Q(veh)	1.007	-	-	0.1	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	290	362	0	122	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	1863	1863	0	1720	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1863	1863	0	1720	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	315	393	0	133	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	315	393	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	290	362	0	122	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	315	393	0	133	68
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	11.9	13.5	11.1
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	66%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	34%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	290	362	185
LT Vol	290	362	0
Through Vol	0	0	63
RT Vol	0	0	122
Lane Flow Rate	315	393	201
Geometry Grp	1	1	1
Degree of Util (X)	0.434	0.533	0.312
Departure Headway (Hd)	5.064	4.872	5.591
Convergence, Y/N	Yes	Yes	Yes
Cap	716	732	648
Service Time	3.064	2.969	3.591
HCM Lane V/C Ratio	0.44	0.537	0.31
HCM Control Delay	11.9	13.5	11.1
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.2	3.2	1.3

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	556	87	31	499	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982					
Flt Protected				0.997		
Satd. Flow (prot)	1847	0	0	1894	1900	0
Flt Permitted				0.997		
Satd. Flow (perm)	1847	0	0	1894	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	611	96	33	525	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	707	0	0	558	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	556	87	31	499	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	611	96	33	525	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	707	0	1250	659
Stage 1	-	-	-	-	659	-
Stage 2	-	-	-	-	591	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	901	-	193	467
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	557	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	901	-	183	467
Mov Capacity-2 Maneuver	-	-	-	-	183	-
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	528	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	0	-	-	901	-
HCM Lane V/C Ratio	+	-	-	0.036	-
HCM Control Delay (s)	0	-	-	9.146	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	+	-	-	0.113	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	519	0	0	477	9	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.896	
Flt Protected					0.989	
Satd. Flow (prot)	1863	0	0	1881	1658	0
Flt Permitted					0.989	
Satd. Flow (perm)	1863	0	0	1881	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	570	0	0	548	12	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	570	0	0	548	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.8

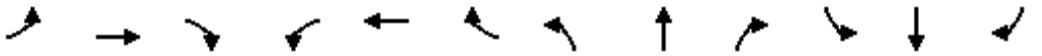
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	519	0	0	477	9	30
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	570	0	0	548	12	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	670	0	1218	671
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	548	-
Follow-up Headway	-	-	2.218	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	920	-	201	456
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	583	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	919	-	184	418
Mov Capacity-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	469	-
Stage 2	-	-	-	-	582	-

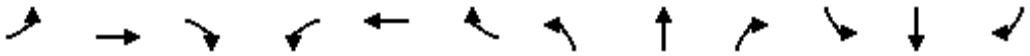
Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.3
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	323	-	-	919	-
HCM Lane V/C Ratio	0.165	-	-	-	-
HCM Control Delay (s)	18.3	-	-	0	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	0.584	-	-	0	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	229	131	43	254	107	100	444	69	76	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.93	0.94		0.93	0.94		0.97	0.96		0.90	0.93	
Frt		0.945			0.956			0.980			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1657	0	1805	1654	0	1668	1894	0	1685	1613	0
Flt Permitted	0.358			0.300			0.299			0.275		
Satd. Flow (perm)	601	1657	0	527	1654	0	508	1894	0	437	1613	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					43						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	58		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	209	305	175	61	302	127	123	505	78	79	456	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	480	0	61	429	0	123	583	0	79	556	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
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	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		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	None	None		None	None		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.4	22.4		22.4	22.4		27.6	27.6		27.6	27.6	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.46	0.46		0.46	0.46	
v/c Ratio	0.93	0.78		0.31	0.67		0.53	0.67		0.39	0.74	
Control Delay	67.2	25.9		17.0	19.1		24.6	18.8		19.9	22.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	67.2	25.9		17.0	19.1		24.6	18.8		19.9	22.0	
LOS	E	C		B	B		C	B		B	C	
Approach Delay		38.4			18.9			19.8			21.8	
Approach LOS		D			B			B			C	
Queue Length 50th (ft)	65	136		14	103		33	170		19	163	
Queue Length 95th (ft)	#144	175		29	165		#76	270		58	#329	
Internal Link Dist (ft)		132			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	250	690		219	714		233	872		201	755	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.84	0.70		0.28	0.60		0.53	0.67		0.39	0.74	

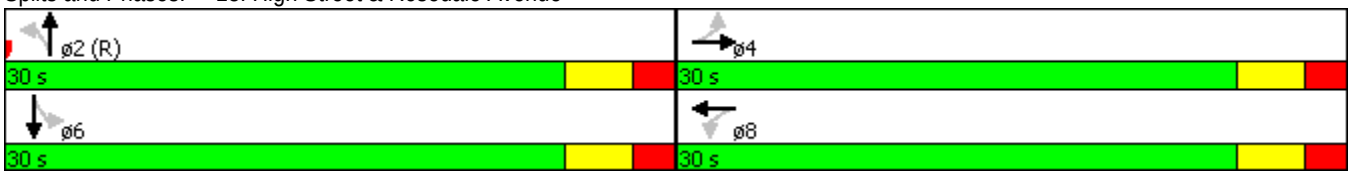
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 25.2		Intersection LOS: C	

Intersection Capacity Utilization 81.6% 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: 13: High Street & Rosedale Avenue

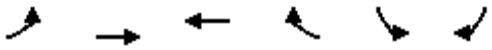


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	165	229	131	43	254	107	100	444	69	76	410	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.88	0.96		0.86	0.92		0.81	0.94		0.75
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	188.1	195.6	197.6	190.0	190.0	190.0
Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Cap, veh/h	319	440	253	280	502	211	230	666	103	238	589	129
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	897	1057	606	890	1204	506	791	1599	247	797	1413	310
Grp Volume(v), veh/h	209	0	480	61	0	429	123	0	583	79	0	556
Grp Sat Flow(s),veh/h/ln	897	0	1663	890	0	1710	791	0	1846	797	0	1723
Q Serve(g_s), s	13.3	0.0	14.2	3.6	0.0	11.7	8.3	0.0	16.2	5.6	0.0	16.7
Cycle Q Clear(g_c), s	25.0	0.0	14.2	17.8	0.0	11.7	25.0	0.0	16.2	21.8	0.0	16.7
Prop In Lane	1.00		0.36	1.00		0.30	1.00		0.13	1.00		0.18
Lane Grp Cap(c), veh/h	319	0	693	280	0	713	230	0	769	238	0	718
V/C Ratio(X)	0.66	0.00	0.69	0.22	0.00	0.60	0.54	0.00	0.76	0.33	0.00	0.77
Avail Cap(c_a), veh/h	319	0	693	280	0	713	230	0	769	238	0	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	14.4	21.7	0.0	13.6	26.3	0.0	14.9	24.2	0.0	15.1
Incr Delay (d2), s/veh	4.8	0.0	3.0	0.4	0.0	1.4	8.7	0.0	6.9	0.8	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.4	0.0	5.8	0.8	0.0	4.7	2.3	0.0	8.0	1.1	0.0	7.4
Lane Grp Delay (d), s/veh	28.5	0.0	17.3	22.0	0.0	15.1	35.0	0.0	21.8	25.0	0.0	20.4
Lane Grp LOS	C		B	C		B	C		C	C		C
Approach Vol, veh/h		689			490			706			635	
Approach Delay, s/veh		20.7			15.9			24.1			21.0	
Approach LOS		C			B			C			C	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		30.0			30.0			30.0			30.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			25.0			25.0	
Max Q Clear Time (g_c+I1), s		27.0			19.8			27.0			23.8	
Green Ext Time (p_c), s		0.0			3.0			0.0			0.9	

Intersection Summary												
HCM 2010 Ctrl Delay			20.8									
HCM 2010 LOS			C									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	405	421	14	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1892	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1892	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	440	458	15	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	456	473	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.4

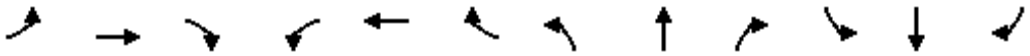
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	405	421	14	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	440	458	15	10	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	473	0	-	0	938	465
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	473	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1099	-	-	-	296	602
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	631	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1099	-	-	-	290	602
Mov Capacity-2 Maneuver	-	-	-	-	290	-
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	619	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.8
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1099	-	-	-	384
HCM Lane V/C Ratio	0.015	-	-	-	0.048
HCM Control Delay (s)	8.325	0	-	-	14.8
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.045	-	-	-	0.151

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	304	13	1	475	85	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.995			0.980							
Flt Protected		0.991										
Satd. Flow (prot)	0	1855	0	0	1844	0	0	1900	0	0	0	0
Flt Permitted		0.991										
Satd. Flow (perm)	0	1855	0	0	1844	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	86	349	15	1	565	101	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	450	0	0	667	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.9%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.7

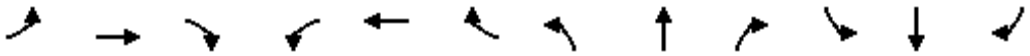
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	75	304	13	1	475	85	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	86	349	15	1	565	101	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	667	0	0	372	0	0	1155	1206	372
Stage 1	-	-	-	-	-	-	537	537	-
Stage 2	-	-	-	-	-	-	618	669	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	927	-	-	1192	-	-	220	185	678
Stage 1	-	-	-	-	-	-	590	526	-
Stage 2	-	-	-	-	-	-	542	459	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	927	-	-	1185	-	-	193	0	670
Mov Capacity-2 Maneuver	-	-	-	-	-	-	193	0	-
Stage 1	-	-	-	-	-	-	517	0	-
Stage 2	-	-	-	-	-	-	541	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.8	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	927	-	-	1185	-	-
HCM Lane V/C Ratio	+	0.093	-	-	0.001	-	-
HCM Control Delay (s)	0	9.281	0	-	8.041	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.307	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	121	111	45	136	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.936							0.850		0.970	
Flt Protected					0.988		0.950				0.995	
Satd. Flow (prot)	0	1761	0	0	1877	0	1805	0	1615	0	1834	0
Flt Permitted					0.988		0.950				0.995	
Satd. Flow (perm)	0	1761	0	0	1877	0	1805	0	1615	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	148	135	56	168	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	283	0	0	224	0	396	0	118	0	145	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	121	111	45	136	0	352	0	93	10	70	23
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	148	135	56	168	0	396	0	118	14	99	32
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	14.8	14.1	23.5	12
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	25%	10%
Vol Thru, %	0%	0%	52%	75%	68%
Vol Right, %	0%	100%	48%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	352	93	232	181	103
LT Vol	0	0	121	136	70
Through Vol	0	93	111	0	23
RT Vol	352	0	0	45	10
Lane Flow Rate	396	118	283	223	145
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.75	0.183	0.482	0.408	0.266
Departure Headway (Hd)	6.953	5.731	6.139	6.576	6.59
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	522	630	588	550	545
Service Time	4.653	3.431	4.161	4.6	4.626
HCM Lane V/C Ratio	0.759	0.187	0.481	0.405	0.266
HCM Control Delay	27.6	9.7	14.8	14.1	12
HCM Lane LOS	D	A	B	B	B
HCM 95th-tile Q	6.4	0.7	2.6	2	1.1

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	179	14	13	12	15	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.935		0.878	
Flt Protected		0.956			0.995	
Satd. Flow (prot)	0	1781	1742	0	1627	0
Flt Permitted		0.956			0.995	
Satd. Flow (perm)	0	1781	1742	0	1627	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		255	313		498	
Travel Time (s)		5.8	7.1		11.3	
Confl. Peds. (#/hr)					1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	195	15	14	13	16	145
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	210	27	0	161	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.3%		ICU Level of Service A	
Analysis Period (min) 15			

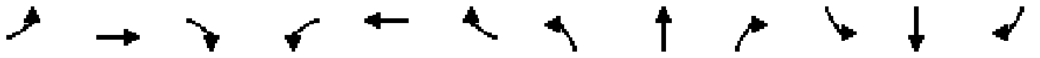
Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	179	14	13	12	15	133
Conflicting Peds, #/hr	0	0	0	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	195	15	14	13	16	145

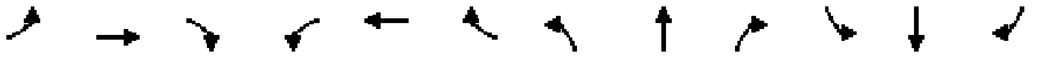
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	426	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	404	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	585	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	674	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	512	1054
Mov Cap-2 Maneuver	-	-	-	-	512	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	590	-

Approach	EB	WB	SB
HCM Control Delay, s	7	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1585	-	-	-	952
HCM Lane V/C Ratio	0.123	-	-	-	0.169
HCM Control Delay (s)	7.6	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.4	-	-	-	0.6



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	134	15	136	107	113	30	152	160	106	155	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	15	15	15	16	16	16	12	12	12	16	16	16
Grade (%)		-1%			0%			6%			4%	
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
Ped Bike Factor		1.00			0.98			0.97			0.99	
Frt		0.988			0.957			0.937			0.998	
Flt Protected		0.995			0.981			0.996			0.980	
Satd. Flow (prot)	0	1918	0	0	1526	0	0	1456	0	0	1715	0
Flt Permitted		0.940			0.794			0.996			0.980	
Satd. Flow (perm)	0	1808	0	0	1235	0	0	1456	0	0	1690	0
Right Turn on Red			No			Yes			Yes			No
Satd. Flow (RTOR)					38			65				
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		10.1			9.6			10.7			11.3	
Confl. Peds. (#/hr)	32					32			23	23		
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.70	0.70	0.70	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	21%	3%	5%	5%	17%	2%	3%	2%	13%
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	20	149	17	160	126	133	43	217	229	120	176	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	186	0	0	419	0	0	489	0	0	301	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	0.94	0.94	0.94	0.91	1.05	0.91	1.11	1.11	1.11	0.94	1.07	0.94
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	



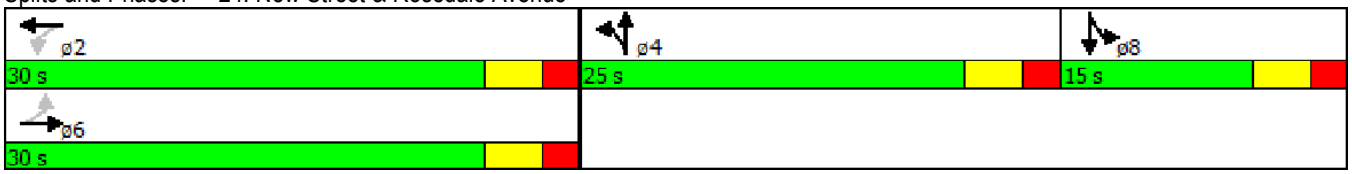
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		-1.0			-1.0			-1.0			-1.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	11	11		11	11							
Act Effct Green (s)		26.0			26.0			21.0			11.0	
Actuated g/C Ratio		0.37			0.37			0.30			0.16	
v/c Ratio		0.28			0.87			1.01			1.12	
Control Delay		16.8			40.0			69.4			122.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		16.8			40.0			69.4			122.5	
LOS		B			D			E			F	
Approach Delay		16.8			40.0			69.4			122.5	
Approach LOS		B			D			E			F	
Queue Length 50th (ft)		55			150			~192			~153	
Queue Length 95th (ft)		100			#284			#239			#285	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		671			482			482			269	
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		0.28			0.87			1.01			1.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 65.0		Intersection LOS: E	
Intersection Capacity Utilization 84.5%		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.

Splits and Phases: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	18	134	15	136	107	113	30	152	160	106	155	4
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.97		0.96	1.00		0.96	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	188.1	184.4	188.1	187.2	169.4	187.2	174.6	160.3	174.6	183.5	178.8	183.5
Adj Flow Rate, veh/h	20	149	17	160	126	133	43	217	229	120	176	5
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.70	0.70	0.70	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	3	3	3	17	17	17	2	2	2
Cap, veh/h	89	545	58	225	154	143	38	192	203	98	144	4
Arrive On Green	0.36	0.37	0.36	0.36	0.37	0.36	0.29	0.30	0.29	0.14	0.16	0.14
Sat Flow, veh/h	86	1466	156	414	416	386	127	641	676	626	919	26
Grp Volume(v), veh/h	186	0	0	419	0	0	489	0	0	301	0	0
Grp Sat Flow(s),veh/h/ln	1708	0	0	1215	0	0	1444	0	0	1571	0	0
Q Serve(g_s), s	0.0	0.0	0.0	18.5	0.0	0.0	21.0	0.0	0.0	11.0	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	0.0	23.6	0.0	0.0	21.0	0.0	0.0	11.0	0.0	0.0
Prop In Lane	0.11		0.09	0.38		0.32	0.09		0.47	0.40		0.02
Lane Grp Cap(c), veh/h	667	0	0	505	0	0	433	0	0	247	0	0
V/C Ratio(X)	0.28	0.00	0.00	0.83	0.00	0.00	1.13	0.00	0.00	1.22	0.00	0.00
Avail Cap(c_a), veh/h	667	0	0	505	0	0	433	0	0	247	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.5	0.0	0.0	21.3	0.0	0.0	24.8	0.0	0.0	29.7	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	14.6	0.0	0.0	83.3	0.0	0.0	129.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.0	0.0	0.0	15.3	0.0	0.0	33.0	0.0	0.0	24.5	0.0	0.0
LnGrp Delay(d),s/veh	16.5	0.0	0.0	35.8	0.0	0.0	108.1	0.0	0.0	159.3	0.0	0.0
LnGrp LOS	B			D			F			F		
Approach Vol, veh/h		186			419			489			301	
Approach Delay, s/veh		16.5			35.8			108.1			159.3	
Approach LOS		B			D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		25.0		30.0		15.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		25.0		20.0		25.0		10.0
Max Q Clear Time (g_c+I1), s		25.6		23.0		7.1		13.0
Green Ext Time (p_c), s		0.0		0.0		4.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	85.2
HCM 2010 LOS	F

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	324	69	17	261	65	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.976				0.974	
Flt Protected				0.997	0.961	
Satd. Flow (prot)	1722	0	0	1563	1649	0
Flt Permitted				0.997	0.961	
Satd. Flow (perm)	1722	0	0	1563	1649	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	351			1056	303	
Travel Time (s)	9.6			28.8	8.3	
Confl. Peds. (#/hr)		29	29		12	2
Peak Hour Factor	0.82	0.82	0.88	0.88	0.79	0.79
Heavy Vehicles (%)	2%	2%	9%	3%	2%	3%
Parking (#/hr)			0	0		
Adj. Flow (vph)	395	84	19	297	82	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	479	0	0	316	102	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.22	1.07	1.07
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	324	69	17	261	65	16
Conflicting Peds, #/hr	0	29	29	0	12	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	88	88	79	79
Heavy Vehicles, %	2	2	9	3	2	3
Mvmt Flow	395	84	19	297	82	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	491	0	784	478
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	-	-	4.3	-	7.1	6.23
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	3	-	3	3.1
Pot Cap-1 Maneuver	-	-	813	-	348	619
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	831	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	793	-	326	598
Mov Cap-2 Maneuver	-	-	-	-	326	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	787	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	358	-	-	793	-
HCM Lane V/C Ratio	0.286	-	-	0.024	-
HCM Control Delay (s)	19	-	-	9.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	341	259	0	83	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.937	
Flt Protected					0.974	
Satd. Flow (prot)	0	1748	1765	0	1263	0
Flt Permitted					0.974	
Satd. Flow (perm)	0	1748	1765	0	1263	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1056	452		257	
Travel Time (s)		28.8	12.3		7.0	
Confl. Peds. (#/hr)					196	209
Peak Hour Factor	0.87	0.87	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	2%	3%	2%	5%	5%	31%
Parking (#/hr)					0	0
Adj. Flow (vph)	0	392	285	0	106	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	392	285	0	198	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.22	1.07
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

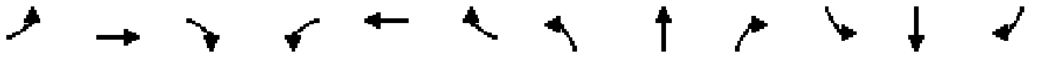
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

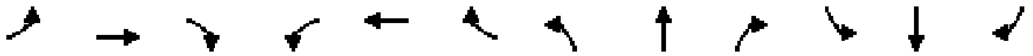
Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Vol, veh/h	0	0	341	0	259	0	0	83	72
Peak Hour Factor	0.92	0.87	0.87	0.92	0.91	0.91	0.92	0.78	0.78
Heavy Vehicles, %	2	2	3	2	2	5	2	5	31
Mvmt Flow	0	0	392	0	285	0	0	106	92
Number of Lanes	0	0	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	13.2	11.2	10.7
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	54%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	46%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	341	259	155
LT Vol	341	259	0
Through Vol	0	0	72
RT Vol	0	0	83
Lane Flow Rate	392	285	199
Geometry Grp	1	1	1
Degree of Util (X)	0.526	0.39	0.296
Departure Headway (Hd)	4.833	4.938	5.363
Convergence, Y/N	Yes	Yes	Yes
Cap	741	720	662
Service Time	2.909	3.022	3.461
HCM Lane V/C Ratio	0.529	0.396	0.301
HCM Control Delay	13.2	11.2	10.7
HCM Lane LOS	B	B	B
HCM 95th-tile Q	3.1	1.9	1.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	149	187	162	169	138	239	250	353	220	217	337	274
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12	10	15	15	11	11	11
Grade (%)		1%			2%			3%			-3%	
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.80	0.81		0.83	0.71			0.85		0.90	0.91	
Frt		0.930			0.905			0.942			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1668	1326	0	1660	1122	0	1541	1529	0	1645	1474	0
Flt Permitted	0.291			0.292			0.160			0.217		
Satd. Flow (perm)	411	1326	0	422	1122	0	260	1529	0	338	1474	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		452			184			385			523	
Travel Time (s)		12.3			5.0			10.5			14.3	
Confl. Peds. (#/hr)	357		315	315		357	129		274	274		129
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.83	0.83	0.83	0.67	0.67	0.67
Adj. Flow (vph)	194	243	210	204	166	288	301	425	265	324	503	409
Shared Lane Traffic (%)												
Lane Group Flow (vph)	194	453	0	204	454	0	301	690	0	324	912	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			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.08	1.08	1.08	1.09	1.09	1.09	1.19	0.97	0.97	1.10	1.10	1.10
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	

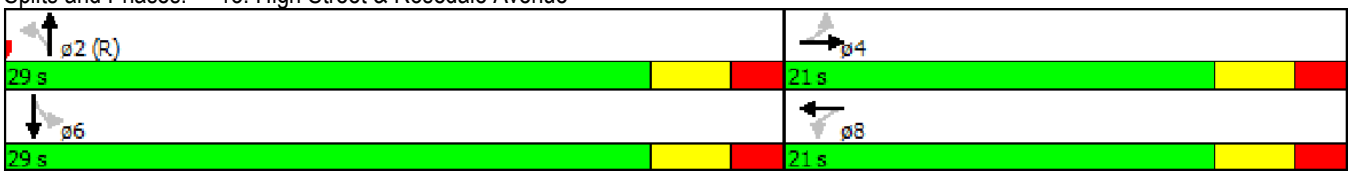


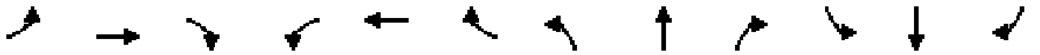
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (%)	42.0%	42.0%		42.0%	42.0%		58.0%	58.0%		58.0%	58.0%	
Maximum Green (s)	16.0	16.0		16.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)	-1.0	-1.0		-1.0	-1.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
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	Max	Max		Max	Max		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	45	45		45	45		45	45		45	45	
Act Effct Green (s)	17.0	17.0		17.0	17.0		25.0	25.0		25.0	25.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.50	0.50		0.50	0.50	
v/c Ratio	1.40	1.01		1.43	1.19		2.32	0.90		1.92	1.24	
Control Delay	239.6	66.3		250.9	131.7		632.6	30.9		452.8	136.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	239.6	66.3		250.9	131.7		632.6	30.9		452.8	136.9	
LOS	F	E		F	F		F	C		F	F	
Approach Delay		118.2			168.6			213.7			219.7	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~79	~130		~85	~168		~118	166		~153	~348	
Queue Length 95th (ft)	#147	#226		#168	#276		#218	#316		#149	#336	
Internal Link Dist (ft)		372			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	139	450		143	381		130	764		169	737	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.40	1.01		1.43	1.19		2.32	0.90		1.92	1.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 50			
Actuated Cycle Length: 50			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.32			
Intersection Signal Delay: 189.9		Intersection LOS: F	

Intersection Capacity Utilization 104.9% 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: 13: High Street & Rosedale Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	149	187	162	169	138	239	250	353	220	217	337	274
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.49	1.00		0.49	1.00		0.71	1.00		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	175.6	175.6	179.1	174.7	174.7	178.2	173.8	180.8	184.4	179.1	179.1	182.7
Adj Flow Rate, veh/h	194	243	210	204	166	288	301	425	265	324	503	409
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.77	0.77	0.77	0.83	0.83	0.83	0.83	0.83	0.83	0.67	0.67	0.67
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	194	167	153	115	199	150	446	278	183	383	311
Arrive On Green	0.34	0.34	0.32	0.34	0.34	0.32	0.50	0.50	0.48	0.50	0.50	0.48
Sat Flow, veh/h	880	570	492	876	337	585	569	892	556	721	766	623
Grp Volume(v), veh/h	194	0	453	204	0	454	301	0	690	324	0	912
Grp Sat Flow(s),veh/h/ln	880	0	1062	876	0	923	569	0	1448	721	0	1389
Q Serve(g_s), s	0.5	0.0	17.0	0.5	0.0	17.0	0.5	0.0	22.8	2.7	0.0	25.0
Cycle Q Clear(g_c), s	17.0	0.0	17.0	17.0	0.0	17.0	25.0	0.0	22.8	25.0	0.0	25.0
Prop In Lane	1.00		0.46	1.00		0.63	1.00		0.38	1.00		0.45
Lane Grp Cap(c), veh/h	153	0	361	153	0	314	150	0	724	183	0	694
V/C Ratio(X)	1.27	0.00	1.25	1.34	0.00	1.45	2.01	0.00	0.95	1.77	0.00	1.31
Avail Cap(c_a), veh/h	153	0	361	153	0	314	150	0	724	183	0	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	16.7	25.0	0.0	16.8	25.0	0.0	12.1	24.7	0.0	12.7
Incr Delay (d2), s/veh	162.7	0.0	135.2	188.5	0.0	218.4	477.7	0.0	23.7	367.1	0.0	151.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.2	0.0	33.3	18.1	0.0	41.9	39.4	0.0	19.6	38.1	0.0	69.5
LnGrp Delay(d),s/veh	187.7	0.0	152.0	213.5	0.0	235.2	502.7	0.0	35.9	391.8	0.0	163.9
LnGrp LOS	F		F	F		F	F		D	F		F
Approach Vol, veh/h		647			658			991			1236	
Approach Delay, s/veh		162.7			228.5			177.6			223.7	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		21.0		29.0		21.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		24.0		16.0		24.0		16.0
Max Q Clear Time (g_c+I1), s		27.5		19.5		27.5		19.5
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	200.5
HCM 2010 LOS	F

Notes

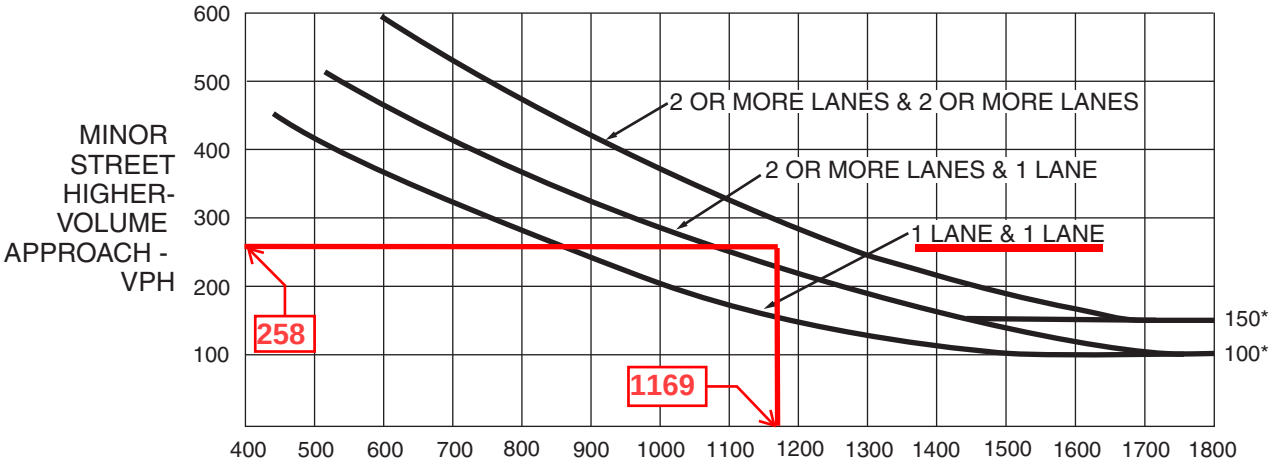
User approved pedestrian interval to be less than phase max green.

APPENDIX E

Traffic Signal Warrant Analysis

WARRANT MET

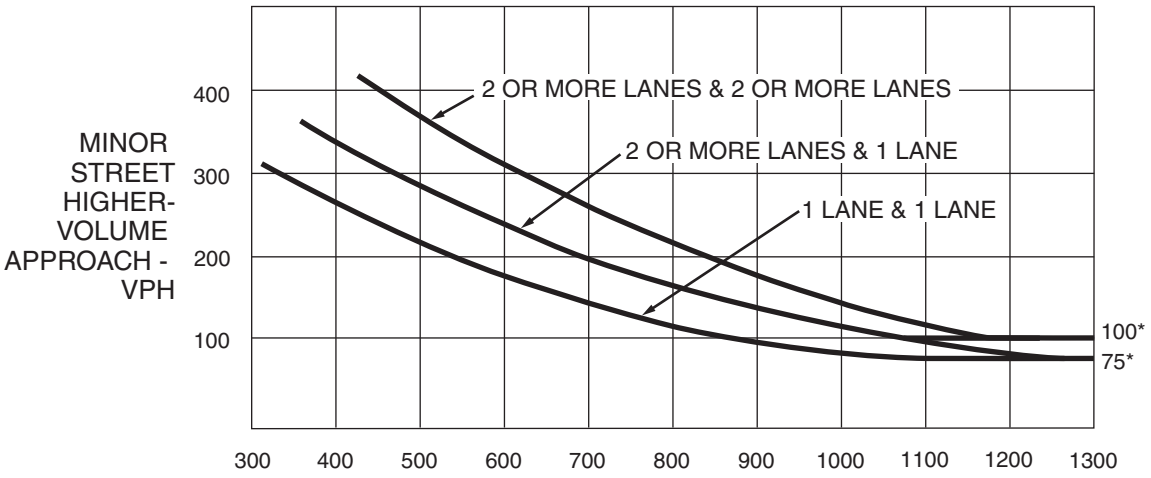
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

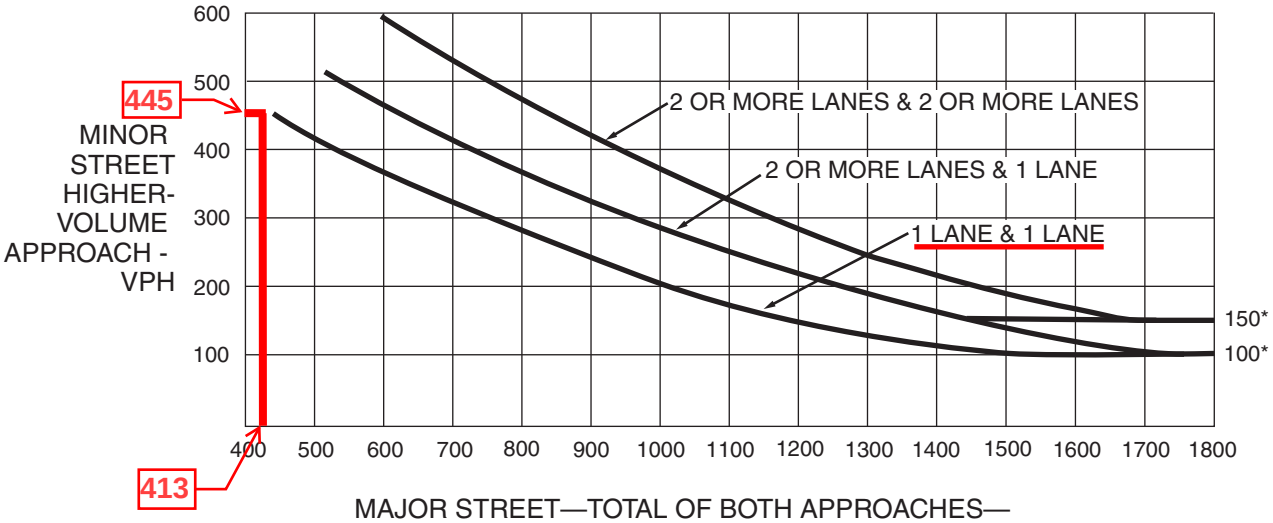
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT MET

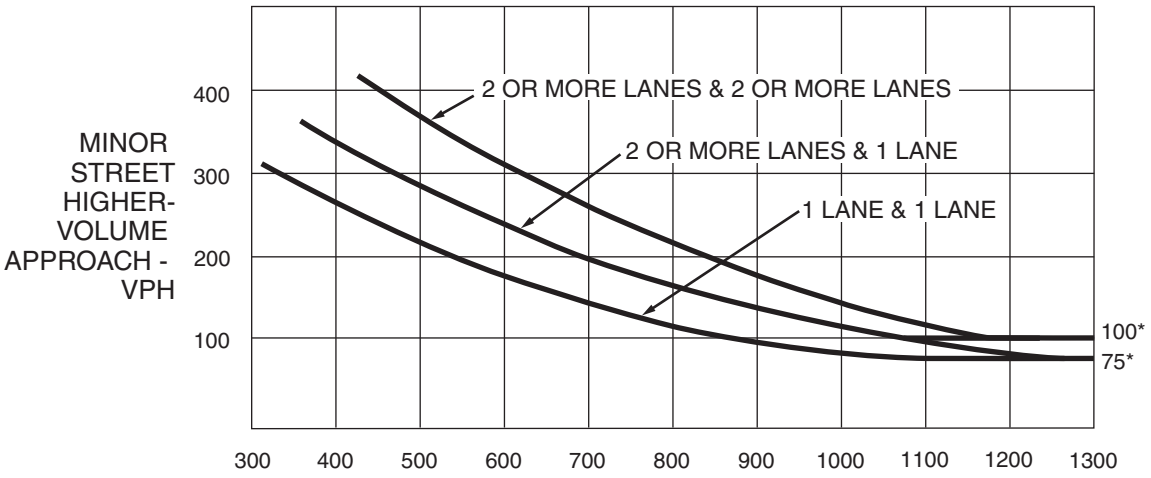
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

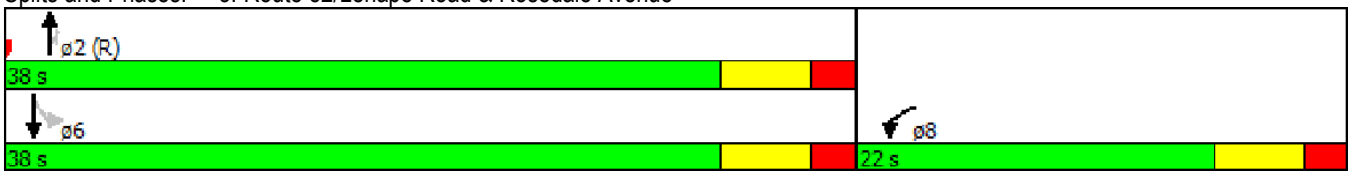
APPENDIX F

LOS Results – Future (2018) Build

Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Configurations					
Volume (vph)	228	396	136	30	607
Turn Type	Prot	NA	Perm	Perm	NA
Protected Phases	8	2			6
Permitted Phases			2	6	
Detector Phase	8	2	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0
Total Split (s)	22.0	38.0	38.0	38.0	38.0
Total Split (%)	36.7%	63.3%	63.3%	63.3%	63.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	Max	Max	Max

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 3: Route 52/Lenape Road & Rosedale Avenue



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	228	30	396	136	30	607
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	186.3	190.0	186.3	186.3	190.0	186.3
Adj Flow Rate, veh/h	268	35	404	139	33	660
Adj No. of Lanes	0	0	1	1	0	1
Peak Hour Factor	0.85	0.85	0.98	0.98	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	411	54	993	844	86	944
Arrive On Green	0.27	0.27	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1543	201	1863	1583	43	1770
Grp Volume(v), veh/h	304	0	404	139	693	0
Grp Sat Flow(s),veh/h/ln	1750	0	1863	1583	1813	0
Q Serve(g_s), s	9.3	0.0	7.8	2.7	0.9	0.0
Cycle Q Clear(g_c), s	9.3	0.0	7.8	2.7	16.7	0.0
Prop In Lane	0.88	0.12		1.00	0.05	
Lane Grp Cap(c), veh/h	467	0	993	844	1030	0
V/C Ratio(X)	0.65	0.00	0.41	0.16	0.67	0.00
Avail Cap(c_a), veh/h	467	0	993	844	1030	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.5	0.0	8.3	7.2	10.4	0.0
Incr Delay (d2), s/veh	6.9	0.0	1.2	0.4	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.0	4.3	1.3	9.5	0.0
LnGrp Delay(d),s/veh	26.4	0.0	9.6	7.6	13.9	0.0
LnGrp LOS	C		A	A	B	
Approach Vol, veh/h	304		543			693
Approach Delay, s/veh	26.4		9.1			13.9
Approach LOS	C		A			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.0				38.0		22.0
Change Period (Y+Rc), s		6.0				6.0		6.0
Max Green Setting (Gmax), s		32.0				32.0		16.0
Max Q Clear Time (g_c+I1), s		9.8				18.7		11.3
Green Ext Time (p_c), s		16.5				10.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

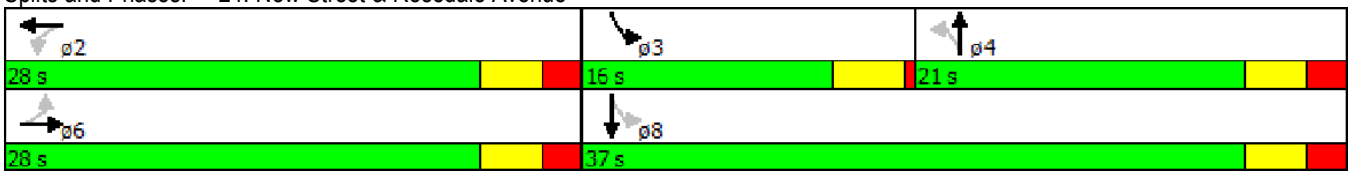
Notes

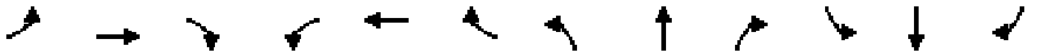
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	22	151	107	265	16	166	119	175
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		6		2		4	3	8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	3	8
Switch Phase								
Minimum Initial (s)	15.0	15.0	15.0	15.0	5.0	5.0	4.0	5.0
Minimum Split (s)	30.0	30.0	30.0	30.0	25.0	25.0	20.0	21.0
Total Split (s)	28.0	28.0	28.0	28.0	21.0	21.0	16.0	37.0
Total Split (%)	43.1%	43.1%	43.1%	43.1%	32.3%	32.3%	24.6%	56.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.5	2.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.0		5.0		5.0		5.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 65
Actuated Cycle Length: 58.8
Natural Cycle: 90
Control Type: Semi Act-Uncoord

Splits and Phases: 24: New Street & Rosedale Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	151	21	107	265	123	16	166	148	119	175	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	0.99		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Adj Flow Rate, veh/h	26	178	25	124	308	143	19	200	178	137	201	26
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	694	90	203	408	173	87	317	267	162	199	20
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	96	1518	198	253	892	379	36	920	776	186	577	59
Grp Volume(v), veh/h	229	0	0	575	0	0	397	0	0	364	0	0
Grp Sat Flow(s),veh/h/ln	1812	0	0	1525	0	0	1732	0	0	821	0	0
Q Serve(g_s), s	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0	0.0	12.8	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	16.3	0.0	0.0	9.9	0.0	0.0	12.8	0.0	0.0
Prop In Lane	0.11		0.11	0.22		0.25	0.05		0.45	0.38		0.07
Lane Grp Cap(c), veh/h	908	0	0	784	0	0	671	0	0	0	0	0
V/C Ratio(X)	0.25	0.00	0.00	0.73	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	908	0	0	784	0	0	671	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.4	0.0	0.0	11.7	0.0	0.0	14.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	3.6	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	7.6	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	9.1	0.0	0.0	15.2	0.0	0.0	15.4	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	A			B			B					
Approach Vol, veh/h		229			575			397			364	
Approach Delay, s/veh		9.1			15.2			15.4			0.0	
Approach LOS		A			B			B			A	

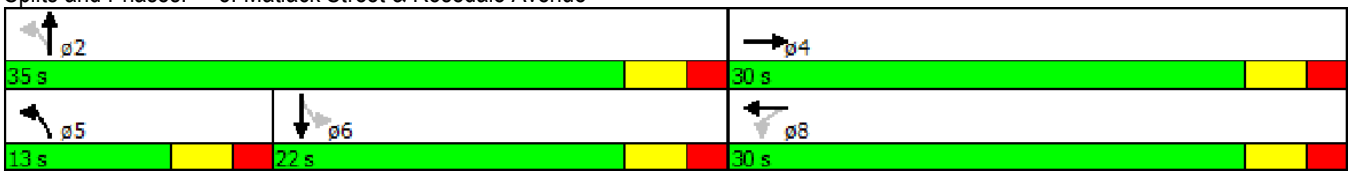
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		28.0		22.3		28.0		22.3
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		23.0		16.0		23.0		32.0
Max Q Clear Time (g_c+I1), s		18.3		11.9		5.8		14.8
Green Ext Time (p_c), s		2.2		1.7		5.3		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	10.8
HCM 2010 LOS	B

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	121	45	136	352	0	10	70
Turn Type	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	4		8	5	2		6
Permitted Phases		8		2		6	
Detector Phase	4	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	22.0	22.0	22.0	10.0	22.0	22.0	22.0
Total Split (s)	30.0	30.0	30.0	13.0	35.0	22.0	22.0
Total Split (%)	46.2%	46.2%	46.2%	20.0%	53.8%	33.8%	33.8%
Yellow Time (s)	3.0	3.0	3.0	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
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	5.0		5.0	5.0	5.0		5.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Max	Max	Max

Intersection Summary
Cycle Length: 65
Actuated Cycle Length: 52.5
Natural Cycle: 55
Control Type: Semi Act-Uncoord

Splits and Phases: 5: Matlack Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	121	111	45	136	0	352	0	93	10	70	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	0.95		0.98	0.96		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0.0	188.1	190.0	190.0	190.0	0.0	190.0	190.0	190.0	190.0	190.0	190.0
Adj Flow Rate, veh/h	0	148	135	56	168	0	396	0	118	14	99	32
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Percent Heavy Veh, %	0	1	1	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	237	216	131	304	0	705	0	871	93	407	121
Arrive On Green	0.00	0.26	0.26	0.26	0.26	0.00	0.15	0.00	0.55	0.31	0.31	0.31
Sat Flow, veh/h	0	902	823	181	1154	0	1810	0	1576	65	1300	387
Grp Volume(v), veh/h	0	0	283	224	0	0	396	0	118	145	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1725	1336	0	0	1810	0	1576	1751	0	0
Q Serve(g_s), s	0.0	0.0	7.9	1.4	0.0	0.0	7.6	0.0	2.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.9	9.3	0.0	0.0	7.6	0.0	2.0	3.3	0.0	0.0
Prop In Lane	0.00		0.48	0.25		0.00	1.00		1.00	0.10		0.22
Lane Grp Cap(c), veh/h	0	0	454	434	0	0	705	0	871	621	0	0
V/C Ratio(X)	0.00	0.00	0.62	0.52	0.00	0.00	0.56	0.00	0.14	0.23	0.00	0.00
Avail Cap(c_a), veh/h	0	0	795	753	0	0	705	0	871	621	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.6	17.2	0.0	0.0	9.2	0.0	5.9	13.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.4	1.0	0.0	0.0	1.0	0.0	0.3	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.9	3.2	0.0	0.0	3.8	0.0	0.9	1.8	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	19.0	18.2	0.0	0.0	10.2	0.0	6.2	14.8	0.0	0.0
LnGrp LOS			B	B			B		A	B		
Approach Vol, veh/h		283			224			514			145	
Approach Delay, s/veh		19.0			18.2			9.3			14.8	
Approach LOS		B			B			A			B	

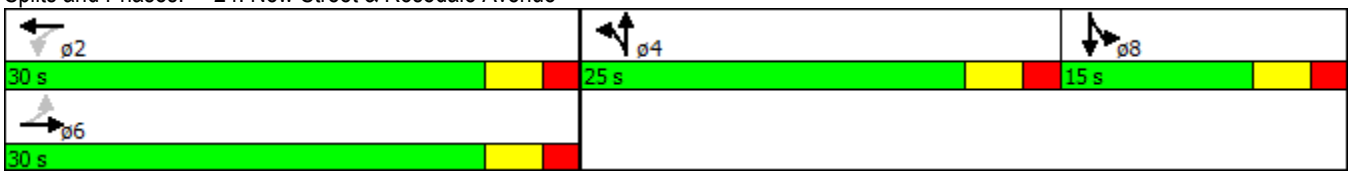
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		35.0		19.3	13.0	22.0		19.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		30.0		25.0	8.0	17.0		25.0
Max Q Clear Time (g_c+I1), s		4.0		9.9	9.6	5.3		11.3
Green Ext Time (p_c), s		1.6		2.8	0.0	1.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.0
HCM 2010 LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Configurations						
Volume (vph)	18	134	136	107	152	155
Turn Type	Perm	NA	Perm	NA	NA	NA
Protected Phases		6		2	4	8
Permitted Phases	6		2			
Detector Phase	6	6	2	2	4	8
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0	15.0	5.0	5.0
Minimum Split (s)	30.0	30.0	30.0	30.0	25.0	15.0
Total Split (s)	30.0	30.0	30.0	30.0	25.0	15.0
Total Split (%)	42.9%	42.9%	42.9%	42.9%	35.7%	21.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		-1.0		-1.0	-1.0	-1.0
Total Lost Time (s)		4.0		4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	None	None

Intersection Summary
Cycle Length: 70
Actuated Cycle Length: 70
Natural Cycle: 75
Control Type: Semi Act-Uncoord

Splits and Phases: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	18	134	15	136	107	113	30	152	160	106	155	4
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.97		0.97	1.00		0.97	1.00		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	198.6	194.7	198.6	197.6	178.8	197.6	184.3	169.2	184.3	193.6	188.8	193.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	121	768	82	294	223	197	49	248	262	242	355	10
Arrive On Green	0.47	0.48	0.47	0.47	0.48	0.47	0.35	0.37	0.35	0.35	0.37	0.35
Sat Flow, veh/h	95	1585	169	415	460	407	135	679	717	662	971	28
Grp Volume(v), veh/h	186	0	0	419	0	0	489	0	0	301	0	0
Grp Sat Flow(s),veh/h/ln	1849	0	0	1282	0	0	1530	0	0	1660	0	0
Q Serve(g_s), s	0.0	0.0	0.0	10.1	0.0	0.0	16.0	0.0	0.0	7.6	0.0	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	13.4	0.0	0.0	16.0	0.0	0.0	7.6	0.0	0.0
Prop In Lane	0.11		0.09	0.38		0.32	0.09		0.47	0.40		0.02
Lane Grp Cap(c), veh/h	937	0	0	691	0	0	560	0	0	607	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.61	0.00	0.00	0.87	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	937	0	0	691	0	0	599	0	0	607	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.9	0.0	0.0	10.6	0.0	0.0	16.1	0.0	0.0	13.3	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	3.9	0.0	0.0	12.9	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (95%), veh/ln	2.4	0.0	0.0	8.0	0.0	0.0	11.8	0.0	0.0	5.2	0.0	0.0
Lane Grp Delay (d), s/veh	8.4	0.0	0.0	14.6	0.0	0.0	29.0	0.0	0.0	14.0	0.0	0.0
Lane Grp LOS	A			B			C			B		
Approach Vol, veh/h		186			419			489			301	
Approach Delay, s/veh		8.4			14.6			29.0			14.0	
Approach LOS		A			B			C			B	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			23.6			23.6	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		5.0			15.4			18.0			9.6	
Green Ext Time (p_c), s		4.1			2.8			0.6			0.2	

Intersection Summary			
HCM 2010 Ctrl Delay		18.7	
HCM 2010 LOS		B	

Notes

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	149	187	162	169	138	239	250	353	220	217	337	274
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	10.0	29.0	29.0	10.0	29.0	29.0
Total Split (s)	41.0	41.0	41.0	41.0	41.0	41.0	19.0	45.0	45.0	19.0	45.0	45.0
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	18.1%	42.9%	42.9%	18.1%	42.9%	42.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	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	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	5.0	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	Max	Max

Intersection Summary
Cycle Length: 105
Actuated Cycle Length: 105
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 13: High Street & Rosedale Avenue

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	149	187	162	169	138	239	250	353	220	217	337	274
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.75		0.66	0.77		0.66	0.93		0.74	0.89		0.74
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	185.3	185.3	185.3	184.4	184.4	184.4	183.5	190.8	190.8	189.1	189.1	189.1
Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	266	635	349	243	632	347	391	727	447	449	720	443
Arrive On Green	0.34	0.34	0.33	0.34	0.34	0.33	0.13	0.38	0.37	0.13	0.38	0.37
Sat Flow, veh/h	710	1853	1047	718	1844	1041	1747	1908	1203	1801	1891	1192
Grp Volume(v), veh/h	194	243	195	204	166	268	301	425	245	324	503	384
Grp Sat Flow(s),veh/h/ln	710	1853	1047	718	1844	1041	1747	1908	1203	1801	1891	1192
Q Serve(g_s), s	28.5	10.4	16.0	25.6	6.8	24.3	10.6	18.6	16.9	11.2	23.6	31.4
Cycle Q Clear(g_c), s	35.4	10.4	16.0	36.0	6.8	24.3	10.6	18.6	16.9	11.2	23.6	31.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	635	349	243	632	347	391	727	447	449	720	443
V/C Ratio(X)	0.73	0.38	0.56	0.84	0.26	0.77	0.77	0.58	0.55	0.72	0.70	0.87
Avail Cap(c_a), veh/h	266	635	349	243	632	347	391	727	447	449	720	443
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	26.1	28.7	41.5	24.9	31.4	20.1	25.9	26.0	18.2	27.4	30.6
Incr Delay (d2), s/veh	9.8	0.4	2.0	21.9	0.2	10.3	9.1	3.4	4.8	5.6	5.6	19.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (95%), veh/ln	9.7	8.5	7.8	11.3	5.7	11.7	9.0	14.5	9.5	9.2	17.9	17.3
Lane Grp Delay (d), s/veh	47.5	26.5	30.7	63.5	25.1	41.7	29.2	29.3	30.8	23.8	33.0	50.5
Lane Grp LOS	D	C	C	E	C	D	C	C	C	C	C	D
Approach Vol, veh/h		632			638			971			1211	
Approach Delay, s/veh		34.2			44.3			29.7			36.1	
Approach LOS		C			D			C			D	

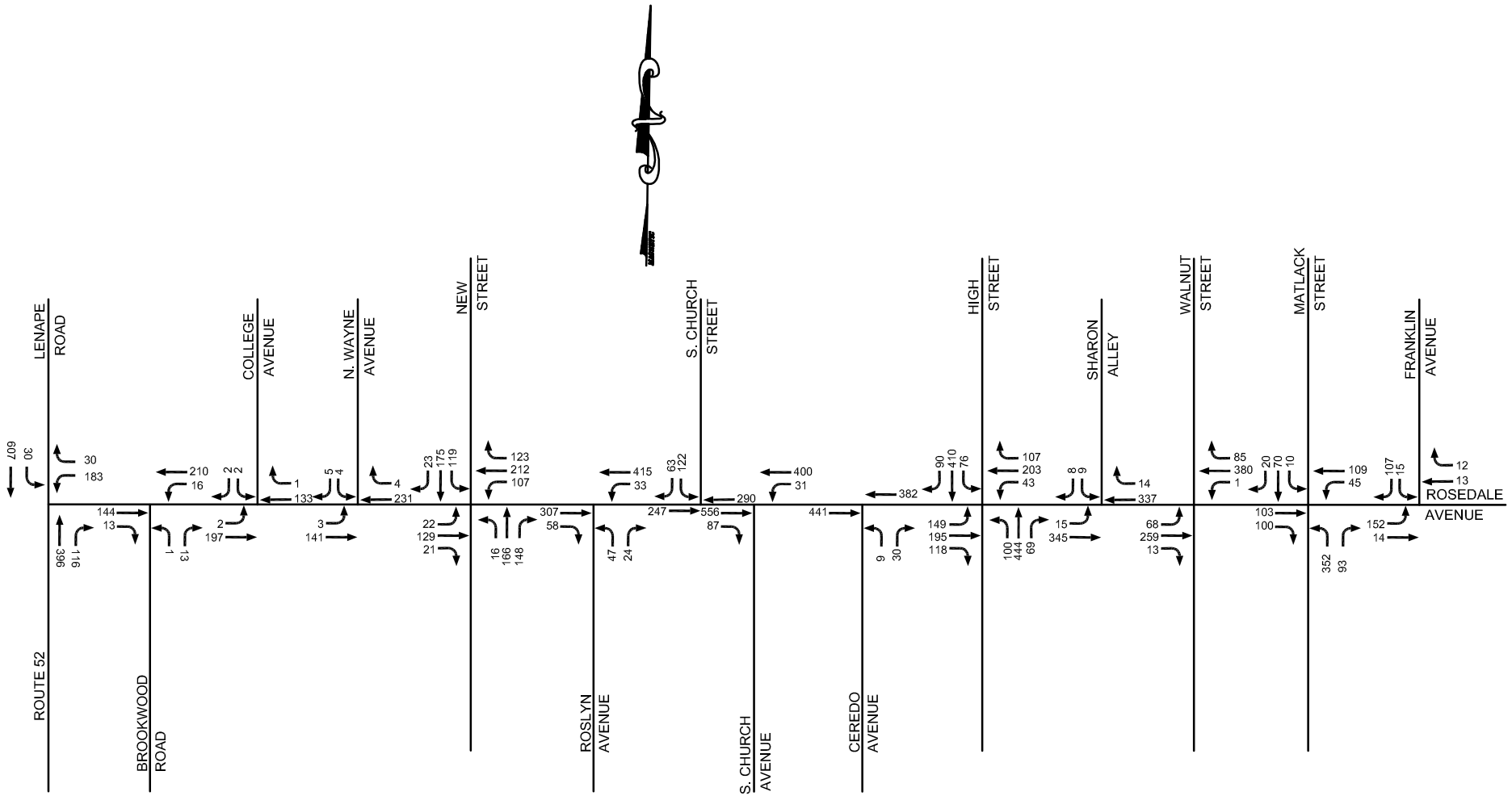
Timer												
Assigned Phs		4			8		5	2		1	6	
Phs Duration (G+Y+Rc), s		41.0			41.0		19.0	45.0		19.0	45.0	
Change Period (Y+Rc), s		6.0			6.0		6.0	6.0		6.0	6.0	
Max Green Setting (Gmax), s		35.0			35.0		13.0	39.0		13.0	39.0	
Max Q Clear Time (g_c+I1), s		37.9			38.5		13.1	21.1		13.7	33.4	
Green Ext Time (p_c), s		0.0			0.0		0.0	9.4		0.0	4.0	

Intersection Summary		
HCM 2010 Ctrl Delay	35.5	
HCM 2010 LOS	D	

Notes
User approved pedestrian interval to be less than phase max green.

APPENDIX G

Alternative Traffic Volumes & LOS Results



LEGEND

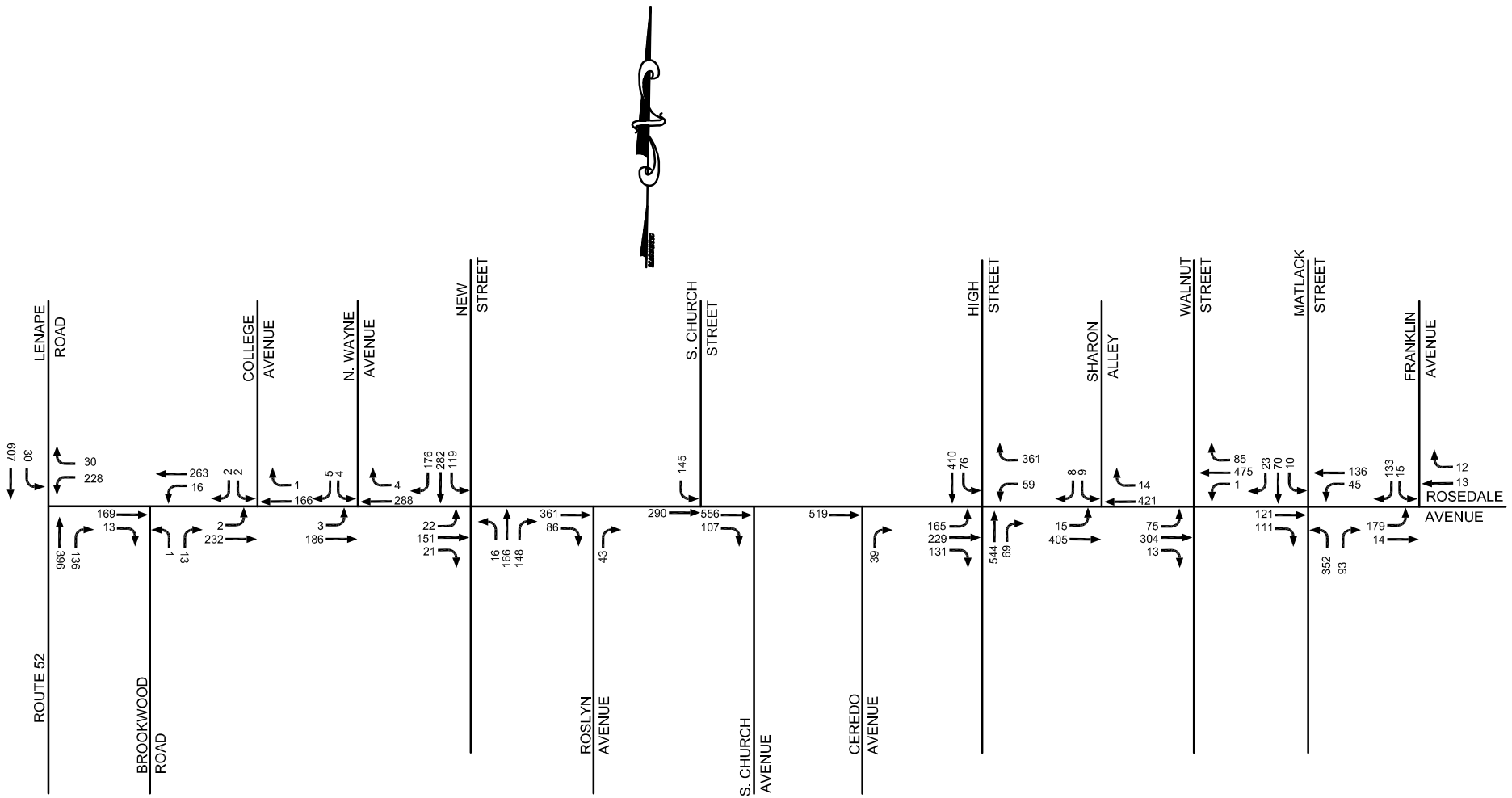
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G1

2018 FUTURE CONDITIONS
STADIUM DRIVE ACCESS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

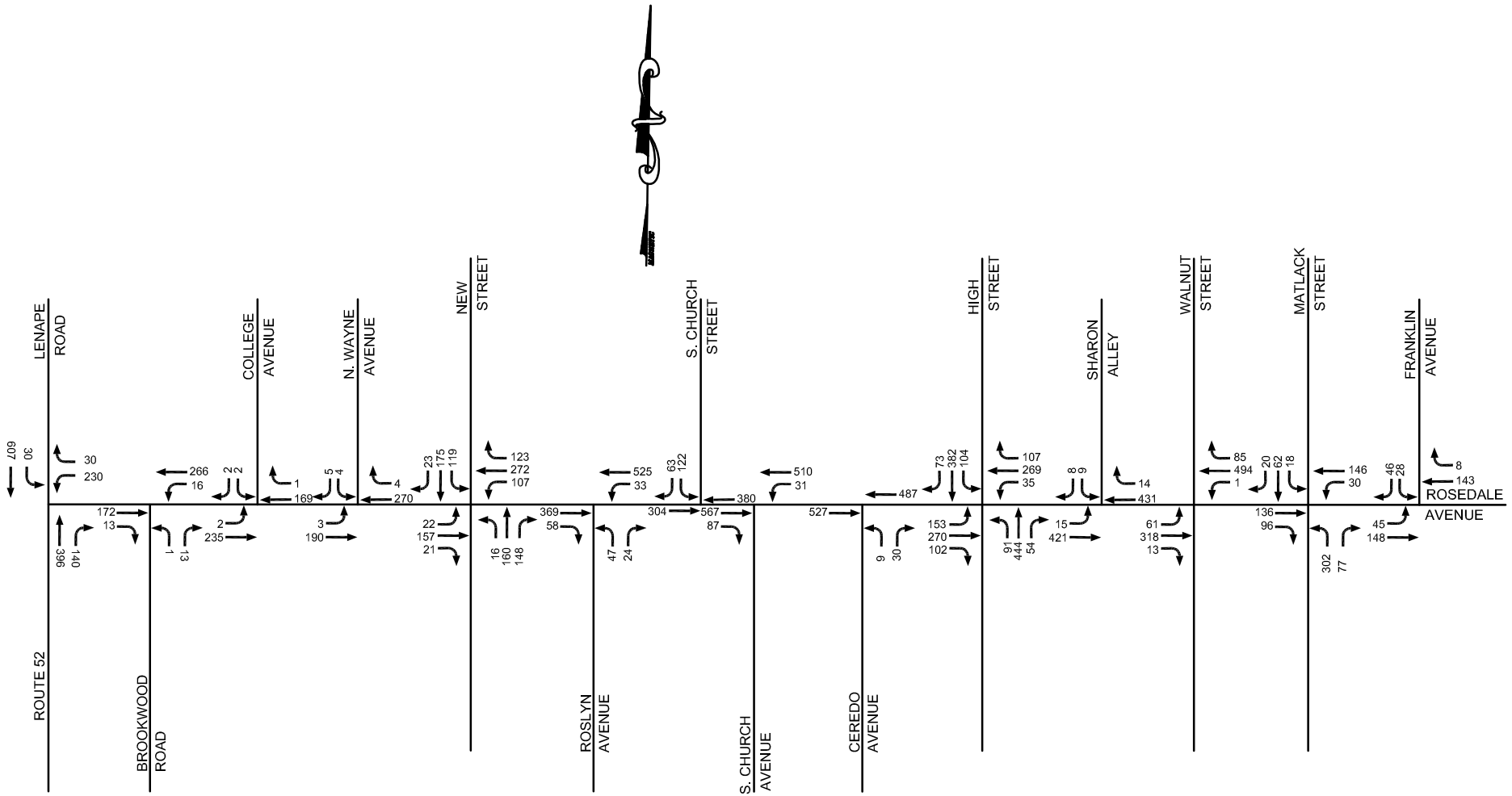
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G2

2018 FUTURE CONDITIONS ONE-WAY PAIRS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

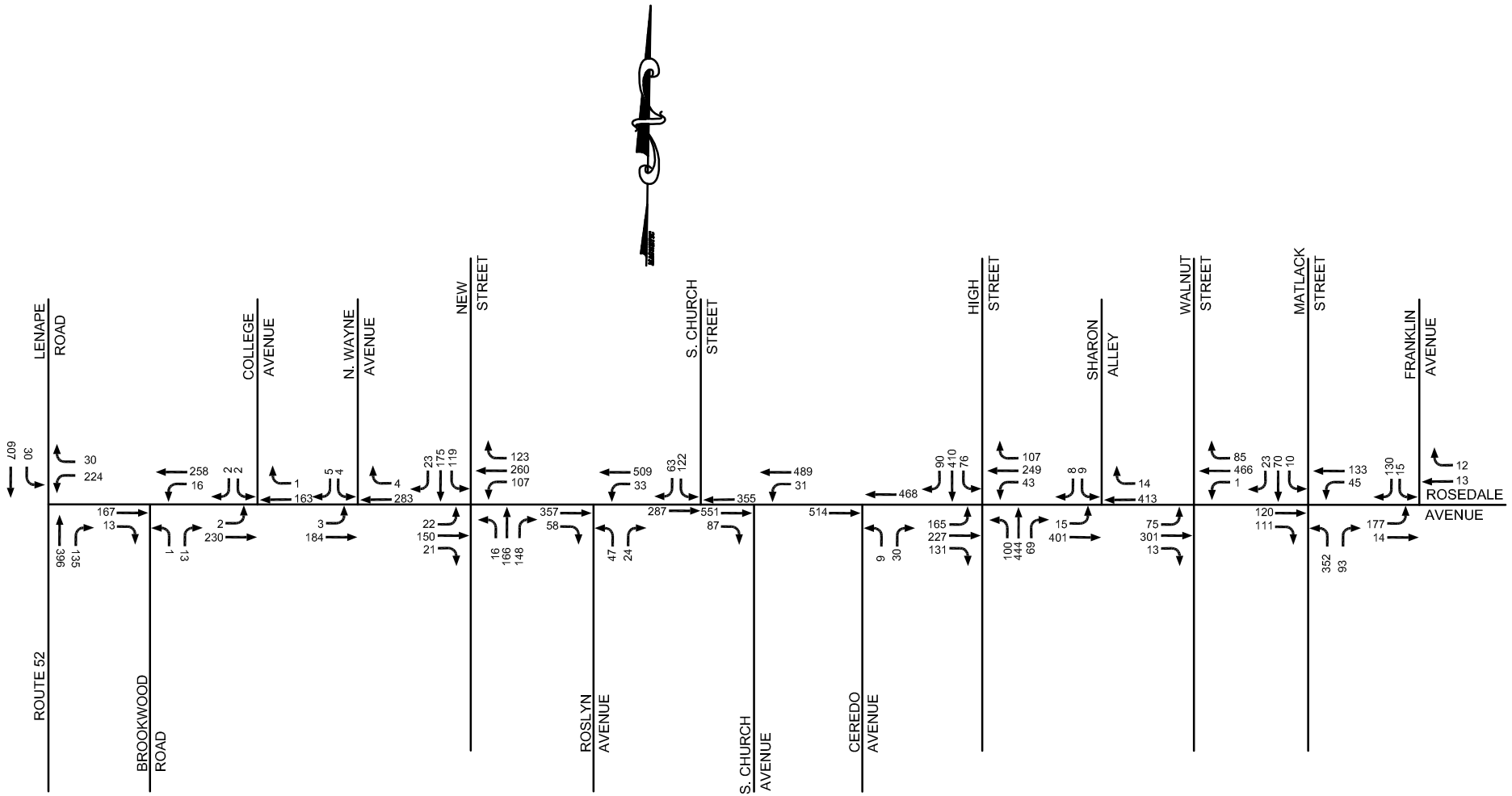
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G3

2018 FUTURE CONDITIONS
EXTENSION TO BOLMAR STREET

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

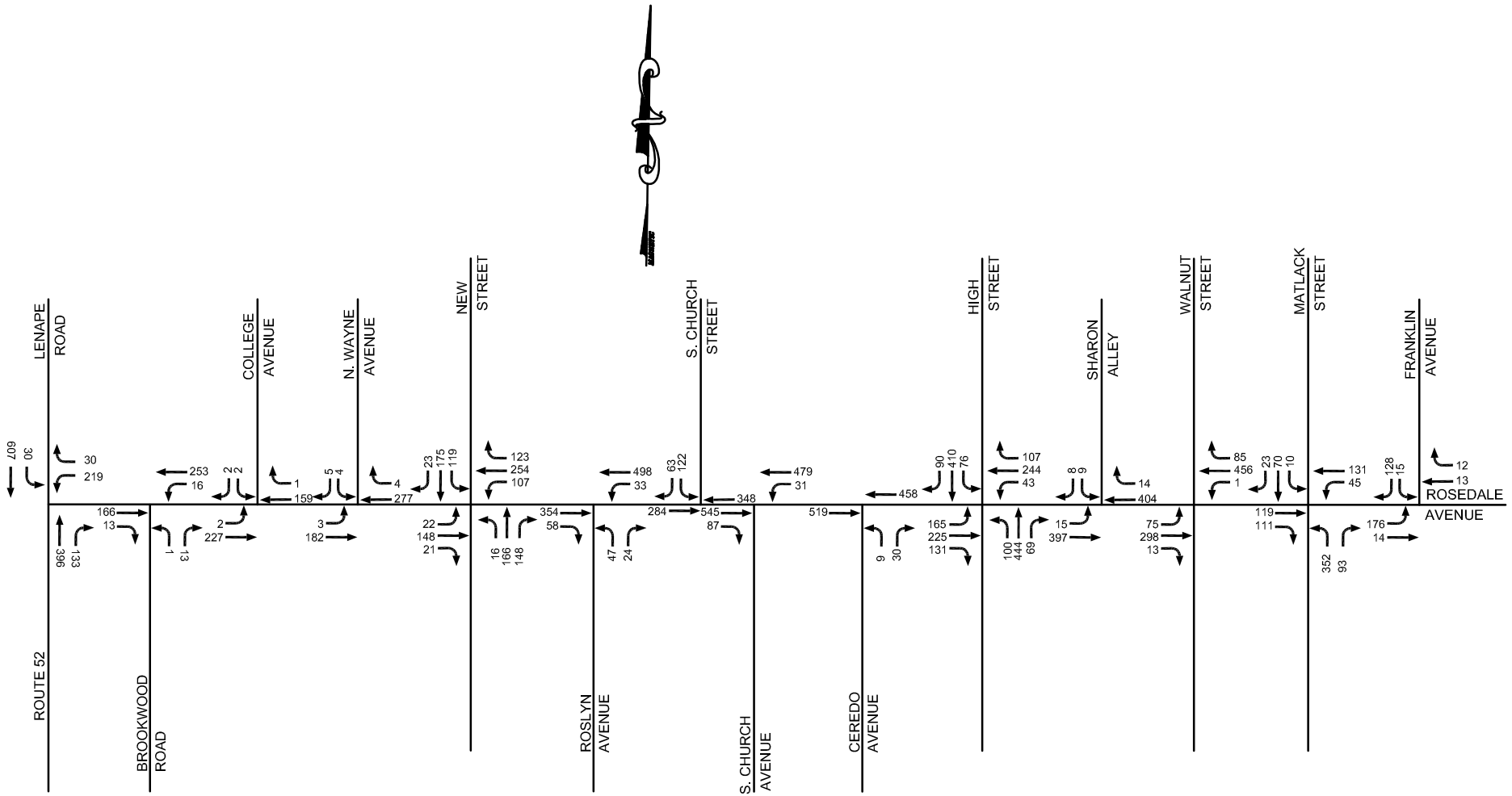
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G4

2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE ROAD

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



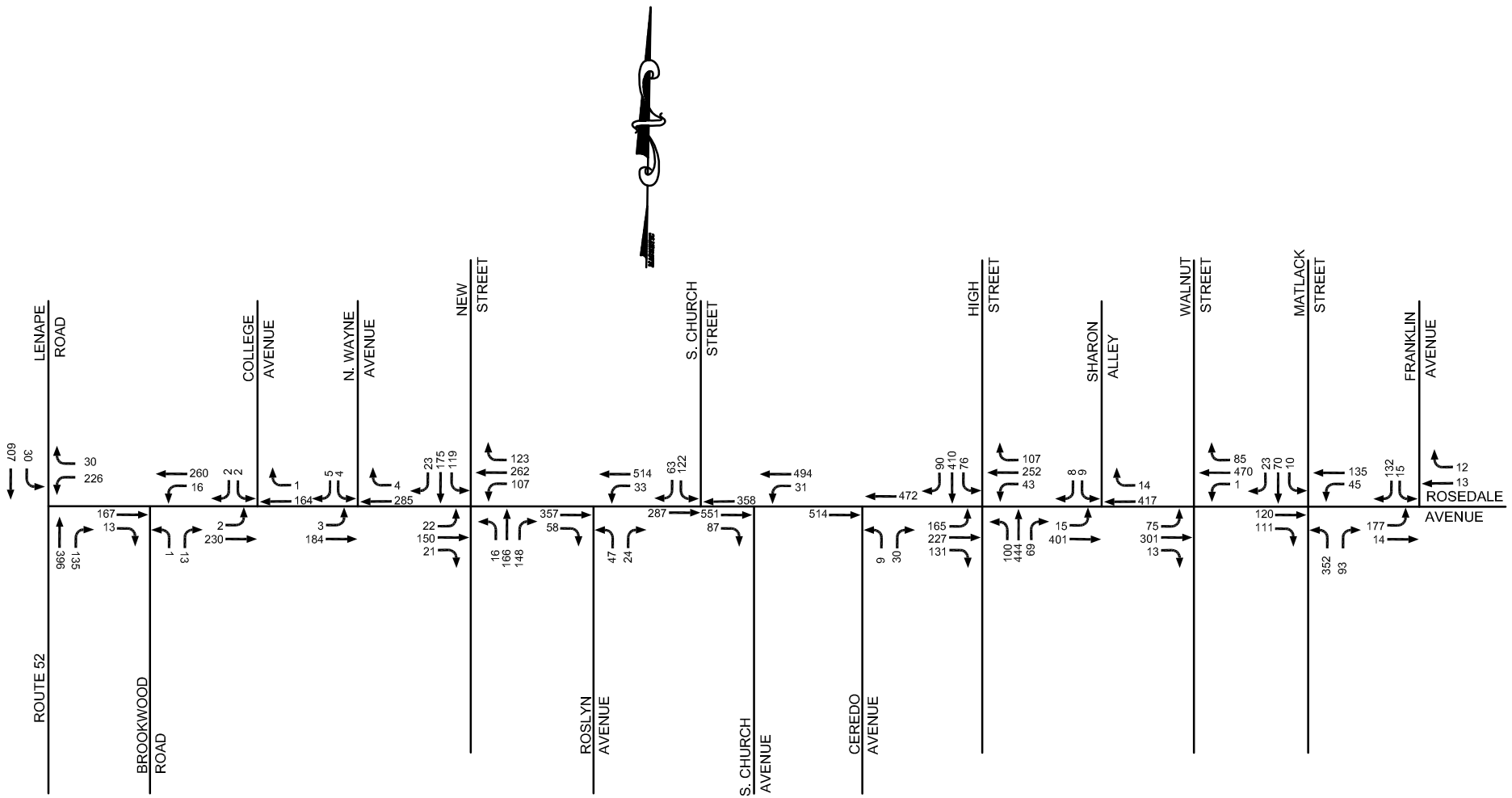
LEGEND

XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G5
2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE RD WITH EXTENSION TO BIRMINGHAM

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

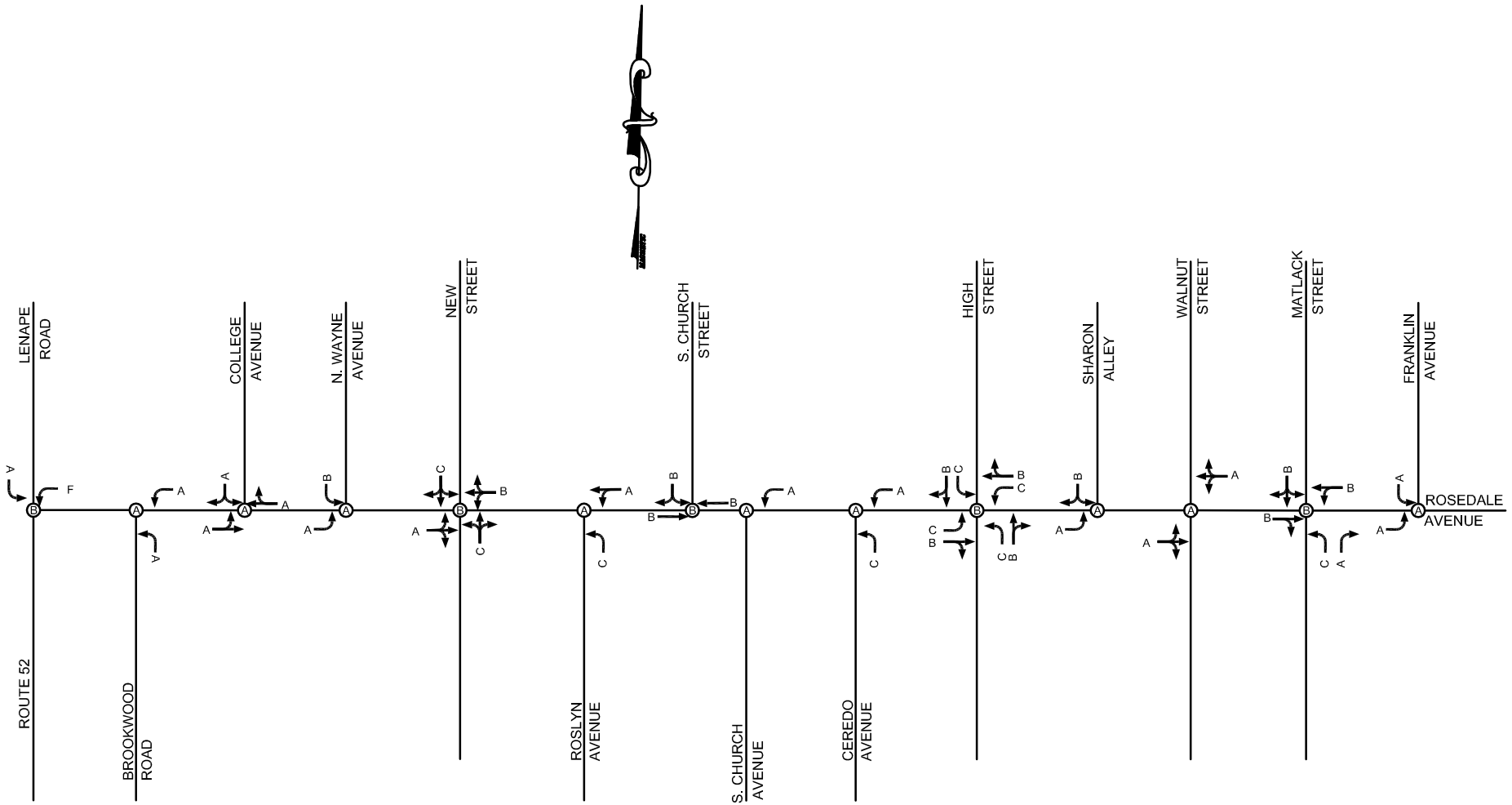
XX PM PEAK HOUR TRAFFIC VOLUMES (VEH/HR)

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G6

2018 FUTURE CONDITIONS
IMPROVE S.R. 0926 (W. STREET ROAD)

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

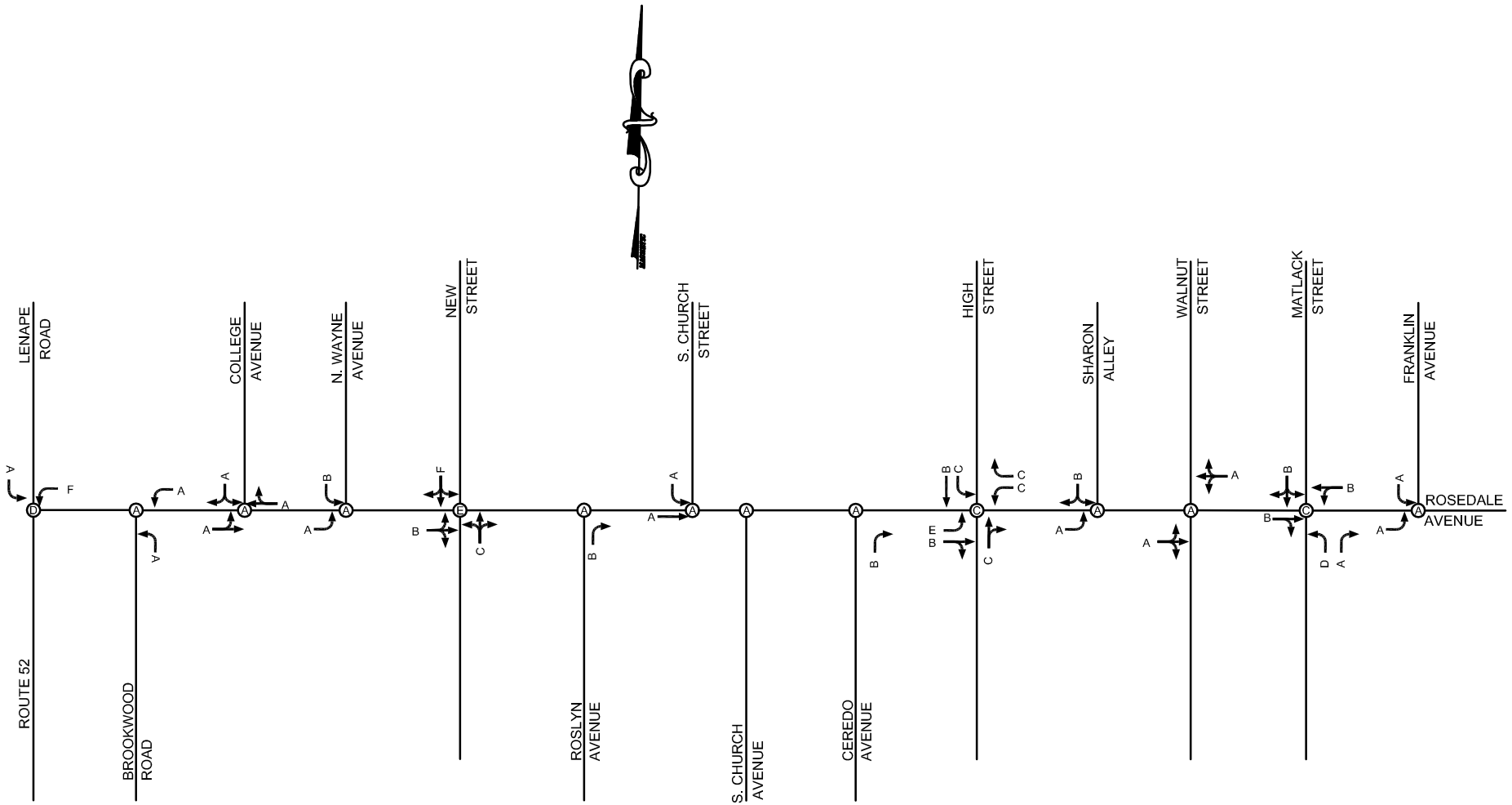
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G7

2018 FUTURE CONDITIONS
STADIUM DRIVE ACCESS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

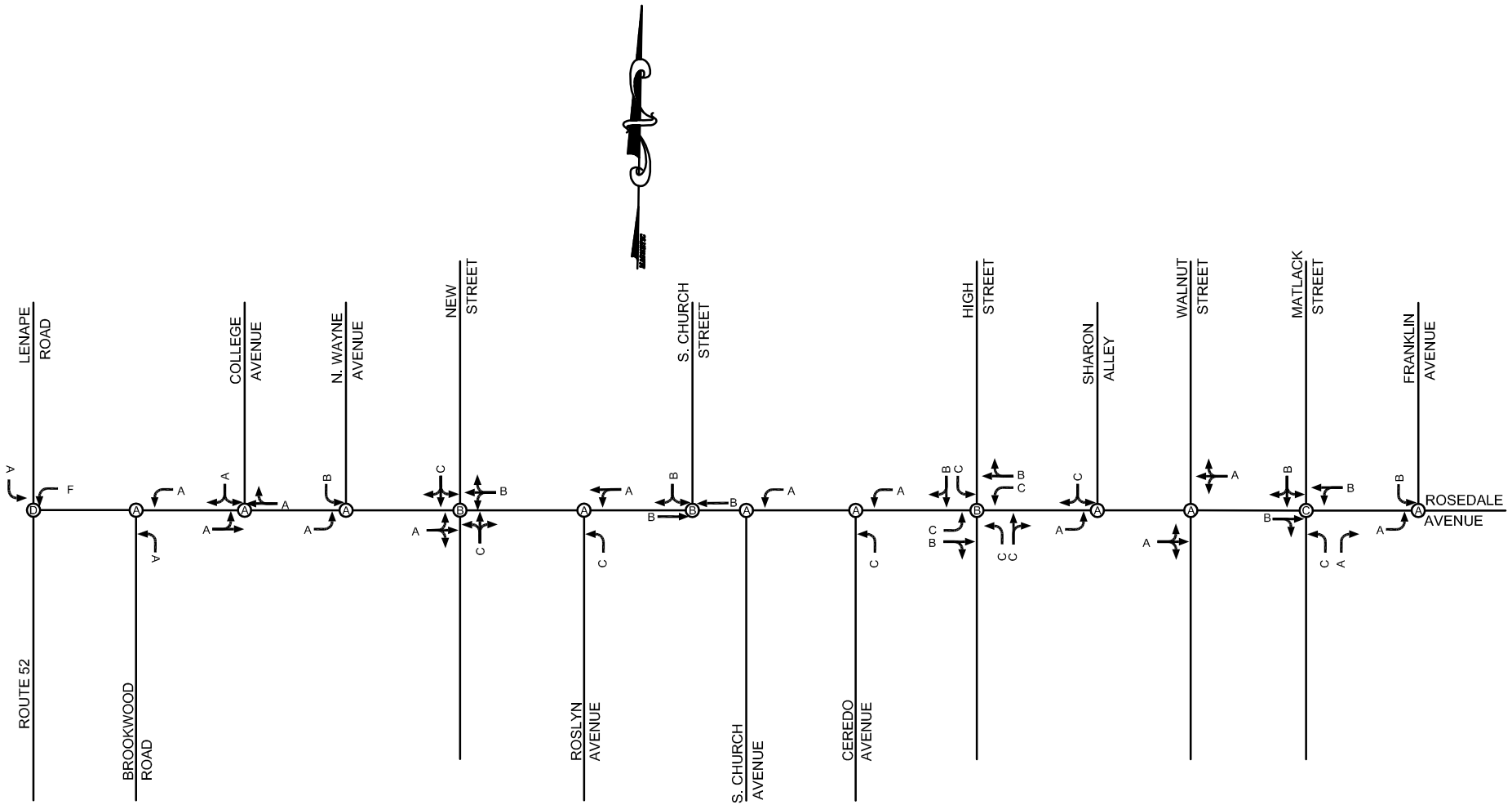
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G8

2018 FUTURE CONDITIONS
ONE-WAY PAIRS

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

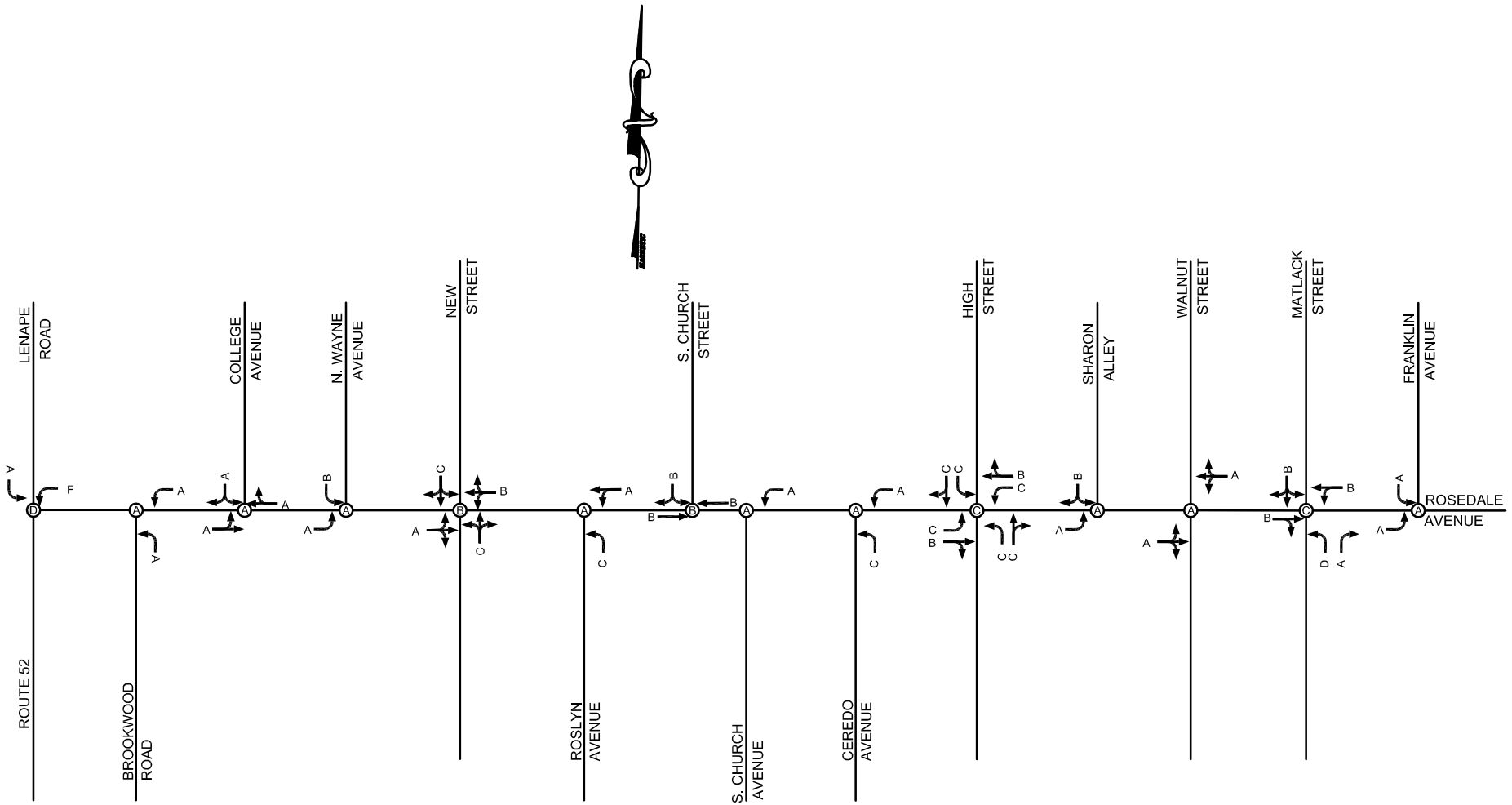
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G9

2018 FUTURE CONDITIONS
EXTENSION TO BOLMAR STREET

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

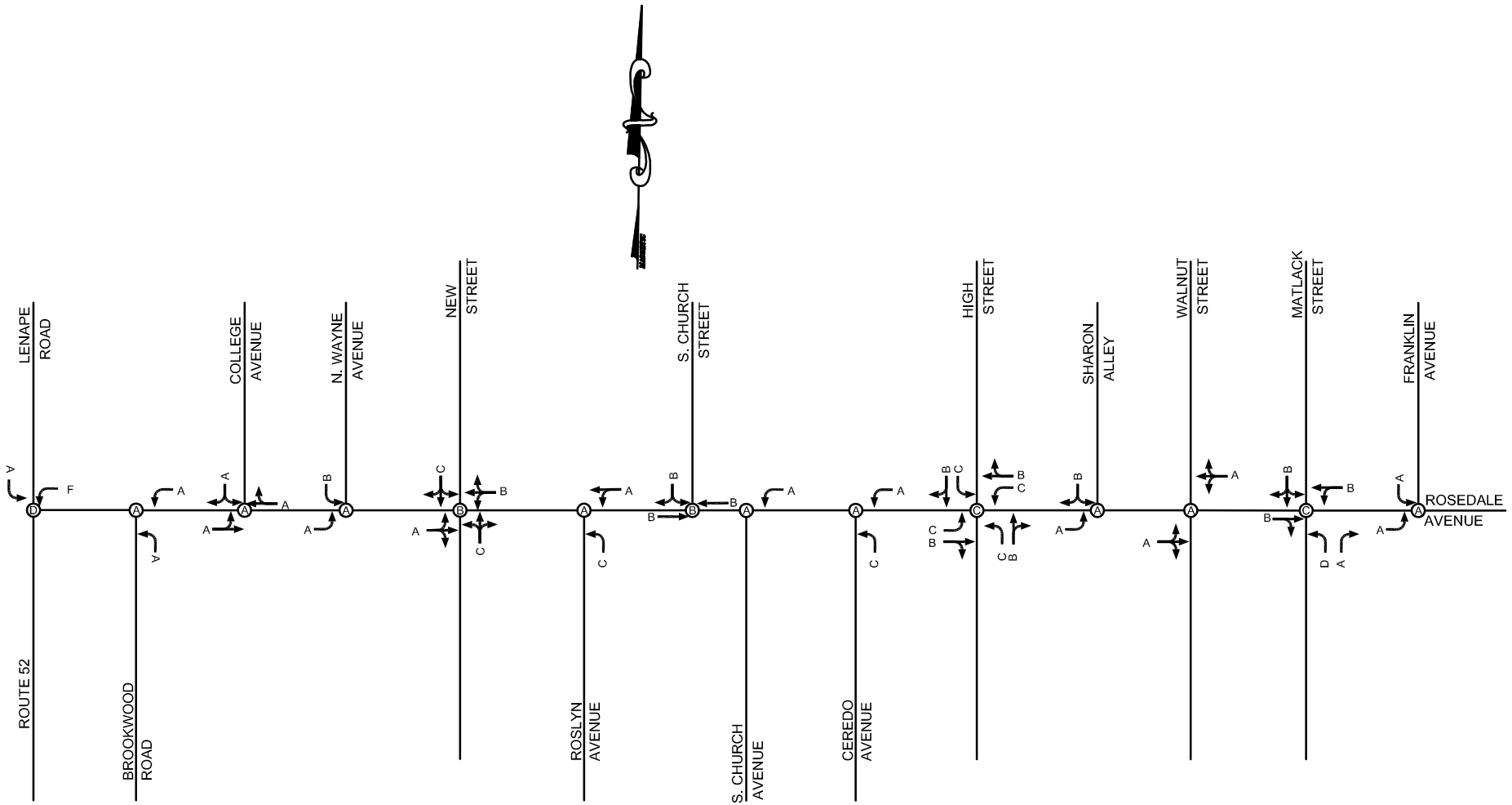
Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G10

2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE ROAD

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

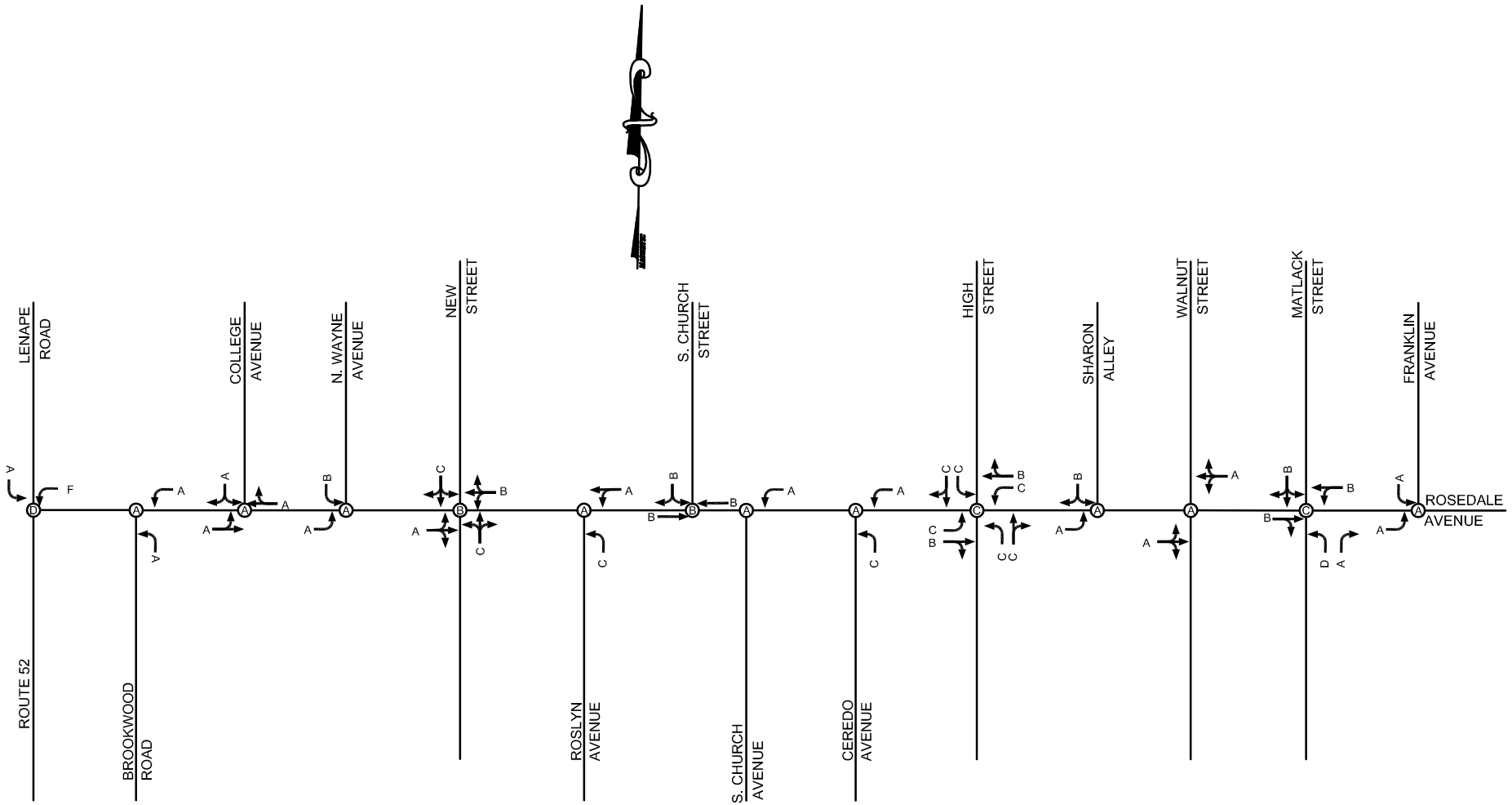
XX PM PEAK HOUR LEVELS OF SERVICE

Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G11
2018 FUTURE CONDITIONS
IMPROVE PLEASANT GROVE RD WITH EXTENSION TO BIRMINGHAM

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330



LEGEND

XX PM PEAK HOUR LEVELS OF SERVICE

Ⓧ OVERALL INTERSECTION LEVELS OF SERVICE

PROJECT NAME:	ROSEDALE AVENUE CORRIDOR STUDY
PROJECT NUMBER:	13-03030T

FIGURE G12

2018 FUTURE CONDITIONS
IMPROVE S.R. 0926 (W. STREET ROAD)

GILMORE & ASSOCIATES, INC.
Engineering and Consulting Services
65 E. Butler Avenue
New Britain, PA 18901
(215) 345-4330

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	183	30	396	116	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981			0.850		
Flt Protected	0.959					0.998
Satd. Flow (prot)	1787	0	1818	1546	0	1833
Flt Permitted	0.959					0.998
Satd. Flow (perm)	1787	0	1818	1546	0	1833
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	187	31	483	130	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	218	0	483	130	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 75.0%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	16.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	183	30	396	116	30	607
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	82	89	92	92
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	187	31	483	130	33	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1208	483	0	0	483	0
Stage 1	483	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Follow-up Headway	3.5	3.3	-	-	2.2	-
Pot Capacity-1 Maneuver	204	588	-	-	1090	-
Stage 1	625	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	194	588	-	-	1090	-
Mov Capacity-2 Maneuver	194	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	113.1	0	0.4
HCM LOS	F		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	214	1090	-
HCM Lane V/C Ratio	-	-	1.016	0.03	-
HCM Control Delay (s)	-	-	113.1	8.405	0
HCM Lane LOS			F	A	A
HCM 95th %tile Q(veh)	-	-	9.24	0.092	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	144	13	16	210	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.989				0.877	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1860	0	0	1857	1658	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1860	0	0	1857	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	153	14	18	239	2	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	167	0	0	257	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.7

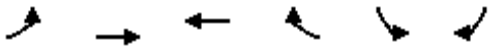
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	144	13	16	210	1	13
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	153	14	18	239	2	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	169	0	437	162
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	275	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1409	-	581	888
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	776	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1409	-	571	887
Mov Capacity-2 Maneuver	-	-	-	-	571	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	764	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	9.3
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	853	-	-	1409	-
HCM Lane V/C Ratio	0.025	-	-	0.013	-
HCM Control Delay (s)	9.3	-	-	7.588	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.078	-	-	0.039	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	197	133	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	226	146	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	228	147	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

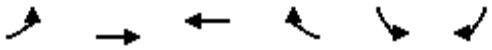
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	197	133	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	226	146	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.5	8	7.6
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	199	134	4
LT Vol	197	133	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	229	147	12
Geometry Grp	1	1	1
Degree of Util (X)	0.256	0.168	0.015
Departure Headway (Hd)	4.033	4.104	4.497
Convergence, Y/N	Yes	Yes	Yes
Cap	887	869	801
Service Time	2.072	2.157	2.497
HCM Lane V/C Ratio	0.258	0.169	0.015
HCM Control Delay	8.5	8	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	0.6	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	141	231	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.997		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1876	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1876	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	150	263	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	153	267	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

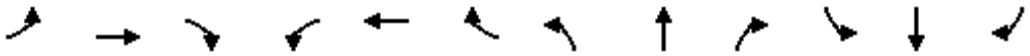
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	141	231	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	150	262	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	272	0	-	0	426	271
Stage 1	-	-	-	-	270	-
Stage 2	-	-	-	-	156	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1286	-	-	-	589	773
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	877	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1285	-	-	-	582	769
Mov Capacity-2 Maneuver	-	-	-	-	582	-
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	871	-

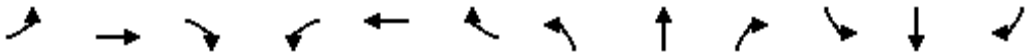
Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.5
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1285	-	-	-	673
HCM Lane V/C Ratio	0.002	-	-	-	0.035
HCM Control Delay (s)	7.809	0	-	-	10.5
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.007	-	-	-	0.109

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	129	21	107	212	123	16	166	148	119	175	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
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
Ped Bike Factor		0.99									0.97	
Frt		0.983			0.962			0.939			0.990	
Flt Protected		0.994			0.988			0.998			0.982	
Satd. Flow (prot)	0	1870	0	0	1806	0	0	1629	0	0	1833	0
Flt Permitted		0.920			0.865			0.998			0.982	
Satd. Flow (perm)	0	1729	0	0	1581	0	0	1629	0	0	1798	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		11									5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)	12		12							25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	26	152	25	124	247	143	19	200	178	137	201	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	203	0	0	514	0	0	397	0	0	364	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	0.96	0.96	0.96	0.85	0.97	0.85	1.09	1.09	1.09	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								



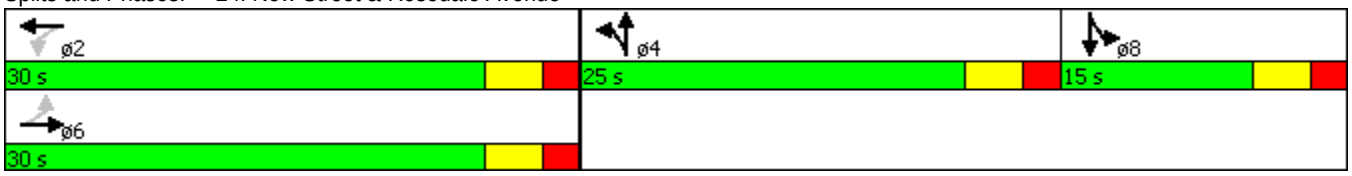
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		5.0			5.0			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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	0	0		0	0							
Act Effct Green (s)		25.0			25.0			19.1			10.0	
Actuated g/C Ratio		0.36			0.36			0.28			0.14	
v/c Ratio		0.32			0.90			0.88			1.35	
Control Delay		17.1			43.4			47.7			208.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.1			43.4			47.7			208.6	
LOS		B			D			D			F	
Approach Delay		17.1			43.4			47.7			208.6	
Approach LOS		B			D			D			F	
Queue Length 50th (ft)		59			207			161			~212	
Queue Length 95th (ft)		100			#358			#268			#352	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		632			572			471			270	
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		0.32			0.90			0.84			1.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.1			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay: 81.6		Intersection LOS: F	
Intersection Capacity Utilization 90.6%		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: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	129	21	107	212	123	16	166	148	119	175	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	146	744	113	233	419	216	23	245	218	179	262	34
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	121	1451	221	276	817	421	82	868	772	634	930	120
Grp Volume(v), veh/h	203	0	0	514	0	0	397	0	0	364	0	0
Grp Sat Flow(s),veh/h/ln	1793	0	0	1514	0	0	1722	0	0	1684	0	0
Q Serve(g_s), s	0.0	0.0	0.0	6.0	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	2.9	0.0	0.0	11.6	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.13		0.12	0.24		0.28	0.05		0.45	0.38		0.07
Lane Grp Cap(c), veh/h	1003	0	0	868	0	0	486	0	0	475	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.59	0.00	0.00	0.82	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	1003	0	0	868	0	0	706	0	0	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.5	0.0	0.0	8.5	0.0	0.0	16.3	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	3.0	0.0	0.0	4.9	0.0	0.0	7.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.2	0.0	0.0	4.1	0.0	0.0	4.6	0.0	0.0	4.6	0.0	0.0
Lane Grp Delay (d), s/veh	6.9	0.0	0.0	11.5	0.0	0.0	21.2	0.0	0.0	23.4	0.0	0.0
Lane Grp LOS	A			B			C			C		
Approach Vol, veh/h		203			514			397			364	
Approach Delay, s/veh		6.9			11.5			21.2			23.4	
Approach LOS		A			B			C			C	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			18.8			18.8	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		4.9			13.6			12.5			11.7	
Green Ext Time (p_c), s		4.7			3.6			1.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			16.4									
HCM 2010 LOS			B									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	307	58	33	415	47	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.979				0.954	
Flt Protected				0.996	0.968	
Satd. Flow (prot)	1824	0	0	1855	1720	0
Flt Permitted				0.996	0.968	
Satd. Flow (perm)	1824	0	0	1855	1720	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	334	63	36	451	51	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	397	0	0	487	77	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.7

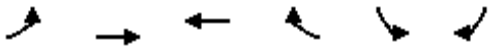
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	307	58	33	415	47	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	334	63	36	451	51	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	397	0	888	365
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	523	-
Follow-up Headway	-	-	2.218	-	3.518	3.318
Pot Capacity-1 Maneuver	-	-	1162	-	314	680
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	595	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1162	-	301	680
Mov Capacity-2 Maneuver	-	-	-	-	301	-
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	571	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	17.2
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	371	-	-	1162	-
HCM Lane V/C Ratio	0.208	-	-	0.031	-
HCM Control Delay (s)	17.2	-	-	8.197	0
HCM Lane LOS	C			A	A
HCM 95th %tile Q(veh)	0.772	-	-	0.095	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	247	290	0	122	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	1863	1863	0	1720	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1863	1863	0	1720	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	268	315	0	133	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	268	315	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	247	290	0	122	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	268	315	0	133	68
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	10.7	11.3	10.4
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	66%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	34%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	247	290	185
LT Vol	247	290	0
Through Vol	0	0	63
RT Vol	0	0	122
Lane Flow Rate	268	315	201
Geometry Grp	1	1	1
Degree of Util (X)	0.361	0.419	0.291
Departure Headway (Hd)	4.84	4.788	5.201
Convergence, Y/N	Yes	Yes	Yes
Cap	738	747	686
Service Time	2.909	2.854	3.281
HCM Lane V/C Ratio	0.363	0.422	0.293
HCM Control Delay	10.7	11.3	10.4
HCM Lane LOS	B	B	B
HCM 95th-tile Q	1.6	2.1	1.2

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	473	87	31	400	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.979					
Flt Protected				0.996		
Satd. Flow (prot)	1842	0	0	1892	1900	0
Flt Permitted				0.996		
Satd. Flow (perm)	1842	0	0	1892	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	520	96	33	421	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	616	0	0	454	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	473	87	31	400	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	520	96	33	421	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	615	0	1054	568
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	486	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	974	-	252	526
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	623	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	974	-	241	526
Mov Capacity-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	596	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	0	-	-	974	-
HCM Lane V/C Ratio	+	-	-	0.034	-
HCM Control Delay (s)	0	-	-	8.824	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	+	-	-	0.104	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	441	0	0	382	9	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.896	
Flt Protected					0.989	
Satd. Flow (prot)	1863	0	0	1881	1658	0
Flt Permitted					0.989	
Satd. Flow (perm)	1863	0	0	1881	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	485	0	0	439	12	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	485	0	0	439	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.9

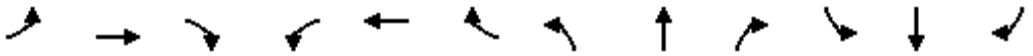
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	441	0	0	382	9	30
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	485	0	0	439	12	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	585	0	1024	586
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	439	-
Follow-up Headway	-	-	2.218	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	990	-	263	510
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	654	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	989	-	241	467
Mov Capacity-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	653	-

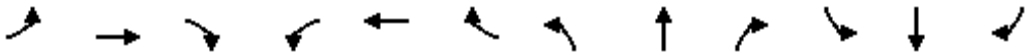
Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.9
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	384	-	-	989	-
HCM Lane V/C Ratio	0.139	-	-	-	-
HCM Control Delay (s)	15.9	-	-	0	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	0.479	-	-	0	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	149	195	118	43	203	107	100	444	69	76	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.92	0.94		0.91	0.93		0.97	0.96		0.89	0.93	
Frt		0.944			0.948			0.980			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1652	0	1805	1623	0	1668	1894	0	1685	1613	0
Flt Permitted	0.393			0.330			0.331			0.309		
Satd. Flow (perm)	654	1652	0	573	1623	0	562	1894	0	488	1613	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					51						24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	58		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	189	260	157	61	242	127	123	505	78	79	456	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	417	0	61	369	0	123	583	0	79	556	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
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	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	28.0	28.0		28.0	28.0		32.0	32.0		32.0	32.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		53.3%	53.3%		53.3%	53.3%	
Maximum Green (s)	23.0	23.0		23.0	23.0		27.0	27.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		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	None	None		None	None		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	19.7	19.7		19.7	19.7		30.3	30.3		30.3	30.3	
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.50	0.50		0.50	0.50	
v/c Ratio	0.88	0.77		0.32	0.65		0.43	0.61		0.32	0.67	
Control Delay	58.6	27.8		18.9	19.9		17.4	15.3		15.2	17.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	58.6	27.8		18.9	19.9		17.4	15.3		15.2	17.5	
LOS	E	C		B	B		B	B		B	B	
Approach Delay		37.4			19.8			15.6			17.2	
Approach LOS		D			B			B			B	
Queue Length 50th (ft)	59	123		15	88		29	154		17	147	
Queue Length 95th (ft)	#127	158		30	144		65	251		50	#307	
Internal Link Dist (ft)		132			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	250	633		219	653		283	955		246	826	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.76	0.66		0.28	0.57		0.43	0.61		0.32	0.67	

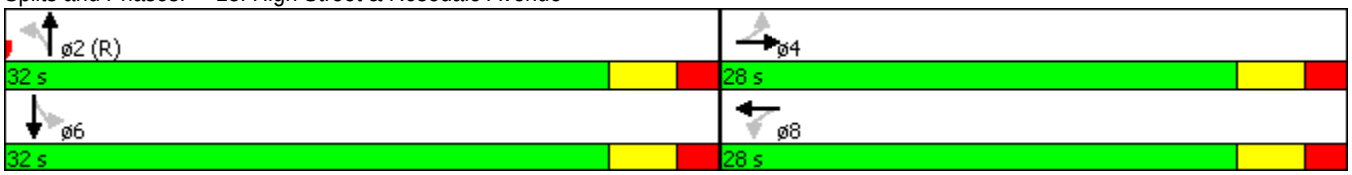
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 22.4		Intersection LOS: C	

Intersection Capacity Utilization 78.4% 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: 13: High Street & Rosedale Avenue

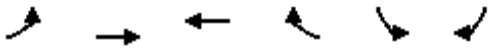


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	149	195	118	43	203	107	100	444	69	76	410	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.87	0.95		0.84	0.92		0.83	0.94		0.77
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	188.1	195.6	197.6	190.0	190.0	190.0
Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Cap, veh/h	315	394	238	283	421	221	271	722	111	277	640	140
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	936	1028	621	935	1097	576	792	1604	248	798	1422	312
Grp Volume(v), veh/h	189	0	417	61	0	369	123	0	583	79	0	556
Grp Sat Flow(s),veh/h/ln	936	0	1649	935	0	1673	792	0	1852	798	0	1733
Q Serve(g_s), s	12.0	0.0	12.5	3.5	0.0	10.5	8.9	0.0	15.2	5.3	0.0	15.6
Cycle Q Clear(g_c), s	22.5	0.0	12.5	16.0	0.0	10.5	24.5	0.0	15.2	20.5	0.0	15.6
Prop In Lane	1.00		0.38	1.00		0.34	1.00		0.13	1.00		0.18
Lane Grp Cap(c), veh/h	315	0	632	283	0	641	271	0	833	277	0	780
V/C Ratio(X)	0.60	0.00	0.66	0.22	0.00	0.58	0.45	0.00	0.70	0.28	0.00	0.71
Avail Cap(c_a), veh/h	315	0	632	283	0	641	271	0	833	277	0	780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	15.3	21.9	0.0	14.6	23.3	0.0	13.2	21.5	0.0	13.4
Incr Delay (d2), s/veh	3.1	0.0	2.5	0.4	0.0	1.3	5.4	0.0	4.9	0.6	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.0	0.0	5.1	0.8	0.0	4.1	2.1	0.0	7.1	1.1	0.0	6.5
Lane Grp Delay (d), s/veh	26.6	0.0	17.8	22.2	0.0	15.9	28.7	0.0	18.1	22.0	0.0	16.4
Lane Grp LOS	C		B	C		B	C		B	C		B
Approach Vol, veh/h		606			430			706			635	
Approach Delay, s/veh		20.6			16.8			20.0			17.1	
Approach LOS		C			B			B			B	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		28.0			28.0			32.0			32.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		23.0			23.0			27.0			27.0	
Max Q Clear Time (g_c+I1), s		24.5			18.0			26.5			22.5	
Green Ext Time (p_c), s		0.0			2.6			0.4			3.1	

Intersection Summary												
HCM 2010 Ctrl Delay			18.8									
HCM 2010 LOS			B									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	345	337	14	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1890	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1890	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	375	366	15	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	391	381	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.5

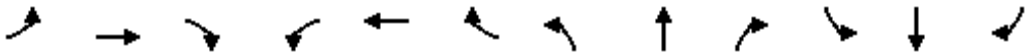
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	345	337	14	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	375	366	15	10	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	382	0	-	0	782	374
Stage 1	-	-	-	-	374	-
Stage 2	-	-	-	-	408	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1188	-	-	-	366	677
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	676	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1188	-	-	-	360	677
Mov Capacity-2 Maneuver	-	-	-	-	360	-
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	665	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.1
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1188	-	-	-	462
HCM Lane V/C Ratio	0.014	-	-	-	0.04
HCM Control Delay (s)	8.072	0	-	-	13.1
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.042	-	-	-	0.125

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	259	13	1	380	85	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.995			0.975							
Flt Protected		0.990										
Satd. Flow (prot)	0	1853	0	0	1834	0	0	1900	0	0	0	0
Flt Permitted		0.990										
Satd. Flow (perm)	0	1853	0	0	1834	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	78	298	15	1	452	101	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	391	0	0	554	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.7

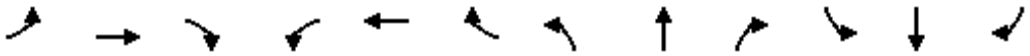
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	68	259	13	1	380	85	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	78	298	15	1	452	101	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	554	0	0	321	0	0	974	1025	320
Stage 1	-	-	-	-	-	-	469	469	-
Stage 2	-	-	-	-	-	-	505	556	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	1021	-	-	1245	-	-	282	237	725
Stage 1	-	-	-	-	-	-	634	564	-
Stage 2	-	-	-	-	-	-	610	516	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	1021	-	-	1238	-	-	254	0	716
Mov Capacity-2 Maneuver	-	-	-	-	-	-	254	0	-
Stage 1	-	-	-	-	-	-	571	0	-
Stage 2	-	-	-	-	-	-	609	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.8	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	1021	-	-	1238	-	-
HCM Lane V/C Ratio	+	0.077	-	-	0.001	-	-
HCM Control Delay (s)	0	8.818	0	-	7.911	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.248	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	103	100	45	109	0	282	0	93	10	70	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.934							0.850		0.973	
Flt Protected					0.986		0.950				0.995	
Satd. Flow (prot)	0	1757	0	0	1873	0	1805	0	1615	0	1839	0
Flt Permitted					0.986		0.950				0.995	
Satd. Flow (perm)	0	1757	0	0	1873	0	1805	0	1615	0	1839	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	126	122	56	135	0	317	0	118	14	99	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	248	0	0	191	0	317	0	118	0	141	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

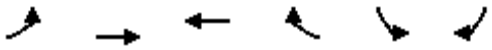
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	103	100	45	109	0	282	0	93	10	70	20
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	126	122	56	135	0	317	0	118	14	99	28
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	12.2	11.9	15.4	10.8
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	29%	10%
Vol Thru, %	0%	0%	51%	71%	70%
Vol Right, %	0%	100%	49%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	282	93	203	154	100
LT Vol	0	0	103	109	70
Through Vol	0	93	100	0	20
RT Vol	282	0	0	45	10
Lane Flow Rate	317	118	248	190	141
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.572	0.173	0.385	0.318	0.232
Departure Headway (Hd)	6.504	5.286	5.593	6.022	5.94
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	554	676	641	593	601
Service Time	4.258	3.04	3.656	4.091	4.012
HCM Lane V/C Ratio	0.572	0.175	0.387	0.32	0.235
HCM Control Delay	17.7	9.2	12.2	11.9	10.8
HCM Lane LOS	C	A	B	B	B
HCM 95th-tile Q	3.6	0.6	1.8	1.4	0.9

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	152	14	13	12	15	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.936		0.882	
Flt Protected		0.956			0.994	
Satd. Flow (prot)	0	1747	1778	0	1649	0
Flt Permitted		0.956			0.994	
Satd. Flow (perm)	0	1747	1778	0	1649	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		466	313		498	
Travel Time (s)		10.6	7.1		11.3	
Confl. Peds. (#/hr)	2			3	7	7
Peak Hour Factor	0.96	0.96	0.60	0.60	0.79	0.79
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Adj. Flow (vph)	158	15	22	20	19	135
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	173	42	0	154	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	152	14	13	12	15	107
Conflicting Peds, #/hr	2	0	0	3	7	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	60	60	79	79
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	158	15	22	20	19	135

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	370	41
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	331	-
Follow-up Headway	2.236	-	-	-	3.509	3.309
Pot Capacity-1 Maneuver	1545	-	-	-	632	1033
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	730	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1542	-	-	-	560	1025
Mov Capacity-2 Maneuver	-	-	-	-	560	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	651	-

Approach	EB	WB	SB
HCM Control Delay, s	7	0	9.6
HCM LOS			A

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1542	-	-	-	930
HCM Lane V/C Ratio	0.103	-	-	-	0.166
HCM Control Delay (s)	7.602	0	-	-	9.6
HCM Lane LOS	A	A			A
HCM 95th %tile Q(veh)	0.343	-	-	-	0.594

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	183	30	396	116	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981			0.850		
Flt Protected	0.959					0.998
Satd. Flow (prot)	1752	0	1863	1583	0	1859
Flt Permitted	0.959					0.971
Satd. Flow (perm)	1752	0	1863	1583	0	1809
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	15			126		
Link Speed (mph)	30		45			45
Link Distance (ft)	1004		717			745
Travel Time (s)	22.8		10.9			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	199	33	430	126	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	232	0	430	126	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		1	0	1	1
Detector Template			Thru	Right	Left	Thru
Leading Detector (ft)	40		350	0	20	350
Trailing Detector (ft)	0		344	0	0	344
Detector 1 Position(ft)	0		344	0	0	344
Detector 1 Size(ft)	40		6	20	20	6
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
Turn Type	NA		NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8			2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	25.0		20.0	20.0	20.0	20.0
Total Split (s)	25.0		35.0	35.0	35.0	35.0
Total Split (%)	41.7%		58.3%	58.3%	58.3%	58.3%

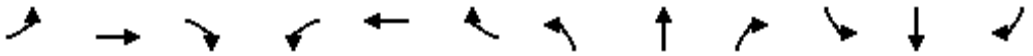
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Maximum Green (s)	21.0		31.0	31.0	31.0	31.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	0.5		0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.0		4.0	4.0		4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	Min	Min
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	11.0		22.3	22.3		22.3
Actuated g/C Ratio	0.27		0.54	0.54		0.54
v/c Ratio	0.49		0.43	0.14		0.71
Control Delay	16.3		7.9	1.9		12.9
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	16.3		7.9	1.9		12.9
LOS	B		A	A		B
Approach Delay	16.3		6.6			12.9
Approach LOS	B		A			B
Queue Length 50th (ft)	35		48	0		97
Queue Length 95th (ft)	110		124	17		252
Internal Link Dist (ft)	924		637			665
Turn Bay Length (ft)				150		
Base Capacity (vph)	920		1432	1246		1391
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	0.25		0.30	0.10		0.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 41.5			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 75.0%		ICU Level of Service D	
Analysis Period (min) 15			

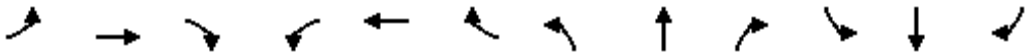
Splits and Phases: 3: Route 52/Lenape Road & Rosedale Avenue

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	183	30	396	116	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0
Lane Util. Factor	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1752		1863	1583		1858
Flt Permitted	0.96		1.00	1.00		0.97
Satd. Flow (perm)	1752		1863	1583		1810
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	199	33	430	126	33	660
RTOR Reduction (vph)	11	0	0	58	0	0
Lane Group Flow (vph)	221	0	430	68	0	693
Turn Type	NA		NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8			2	6	
Actuated Green, G (s)	11.0		22.3	22.3		22.3
Effective Green, g (s)	11.0		22.3	22.3		22.3
Actuated g/C Ratio	0.27		0.54	0.54		0.54
Clearance Time (s)	4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	466		1005	854		977
v/s Ratio Prot			0.23			
v/s Ratio Perm	c0.13			0.04		c0.38
v/c Ratio	0.47		0.43	0.08		0.71
Uniform Delay, d1	12.7		5.7	4.6		7.1
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	0.8		0.3	0.0		2.4
Delay (s)	13.5		6.0	4.6		9.5
Level of Service	B		A	A		A
Approach Delay (s)	13.5		5.7			9.5
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	41.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



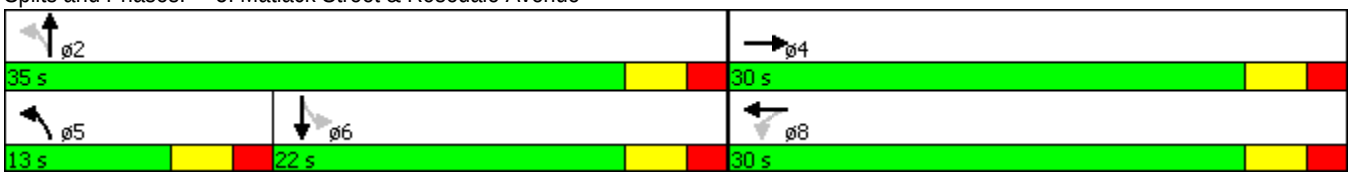
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	103	100	45	109	0	282	0	93	10	70	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor		0.98			0.99		0.97	0.93			0.96	
Frt		0.934						0.850			0.973	
Flt Protected					0.986		0.950				0.995	
Satd. Flow (prot)	0	1729	0	0	1873	0	1805	1496	0	0	1790	0
Flt Permitted					0.739		0.602				0.971	
Satd. Flow (perm)	0	1729	0	0	1396	0	1104	1496	0	0	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87						689			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	126	122	56	135	0	317	0	118	14	99	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	248	0	0	191	0	317	118	0	0	141	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)		8			8			8			8	
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		1	2		1	2		1	2	
Detector Template		Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)		100		20	100		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)		6		20	6		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			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		NA		Perm	NA		pm+pt	NA		Perm	NA	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8		5	2			6	
Permitted Phases				8			2			6		
Detector Phase		4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		21.0		21.0	21.0		9.0	21.0		21.0	21.0	
Total Split (s)		30.0		30.0	30.0		13.0	35.0		22.0	22.0	
Total Split (%)		46.2%		46.2%	46.2%		20.0%	53.8%		33.8%	33.8%	
Maximum Green (s)		25.0		25.0	25.0		8.0	30.0		17.0	17.0	
Yellow Time (s)		3.0		3.0	3.0		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	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0			5.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		None		None	None		None	Max		Max	Max	
Walk Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0			11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0			0		0	0	
Act Effct Green (s)		11.2			11.2		30.1	30.1			17.3	
Actuated g/C Ratio		0.22			0.22		0.59	0.59			0.34	
v/c Ratio		0.56			0.63		0.42	0.10			0.24	
Control Delay		16.4			27.7		8.0	0.2			13.2	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		16.4			27.7		8.0	0.2			13.2	
LOS		B			C		A	A			B	
Approach Delay		16.4			27.7			5.9			13.2	
Approach LOS		B			C			A			B	
Queue Length 50th (ft)		42			52		41	0			26	
Queue Length 95th (ft)		82			91		94	0			50	
Internal Link Dist (ft)		386			386			267			183	
Turn Bay Length (ft)							150					
Base Capacity (vph)		888			681		756	1161			594	
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		0.28			0.28		0.42	0.10			0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 51.4			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 57.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Matlack Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	103	100	45	109	0	282	0	93	10	70	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	0.94		0.98	0.97		0.91
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	188.1	190.0	190.0	190.0	0.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Cap, veh/h	0	210	203	141	268	0	727	0	898	97	450	117
Arrive On Green	0.00	0.24	0.24	0.24	0.24	0.00	0.14	0.00	0.57	0.33	0.33	0.33
Sat Flow, veh/h	0	874	846	218	1115	0	1810	0	1577	66	1349	350
Grp Volume(v), veh/h	0	0	248	191	0	0	317	0	118	141	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1719	1332	0	0	1810	0	1577	1765	0	0
Q Serve(g_s), s	0.0	0.0	6.7	1.0	0.0	0.0	5.4	0.0	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.7	7.8	0.0	0.0	5.4	0.0	1.8	3.0	0.0	0.0
Prop In Lane	0.00		0.49	0.29		0.00	1.00		1.00	0.10		0.20
Lane Grp Cap(c), veh/h	0	0	413	409	0	0	727	0	898	664	0	0
V/C Ratio(X)	0.00	0.00	0.60	0.47	0.00	0.00	0.44	0.00	0.13	0.21	0.00	0.00
Avail Cap(c_a), veh/h	0	0	816	782	0	0	747	0	898	664	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.8	17.3	0.0	0.0	7.9	0.0	5.3	12.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.4	0.8	0.0	0.0	0.4	0.0	0.3	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	2.8	2.0	0.0	0.0	2.1	0.0	0.6	1.3	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	19.2	18.1	0.0	0.0	8.3	0.0	5.6	13.4	0.0	0.0
Lane Grp LOS			B	B			A		A	B		
Approach Vol, veh/h		248			191			435			141	
Approach Delay, s/veh		19.2			18.1			7.6			13.4	
Approach LOS		B			B			A			B	

Timer												
Assigned Phs		4			8		5	2			6	
Phs Duration (G+Y+Rc), s		17.7			17.7		12.4	35.0			22.6	
Change Period (Y+Rc), s		5.0			5.0		5.0	5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0		8.0	30.0			17.0	
Max Q Clear Time (g_c+I1), s		8.7			9.8		7.4	3.8			5.0	
Green Ext Time (p_c), s		2.4			2.3		0.1	1.6			1.2	

Intersection Summary		
HCM 2010 Ctrl Delay	13.2	
HCM 2010 LOS	B	

Notes

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	228	30	396	136	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.998
Satd. Flow (perm)	1791	0	1818	1546	0	1833
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	233	31	483	153	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	264	0	483	153	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.5%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	32.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	228	30	396	136	30	607
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	82	89	92	92
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	233	31	483	153	33	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1208	483	0	0	483	0
Stage 1	483	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Follow-up Headway	3.5	3.3	-	-	2.2	-
Pot Capacity-1 Maneuver	# 204	588	-	-	1090	-
Stage 1	625	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	# 194	588	-	-	1090	-
Mov Capacity-2 Maneuver	# 194	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	192.9	0	0.4
HCM LOS	F		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	210	1090	-
HCM Lane V/C Ratio	-	-	1.254	0.03	-
HCM Control Delay (s)	-	-	192.9	8.405	0
HCM Lane LOS			F	A	A
HCM 95th %tile Q(veh)	-	-	13.808	0.092	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	169	13	16	263	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.877	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1862	0	0	1857	1658	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1862	0	0	1857	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	180	14	18	299	2	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	0	0	317	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

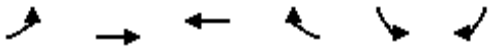
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	169	13	16	263	1	13
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	180	14	18	299	2	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	196	0	524	189
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	335	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1377	-	517	858
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	729	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1377	-	508	857
Mov Capacity-2 Maneuver	-	-	-	-	508	-
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	717	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.5
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	817	-	-	1377	-
HCM Lane V/C Ratio	0.026	-	-	0.013	-
HCM Control Delay (s)	9.5	-	-	7.649	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.081	-	-	0.04	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	232	166	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	267	182	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	269	183	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

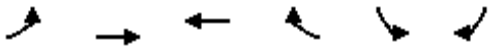
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	232	166	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	267	182	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	8.3	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	234	167	4
LT Vol	232	166	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	269	184	12
Geometry Grp	1	1	1
Degree of Util (X)	0.303	0.211	0.016
Departure Headway (Hd)	4.06	4.135	4.659
Convergence, Y/N	Yes	Yes	Yes
Cap	880	861	773
Service Time	2.11	2.199	2.659
HCM Lane V/C Ratio	0.306	0.214	0.016
HCM Control Delay	8.9	8.3	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	0.8	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	186	288	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1877	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1877	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	198	327	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	201	332	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.5

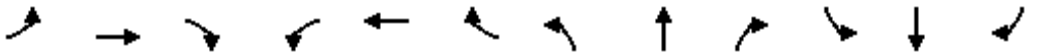
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	186	288	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	198	327	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	337	0	-	0	539	336
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	204	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1217	-	-	-	507	711
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	835	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1216	-	-	-	501	707
Mov Capacity-2 Maneuver	-	-	-	-	501	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	829	-

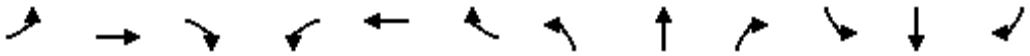
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.3
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1216	-	-	-	598
HCM Lane V/C Ratio	0.003	-	-	-	0.04
HCM Control Delay (s)	7.968	0	-	-	11.3
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.008	-	-	-	0.124

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	151	21	0	0	0	16	166	148	119	282	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
Storage Length (ft)	0		0	0		0	0		0	0		200
Storage Lanes	0		0	0		0	0		0	0		1
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
Ped Bike Factor		0.99									1.00	0.96
Frt		0.985						0.939				0.850
Flt Protected		0.994						0.998			0.985	
Satd. Flow (prot)	0	1875	0	0	0	0	0	1629	0	0	1872	1615
Flt Permitted		0.994						0.970			0.728	
Satd. Flow (perm)	0	1870	0	0	0	0	0	1584	0	0	1378	1543
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		10										202
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)	12		12							25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	26	178	25	0	0	0	19	200	178	137	324	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	0	0	0	397	0	0	461	202
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	0.96	0.96	0.96	0.85	0.85	0.85	1.09	1.09	1.09	0.85	0.97	0.97
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2					1	2		1	1	1
Detector Template	Left						Left			Left		Right
Leading Detector (ft)	20	100					20	100		20	35	20
Trailing Detector (ft)	0	0					0	-5		0	-5	0
Detector 1 Position(ft)	0	0					0	-5		0	-5	0
Detector 1 Size(ft)	20	0					20	40		20	40	20
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				
Detector 2 Size(ft)		6						6				
Detector 2 Type		Cl+Ex						Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0				

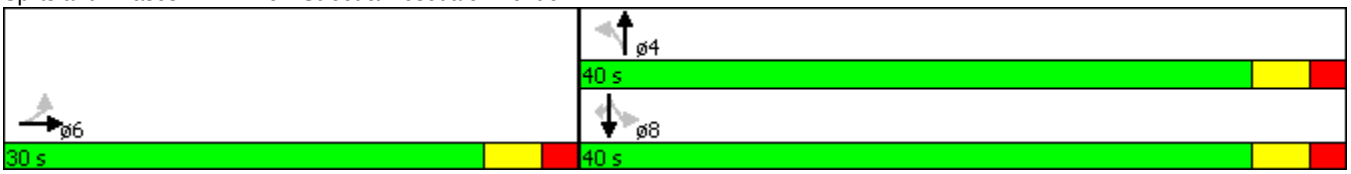


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					Perm	NA		Perm	NA	Perm
Protected Phases		6						4			8	
Permitted Phases	6						4			8		8
Detector Phase	6	6					4	4		8	8	8
Switch Phase												
Minimum Initial (s)	15.0	15.0					5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	30.0	30.0					25.0	25.0		15.0	15.0	15.0
Total Split (s)	30.0	30.0					40.0	40.0		40.0	40.0	40.0
Total Split (%)	42.9%	42.9%					57.1%	57.1%		57.1%	57.1%	57.1%
Maximum Green (s)	25.0	25.0					35.0	35.0		35.0	35.0	35.0
Yellow Time (s)	3.0	3.0					3.0	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
Lost Time Adjust (s)		0.0						0.0			0.0	0.0
Total Lost Time (s)		5.0						5.0			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
Recall Mode	Max	Max					None	None		None	None	None
Walk Time (s)	5.0	5.0										
Flash Dont Walk (s)	11.0	11.0										
Pedestrian Calls (#/hr)	0	0										
Act Effct Green (s)		25.4						23.4			23.4	23.4
Actuated g/C Ratio		0.43						0.40			0.40	0.40
v/c Ratio		0.28						0.63			0.84	0.28
Control Delay		13.7						18.7			30.6	2.8
Queue Delay		0.0						0.0			0.0	0.0
Total Delay		13.7						18.7			30.6	2.8
LOS		B						B			C	A
Approach Delay		13.7						18.7			22.1	
Approach LOS		B						B			C	
Queue Length 50th (ft)		48						107			139	0
Queue Length 95th (ft)		111						158			228	26
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												200
Base Capacity (vph)		810						955			831	1010
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		0.28						0.42			0.55	0.20

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 59			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 19.6		Intersection LOS: B	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	151	21	0	0	0	16	166	148	119	282	176
Number	1	6	16				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				0.99		1.00	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6				190.0	186.3	190.0	197.6	193.7	193.7
Lanes	0	1	0				0	1	0	0	1	1
Cap, veh/h	76	524	74				54	273	222	130	259	722
Arrive On Green	0.36	0.36	0.36				0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	214	1466	206				0	547	444	127	517	1445
Grp Volume(v), veh/h	229	0	0				397	0	0	461	0	202
Grp Sat Flow(s),veh/h/ln	1886	0	0				991	0	0	644	0	1445
Q Serve(g_s), s	6.2	0.0	0.0				0.0	0.0	0.0	0.0	0.0	5.7
Cycle Q Clear(g_c), s	6.2	0.0	0.0				35.0	0.0	0.0	35.0	0.0	5.7
Prop In Lane	0.11		0.11				0.05		0.45	0.30		1.00
Lane Grp Cap(c), veh/h	674	0	0				550	0	0	389	0	722
V/C Ratio(X)	0.34	0.00	0.00				0.72	0.00	0.00	1.19	0.00	0.28
Avail Cap(c_a), veh/h	674	0	0				550	0	0	389	0	722
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	0.0				16.5	0.0	0.0	17.3	0.0	10.2
Incr Delay (d2), s/veh	1.4	0.0	0.0				4.6	0.0	0.0	106.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.0	0.0	0.0				5.4	0.0	0.0	18.2	0.0	1.8
Lane Grp Delay (d), s/veh	17.8	0.0	0.0				21.2	0.0	0.0	123.8	0.0	10.4
Lane Grp LOS	B						C			F		B
Approach Vol, veh/h		229						397			663	
Approach Delay, s/veh		17.8						21.2			89.2	
Approach LOS		B						C			F	

Timer												
Assigned Phs		6						4			8	
Phs Duration (G+Y+Rc), s		30.0						40.0			40.0	
Change Period (Y+Rc), s		5.0						5.0			5.0	
Max Green Setting (Gmax), s		25.0						35.0			35.0	
Max Q Clear Time (g_c+I1), s		8.2						37.0			37.0	
Green Ext Time (p_c), s		1.1						0.0			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			55.6									
HCM 2010 LOS			E									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	361	86	0	0	0	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974					0.865
Flt Protected						
Satd. Flow (prot)	1814	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1814	0	0	0	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	93	0	0	0	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	485	0	0	0	0	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1

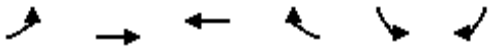
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	361	86	0	0	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	392	93	0	0	0	47

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		439	439
Stage 1	-	-		439	-
Stage 2	-	-		0	-
Follow-up Headway	-	-		3.518	3.318
Pot Capacity-1 Maneuver	-	-		528	618
Stage 1	-	-		597	-
Stage 2	-	-		-	-
Time blocked-Platoon, %	-	-			
Mov Capacity-1 Maneuver	-	-		528	618
Mov Capacity-2 Maneuver	-	-		528	-
Stage 1	-	-		597	-
Stage 2	-	-		-	-

Approach	EB	NB
HCM Control Delay, s	0	11.3
HCM LOS		B

Minor Lane / Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	618	-	-
HCM Lane V/C Ratio	0.076	-	-
HCM Control Delay (s)	11.3	-	-
HCM Lane LOS	B		
HCM 95th %tile Q(veh)	0.245	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	290	0	0	145	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	0	0	1770	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	315	0	0	158	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	315	0	0	158	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	290	0	0	145	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	315	0	0	158	0
Number of Lanes	0	1	0	0	1	0

Approach	EB	SB
Opposing Approach		
Opposing Lanes	0	0
Conflicting Approach Left	SB	
Conflicting Lanes Left	1	0
Conflicting Approach Right		EB
Conflicting Lanes Right	0	1
HCM Control Delay	10	9.2
HCM LOS	A	A

Lane	EBLn1	SBLn1
Vol Left, %	0%	100%
Vol Thru, %	100%	0%
Vol Right, %	0%	0%
Sign Control	Stop	Stop
Traffic Vol by Lane	290	145
LT Vol	290	0
Through Vol	0	0
RT Vol	0	145
Lane Flow Rate	315	158
Geometry Grp	1	1
Degree of Util (X)	0.38	0.213
Departure Headway (Hd)	4.337	4.861
Convergence, Y/N	Yes	Yes
Cap	832	739
Service Time	2.353	2.883
HCM Lane V/C Ratio	0.379	0.214
HCM Control Delay	10	9.2
HCM Lane LOS	A	A
HCM 95th-tile Q	1.8	0.8

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	556	107	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.978					
Flt Protected						
Satd. Flow (prot)	1840	0	0	0	1900	0
Flt Permitted						
Satd. Flow (perm)	1840	0	0	0	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	611	118	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	729	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	556	107	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	611	118	0	0	0	0

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	670	670
Stage 1	-	-	670	-
Stage 2	-	-	0	-
Follow-up Headway	-	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	373	460
Stage 1	-	-	450	-
Stage 2	-	-	-	-
Time blocked-Platoon, %	-	-		
Mov Capacity-1 Maneuver	-	-	373	460
Mov Capacity-2 Maneuver	-	-	373	-
Stage 1	-	-	450	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	0
HCM LOS		A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	0	-	-
HCM Lane V/C Ratio	+	-	-
HCM Control Delay (s)	0	-	-
HCM Lane LOS	A		
HCM 95th %tile Q(veh)	+	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	519	0	0	0	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	570	0	0	0	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	570	0	0	0	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	1.3

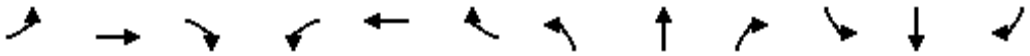
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	519	0	0	0	0	39
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	570	0	0	0	0	53

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		670	670
Stage 1	-	-		670	-
Stage 2	-	-		0	-
Follow-up Headway	-	-		3.5	3.318
Pot Capacity-1 Maneuver	-	-		373	457
Stage 1	-	-		450	-
Stage 2	-	-		-	-
Time blocked-Platoon, %	-	-			
Mov Capacity-1 Maneuver	-	-		341	419
Mov Capacity-2 Maneuver	-	-		341	-
Stage 1	-	-		413	-
Stage 2	-	-		-	-

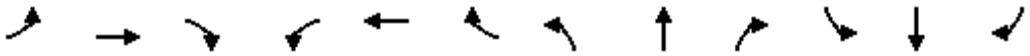
Approach	EB	NB
HCM Control Delay, s	0	14.8
HCM LOS		B

Minor Lane / Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	419	-	-
HCM Lane V/C Ratio	0.128	-	-
HCM Control Delay (s)	14.8	-	-
HCM Lane LOS	B		
HCM 95th %tile Q(veh)	0.434	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	229	131	59	0	361	0	544	69	76	410	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.93	0.94		0.93	0.80			0.97		0.93		
Frt		0.945			0.850			0.985				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1711	1657	0	1805	1255	0	0	1916	0	1685	1773	0
Flt Permitted	0.352			0.295						0.182		
Satd. Flow (perm)	592	1657	0	519	1255	0	0	1916	0	299	1773	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					62							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	58		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	209	305	175	84	0	430	0	618	78	79	456	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	480	0	84	430	0	0	696	0	79	456	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2			2		1	2	
Detector Template	Left	Thru		Left	Thru			Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100			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	6			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			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	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8						6		
Detector Phase	4	4		8	8			2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0			4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0			29.0		29.0	29.0	
Total Split (s)	29.0	29.0		29.0	29.0			31.0		31.0	31.0	
Total Split (%)	48.3%	48.3%		48.3%	48.3%			51.7%		51.7%	51.7%	
Maximum Green (s)	24.0	24.0		24.0	24.0			26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	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	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0		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	
Recall Mode	None	None		None	None			C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0			11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	22.1	22.1		22.1	22.1			27.9		27.9	27.9	
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.46		0.46	0.46	
v/c Ratio	0.96	0.79		0.44	0.86			0.78		0.57	0.55	
Control Delay	75.6	27.4		21.8	33.7			22.9		35.1	15.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	75.6	27.4		21.8	33.7			22.9		35.1	15.6	
LOS	E	C		C	C			C		D	B	
Approach Delay		42.0			31.8			22.9			18.5	
Approach LOS		D			C			C			B	
Queue Length 50th (ft)	67	141		21	113			212		21	120	
Queue Length 95th (ft)	#149	181		40	#230			#384		#84	202	
Internal Link Dist (ft)		132			104			305			443	
Turn Bay Length (ft)	115			100						115		
Base Capacity (vph)	236	662		207	539			892		139	825	
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	0.89	0.73		0.41	0.80			0.78		0.57	0.55	

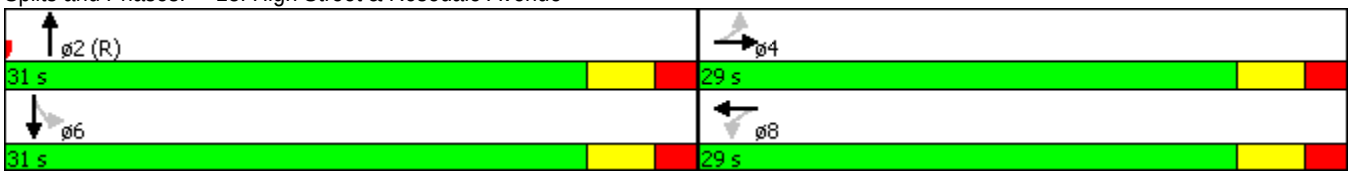
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 29.2		Intersection LOS: C	

Intersection Capacity Utilization 92.5% 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: 13: High Street & Rosedale Avenue

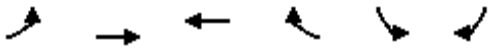


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	165	229	131	59	0	361	0	544	69	76	410	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.88	0.96		0.85	1.00		0.82	0.96		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	0.0	195.6	197.6	190.0	190.0	0.0
Lanes	1	1	0	1	1	0	0	1	0	1	1	0
Cap, veh/h	234	422	242	259	0	549	0	718	91	190	823	0
Arrive On Green	0.40	0.40	0.40	0.40	0.00	0.40	0.00	0.43	0.43	0.43	0.43	0.00
Sat Flow, veh/h	902	1054	605	890	0	1373	0	1656	209	729	1900	0
Grp Volume(v), veh/h	209	0	480	84	0	430	0	0	696	79	456	0
Grp Sat Flow(s),veh/h/ln	902	0	1659	890	0	1373	0	0	1866	729	1900	0
Q Serve(g_s), s	7.6	0.0	14.7	5.3	0.0	16.4	0.0	0.0	20.2	5.8	10.7	0.0
Cycle Q Clear(g_c), s	24.0	0.0	14.7	19.9	0.0	16.4	0.0	0.0	20.2	26.0	10.7	0.0
Prop In Lane	1.00		0.36	1.00		1.00	0.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	234	0	664	259	0	549	0	0	808	190	823	0
V/C Ratio(X)	0.89	0.00	0.72	0.32	0.00	0.78	0.00	0.00	0.86	0.42	0.55	0.00
Avail Cap(c_a), veh/h	234	0	664	259	0	549	0	0	808	190	823	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.9	0.0	15.2	23.6	0.0	15.7	0.0	0.0	15.4	27.4	12.7	0.0
Incr Delay (d2), s/veh	32.1	0.0	3.9	0.7	0.0	7.3	0.0	0.0	11.6	1.4	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	5.1	0.0	6.1	1.2	0.0	6.1	0.0	0.0	10.9	1.2	4.6	0.0
Lane Grp Delay (d), s/veh	60.1	0.0	19.1	24.3	0.0	23.0	0.0	0.0	27.0	28.9	13.5	0.0
Lane Grp LOS	E		B	C		C			C	C	B	
Approach Vol, veh/h		689			514			696			535	
Approach Delay, s/veh		31.5			23.2			27.0			15.8	
Approach LOS		C			C			C			B	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		29.0			29.0			31.0			31.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		24.0			24.0			26.0			26.0	
Max Q Clear Time (g_c+I1), s		26.0			21.9			22.2			28.0	
Green Ext Time (p_c), s		0.0			1.4			2.5			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			25.0									
HCM 2010 LOS			C									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	405	421	14	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1892	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1892	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	440	458	15	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	456	473	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.4

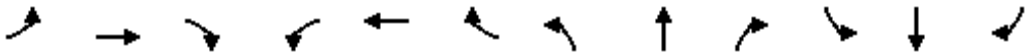
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	405	421	14	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	440	458	15	10	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	473	0	-	0	938	465
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	473	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1099	-	-	-	296	602
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	631	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1099	-	-	-	290	602
Mov Capacity-2 Maneuver	-	-	-	-	290	-
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	619	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.8
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1099	-	-	-	384
HCM Lane V/C Ratio	0.015	-	-	-	0.048
HCM Control Delay (s)	8.325	0	-	-	14.8
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.045	-	-	-	0.151

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	304	13	1	475	85	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.995			0.980							
Flt Protected		0.991										
Satd. Flow (prot)	0	1855	0	0	1844	0	0	1900	0	0	0	0
Flt Permitted		0.991										
Satd. Flow (perm)	0	1855	0	0	1844	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	86	349	15	1	565	101	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	450	0	0	667	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.7

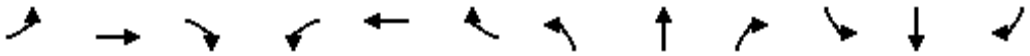
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	75	304	13	1	475	85	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	86	349	15	1	565	101	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	667	0	0	372	0	0	1155	1206	372
Stage 1	-	-	-	-	-	-	537	537	-
Stage 2	-	-	-	-	-	-	618	669	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	927	-	-	1192	-	-	220	185	678
Stage 1	-	-	-	-	-	-	590	526	-
Stage 2	-	-	-	-	-	-	542	459	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	927	-	-	1185	-	-	193	0	670
Mov Capacity-2 Maneuver	-	-	-	-	-	-	193	0	-
Stage 1	-	-	-	-	-	-	517	0	-
Stage 2	-	-	-	-	-	-	541	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.8	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	927	-	-	1185	-	-
HCM Lane V/C Ratio	+	0.093	-	-	0.001	-	-
HCM Control Delay (s)	0	9.281	0	-	8.041	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.307	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	121	111	45	136	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.936							0.850		0.970	
Flt Protected					0.988		0.950				0.995	
Satd. Flow (prot)	0	1761	0	0	1877	0	1805	0	1615	0	1834	0
Flt Permitted					0.988		0.950				0.995	
Satd. Flow (perm)	0	1761	0	0	1877	0	1805	0	1615	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	148	135	56	168	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	283	0	0	224	0	396	0	118	0	145	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

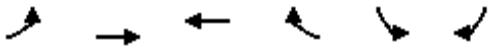
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	121	111	45	136	0	352	0	93	10	70	23
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	148	135	56	168	0	396	0	118	14	99	32
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	14.8	14.1	23.5	12
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	25%	10%
Vol Thru, %	0%	0%	52%	75%	68%
Vol Right, %	0%	100%	48%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	352	93	232	181	103
LT Vol	0	0	121	136	70
Through Vol	0	93	111	0	23
RT Vol	352	0	0	45	10
Lane Flow Rate	396	118	283	223	145
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.75	0.183	0.482	0.408	0.266
Departure Headway (Hd)	6.953	5.731	6.139	6.576	6.59
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	522	630	588	550	545
Service Time	4.653	3.431	4.161	4.6	4.626
HCM Lane V/C Ratio	0.759	0.187	0.481	0.405	0.266
HCM Control Delay	27.6	9.7	14.8	14.1	12
HCM Lane LOS	D	A	B	B	B
HCM 95th-tile Q	6.4	0.7	2.6	2	1.1

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	179	14	13	12	15	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.936		0.879	
Flt Protected		0.956			0.995	
Satd. Flow (prot)	0	1747	1778	0	1645	0
Flt Permitted		0.956			0.995	
Satd. Flow (perm)	0	1747	1778	0	1645	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		466	313		498	
Travel Time (s)		10.6	7.1		11.3	
Confl. Peds. (#/hr)	2			3	7	7
Peak Hour Factor	0.96	0.96	0.60	0.60	0.79	0.79
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Adj. Flow (vph)	186	15	22	20	19	168
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	201	42	0	187	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	179	14	13	12	15	133
Conflicting Peds, #/hr	2	0	0	3	7	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	60	60	79	79
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	186	15	22	20	19	168

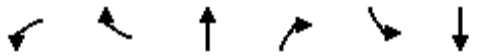
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	427	41
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	388	-
Follow-up Headway	2.236	-	-	-	3.509	3.309
Pot Capacity-1 Maneuver	1545	-	-	-	586	1033
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	688	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1542	-	-	-	509	1025
Mov Capacity-2 Maneuver	-	-	-	-	509	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	601	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	9.9
HCM LOS			A

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1542	-	-	-	929
HCM Lane V/C Ratio	0.121	-	-	-	0.202
HCM Control Delay (s)	7.656	0	-	-	9.9
HCM Lane LOS	A	A			A
HCM 95th %tile Q(veh)	0.412	-	-	-	0.752

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	228	30	396	136	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.967
Satd. Flow (perm)	1791	0	1818	1546	0	1776
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	12			153		
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	233	31	483	153	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	264	0	483	153	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
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	NA		NA	Perm	Perm	NA
Protected Phases	8		2			6



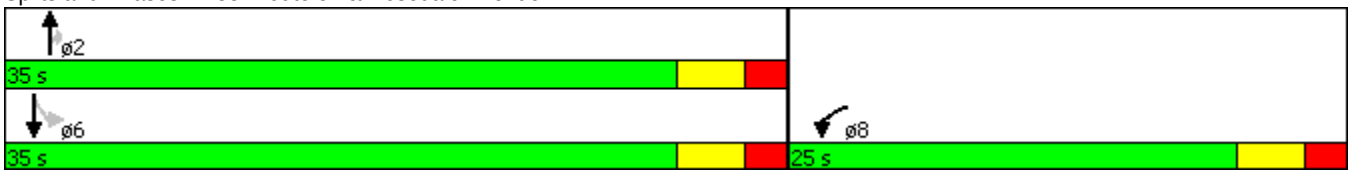
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases				2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	21.0		21.0	21.0	21.0	21.0
Total Split (s)	25.0		35.0	35.0	35.0	35.0
Total Split (%)	41.7%		58.3%	58.3%	58.3%	58.3%
Maximum Green (s)	20.0		30.0	30.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0		5.0	5.0		5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	Max	Max
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	13.0		33.0	33.0		33.0
Actuated g/C Ratio	0.23		0.59	0.59		0.59
v/c Ratio	0.62		0.45	0.16		0.66
Control Delay	24.3		9.1	2.0		13.2
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	24.3		9.1	2.0		13.2
LOS	C		A	A		B
Approach Delay	24.3		7.4			13.2
Approach LOS	C		A			B
Queue Length 50th (ft)	69		76	0		130
Queue Length 95th (ft)	128		149	21		#314
Internal Link Dist (ft)	976		325			323
Turn Bay Length (ft)				80		
Base Capacity (vph)	649		1070	973		1045
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	0.41		0.45	0.16		0.66

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 56			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 79.2%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

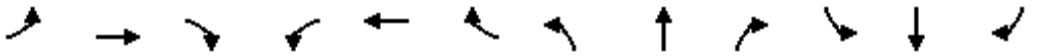
Queue shown is maximum after two cycles.

Splits and Phases: 33: Route 52 & Rosedale Avenue

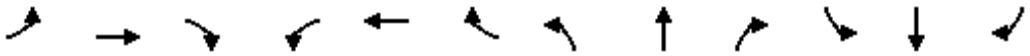


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	228	30	396	136	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	11	11	11	11
Total Lost time (s)	5.0		5.0	5.0		5.0
Lane Util. Factor	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1791		1818	1546		1832
Flt Permitted	0.96		1.00	1.00		0.97
Satd. Flow (perm)	1791		1818	1546		1776
Peak-hour factor, PHF	0.98	0.98	0.82	0.89	0.92	0.92
Adj. Flow (vph)	233	31	483	153	33	660
RTOR Reduction (vph)	9	0	0	63	0	0
Lane Group Flow (vph)	255	0	483	90	0	693
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Turn Type	NA		NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases				2	6	
Actuated Green, G (s)	13.0		33.0	33.0		33.0
Effective Green, g (s)	13.0		33.0	33.0		33.0
Actuated g/C Ratio	0.23		0.59	0.59		0.59
Clearance Time (s)	5.0		5.0	5.0		5.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	415		1071	911		1046
v/s Ratio Prot	c0.14		0.27			
v/s Ratio Perm				0.06		c0.39
v/c Ratio	0.61		0.45	0.10		0.66
Uniform Delay, d1	19.3		6.4	5.0		7.7
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	2.7		1.4	0.2		3.3
Delay (s)	21.9		7.8	5.2		11.1
Level of Service	C		A	A		B
Approach Delay (s)	21.9		7.2			11.1
Approach LOS	C		A			B

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	56.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



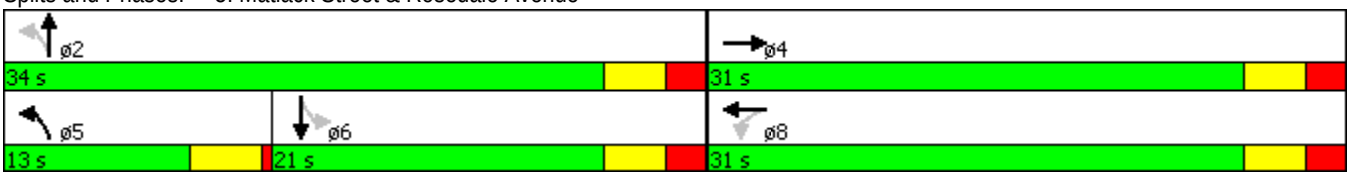
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	121	111	45	136	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor		0.98			1.00		0.96	0.93			0.96	
Frt		0.936						0.850			0.970	
Flt Protected					0.988		0.950				0.995	
Satd. Flow (prot)	0	1734	0	0	1877	0	1805	1496	0	0	1779	0
Flt Permitted					0.728		0.616				0.971	
Satd. Flow (perm)	0	1734	0	0	1377	0	1129	1496	0	0	1719	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		84						654			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	148	135	56	168	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	283	0	0	224	0	396	118	0	0	145	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)		8			8			8			8	
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		1	2		1	2		1	2	
Detector Template		Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)		100		20	100		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)		6		20	6		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			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		NA		Perm	NA		pm+pt	NA		Perm	NA	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8		5	2			6	
Permitted Phases				8			2			6		
Detector Phase		4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		21.0		21.0	21.0		8.0	21.0		21.0	21.0	
Total Split (s)		31.0		31.0	31.0		13.0	34.0		21.0	21.0	
Total Split (%)		47.7%		47.7%	47.7%		20.0%	52.3%		32.3%	32.3%	
Maximum Green (s)		26.0		26.0	26.0		9.0	29.0		16.0	16.0	
Yellow Time (s)		3.0		3.0	3.0		3.5	3.0		3.0	3.0	
All-Red Time (s)		2.0		2.0	2.0		0.5	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		5.0			5.0		4.0	5.0			5.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		None		None	None		None	Max		Max	Max	
Walk Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0			11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0			0		0	0	
Act Effct Green (s)		12.1			12.1		30.2	29.1			16.4	
Actuated g/C Ratio		0.24			0.24		0.59	0.57			0.32	
v/c Ratio		0.60			0.69		0.51	0.10			0.26	
Control Delay		17.5			29.5		9.1	0.2			14.0	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		17.5			29.5		9.1	0.2			14.0	
LOS		B			C		A	A			B	
Approach Delay		17.5			29.5			7.1			14.0	
Approach LOS		B			C			A			B	
Queue Length 50th (ft)		52			61		53	0			27	
Queue Length 95th (ft)		95			104		124	0			53	
Internal Link Dist (ft)		386			386			267			183	
Turn Bay Length (ft)							150					
Base Capacity (vph)		924			701		782	1132			562	
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		0.31			0.32		0.51	0.10			0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 51.3			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 14.8		Intersection LOS: B	
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Matlack Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	121	111	45	136	0	352	0	93	10	70	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	0.94		0.98	0.96		0.90
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	188.1	190.0	190.0	190.0	0.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Cap, veh/h	0	239	218	133	308	0	731	0	862	94	392	116
Arrive On Green	0.00	0.26	0.26	0.26	0.26	0.00	0.17	0.00	0.55	0.30	0.30	0.30
Sat Flow, veh/h	0	902	823	183	1165	0	1810	0	1575	65	1298	386
Grp Volume(v), veh/h	0	0	283	224	0	0	396	0	118	145	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1725	1348	0	0	1810	0	1575	1749	0	0
Q Serve(g_s), s	0.0	0.0	7.7	1.3	0.0	0.0	7.3	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.7	9.0	0.0	0.0	7.3	0.0	1.9	3.3	0.0	0.0
Prop In Lane	0.00		0.48	0.25		0.00	1.00		1.00	0.10		0.22
Lane Grp Cap(c), veh/h	0	0	456	441	0	0	731	0	862	602	0	0
V/C Ratio(X)	0.00	0.00	0.62	0.51	0.00	0.00	0.54	0.00	0.14	0.24	0.00	0.00
Avail Cap(c_a), veh/h	0	0	846	805	0	0	731	0	862	602	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.2	16.7	0.0	0.0	8.6	0.0	5.9	14.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.4	0.9	0.0	0.0	0.8	0.0	0.3	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	3.2	2.4	0.0	0.0	2.8	0.0	0.7	1.5	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	18.5	17.6	0.0	0.0	9.4	0.0	6.2	15.0	0.0	0.0
Lane Grp LOS			B	B			A		A	B		
Approach Vol, veh/h		283			224			514			145	
Approach Delay, s/veh		18.5			17.6			8.7			15.0	
Approach LOS		B			B			A			B	

Timer												
Assigned Phs		4			8		5	2			6	
Phs Duration (G+Y+Rc), s		19.0			19.0		13.0	34.0			21.0	
Change Period (Y+Rc), s		5.0			5.0		4.0	5.0			5.0	
Max Green Setting (Gmax), s		26.0			26.0		9.0	29.0			16.0	
Max Q Clear Time (g_c+I1), s		9.7			11.0		9.3	3.9			5.3	
Green Ext Time (p_c), s		2.8			2.7		0.0	1.6			1.1	

Intersection Summary		
HCM 2010 Ctrl Delay	13.6	
HCM 2010 LOS	B	

Notes

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	230	30	396	140	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.998
Satd. Flow (perm)	1791	0	1818	1546	0	1833
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	235	31	483	157	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	266	0	483	157	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	32.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	230	30	396	140	30	607
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	82	89	92	92
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	235	31	483	157	33	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1208	483	0	0	483	0
Stage 1	483	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Follow-up Headway	3.5	3.3	-	-	2.2	-
Pot Capacity-1 Maneuver	# 204	588	-	-	1090	-
Stage 1	625	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	# 194	588	-	-	1090	-
Mov Capacity-2 Maneuver	# 194	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	196.5	0	0.4
HCM LOS	F		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	210	1090	-
HCM Lane V/C Ratio	-	-	1.263	0.03	-
HCM Control Delay (s)	-	-	196.5	8.405	0
HCM Lane LOS			F	A	A
HCM 95th %tile Q(veh)	-	-	14.013	0.092	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	172	13	16	266	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.877	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1862	0	0	1857	1658	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1862	0	0	1857	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	183	14	18	302	2	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	197	0	0	320	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

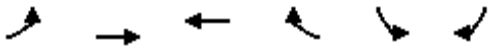
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	172	13	16	266	1	13
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	183	14	18	302	2	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	199	0	531	192
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	339	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1373	-	512	855
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	726	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1373	-	503	854
Mov Capacity-2 Maneuver	-	-	-	-	503	-
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	714	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.5
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	813	-	-	1373	-
HCM Lane V/C Ratio	0.026	-	-	0.013	-
HCM Control Delay (s)	9.5	-	-	7.657	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.082	-	-	0.04	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	235	169	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	270	186	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	272	187	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

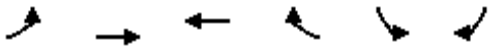
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	235	169	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	270	186	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	8.4	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	237	170	4
LT Vol	235	169	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	272	187	12
Geometry Grp	1	1	1
Degree of Util (X)	0.307	0.215	0.016
Departure Headway (Hd)	4.062	4.138	4.673
Convergence, Y/N	Yes	Yes	Yes
Cap	880	859	771
Service Time	2.114	2.203	2.673
HCM Lane V/C Ratio	0.309	0.218	0.016
HCM Control Delay	8.9	8.4	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	0.8	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	190	292	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1877	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1877	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	202	332	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	205	337	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.5

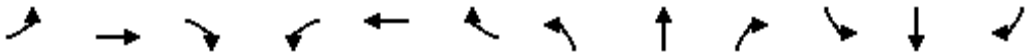
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	190	292	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	202	332	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	341	0	-	0	548	340
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	209	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1213	-	-	-	501	707
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	831	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1212	-	-	-	495	703
Mov Capacity-2 Maneuver	-	-	-	-	495	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	825	-

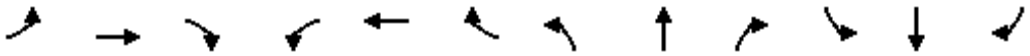
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.3
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1212	-	-	-	592
HCM Lane V/C Ratio	0.003	-	-	-	0.04
HCM Control Delay (s)	7.978	0	-	-	11.3
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.008	-	-	-	0.125

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	157	21	107	272	123	16	160	153	119	175	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
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
Ped Bike Factor		0.99									0.97	
Frt		0.986			0.967			0.937			0.990	
Flt Protected		0.995			0.989			0.998			0.982	
Satd. Flow (prot)	0	1879	0	0	1817	0	0	1626	0	0	1833	0
Flt Permitted		0.918			0.861			0.998			0.982	
Satd. Flow (perm)	0	1733	0	0	1582	0	0	1626	0	0	1798	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		9									5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)	12		12							25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	26	185	25	124	316	143	19	193	184	137	201	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	236	0	0	583	0	0	396	0	0	364	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	0.96	0.96	0.96	0.85	0.97	0.85	1.09	1.09	1.09	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								



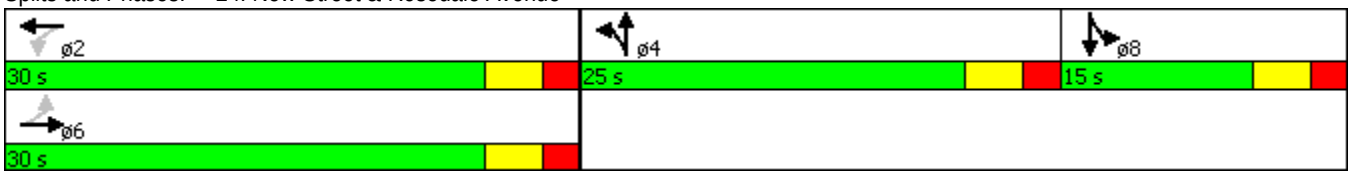
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		5.0			5.0			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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	0	0		0	0							
Act Effct Green (s)		25.0			25.0			19.1			10.0	
Actuated g/C Ratio		0.36			0.36			0.28			0.14	
v/c Ratio		0.37			1.02			0.88			1.35	
Control Delay		18.1			68.0			47.7			208.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.1			68.0			47.7			208.6	
LOS		B			E			D			F	
Approach Delay		18.1			68.0			47.7			208.6	
Approach LOS		B			E			D			F	
Queue Length 50th (ft)		71			~276			160			~212	
Queue Length 95th (ft)		117			#425			#268			#352	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		633			573			470			270	
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		0.37			1.02			0.84			1.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.1			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay: 87.9		Intersection LOS: F	
Intersection Capacity Utilization 93.7%		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: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	157	21	107	272	123	16	160	153	119	175	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	132	785	99	215	465	192	23	236	225	179	262	34
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	97	1531	193	245	908	375	82	837	798	634	930	120
Grp Volume(v), veh/h	236	0	0	583	0	0	396	0	0	364	0	0
Grp Sat Flow(s),veh/h/ln	1821	0	0	1528	0	0	1718	0	0	1684	0	0
Q Serve(g_s), s	0.0	0.0	0.0	8.6	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	3.4	0.0	0.0	14.2	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.11		0.11	0.21		0.25	0.05		0.46	0.38		0.07
Lane Grp Cap(c), veh/h	1016	0	0	873	0	0	485	0	0	475	0	0
V/C Ratio(X)	0.23	0.00	0.00	0.67	0.00	0.00	0.82	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	1016	0	0	873	0	0	705	0	0	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	9.1	0.0	0.0	16.3	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	4.0	0.0	0.0	4.9	0.0	0.0	7.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.4	0.0	0.0	5.2	0.0	0.0	4.6	0.0	0.0	4.5	0.0	0.0
Lane Grp Delay (d), s/veh	7.1	0.0	0.0	13.1	0.0	0.0	21.2	0.0	0.0	23.4	0.0	0.0
Lane Grp LOS	A			B			C			C		
Approach Vol, veh/h		236			583			396			364	
Approach Delay, s/veh		7.1			13.1			21.2			23.4	
Approach LOS		A			B			C			C	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			18.8			18.8	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		5.4			16.2			12.5			11.7	
Green Ext Time (p_c), s		5.5			3.6			1.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			16.6									
HCM 2010 LOS			B									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	369	58	33	525	47	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982				0.954	
Flt Protected				0.997	0.968	
Satd. Flow (prot)	1829	0	0	1857	1720	0
Flt Permitted				0.997	0.968	
Satd. Flow (perm)	1829	0	0	1857	1720	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	401	63	36	571	51	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	464	0	0	607	77	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.7

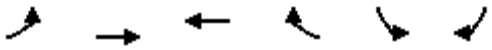
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	369	58	33	525	47	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	401	63	36	571	51	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	464	0	1075	433
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	642	-
Follow-up Headway	-	-	2.218	-	3.518	3.318
Pot Capacity-1 Maneuver	-	-	1097	-	243	623
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	524	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1097	-	231	623
Mov Capacity-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	499	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	21.6
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	293	-	-	1097	-
HCM Lane V/C Ratio	0.263	-	-	0.033	-
HCM Control Delay (s)	21.6	-	-	8.393	0
HCM Lane LOS	C			A	A
HCM 95th %tile Q(veh)	1.033	-	-	0.101	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	304	380	0	122	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	1863	1863	0	1720	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1863	1863	0	1720	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	330	413	0	133	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	330	413	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	12.9
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	304	380	0	122	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	330	413	0	133	68
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	12.3	14.2	11.3
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	66%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	34%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	304	380	185
LT Vol	304	380	0
Through Vol	0	0	63
RT Vol	0	0	122
Lane Flow Rate	330	413	201
Geometry Grp	1	1	1
Degree of Util (X)	0.458	0.562	0.317
Departure Headway (Hd)	5.103	5.003	5.677
Convergence, Y/N	Yes	Yes	Yes
Cap	710	727	637
Service Time	3.103	3.003	3.677
HCM Lane V/C Ratio	0.465	0.568	0.316
HCM Control Delay	12.3	14.2	11.3
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.4	3.5	1.4

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	567	87	31	510	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982					
Flt Protected				0.997		
Satd. Flow (prot)	1847	0	0	1894	1900	0
Flt Permitted				0.997		
Satd. Flow (perm)	1847	0	0	1894	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	623	96	33	537	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	719	0	0	570	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	567	87	31	510	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	623	96	33	537	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	719	0	1273	671
Stage 1	-	-	-	-	671	-
Stage 2	-	-	-	-	602	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	892	-	187	460
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	551	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	892	-	177	460
Mov Capacity-2 Maneuver	-	-	-	-	177	-
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	0	-	-	892	-
HCM Lane V/C Ratio	+	-	-	0.037	-
HCM Control Delay (s)	0	-	-	9.189	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	+	-	-	0.114	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	527	0	0	487	9	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.896	
Flt Protected					0.989	
Satd. Flow (prot)	1863	0	0	1881	1658	0
Flt Permitted					0.989	
Satd. Flow (perm)	1863	0	0	1881	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	579	0	0	560	12	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	579	0	0	560	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.8

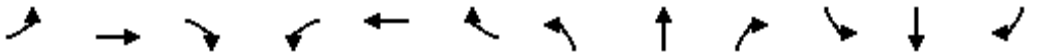
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	527	0	0	487	9	30
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	579	0	0	560	12	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	679	0	1239	680
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	560	-
Follow-up Headway	-	-	2.218	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	913	-	196	451
Stage 1	-	-	-	-	507	-
Stage 2	-	-	-	-	576	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	912	-	179	413
Mov Capacity-2 Maneuver	-	-	-	-	179	-
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	575	-

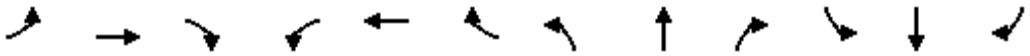
Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.6
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	317	-	-	912	-
HCM Lane V/C Ratio	0.169	-	-	-	-
HCM Control Delay (s)	18.6	-	-	0	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	0.597	-	-	0	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	153	270	102	35	269	107	91	444	54	104	382	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.94	0.96		0.93	0.94		0.96	0.97		0.89	0.94	
Frt		0.959			0.957			0.984			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1707	0	1805	1660	0	1668	1916	0	1685	1630	0
Flt Permitted	0.334			0.278			0.348			0.293		
Satd. Flow (perm)	563	1707	0	490	1660	0	589	1916	0	462	1630	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					41						20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	58		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	194	360	136	50	320	127	112	505	61	108	424	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	194	496	0	50	447	0	112	566	0	108	505	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
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	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		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	None	None		None	None		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.2	22.2		22.2	22.2		27.8	27.8		27.8	27.8	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.46	0.46		0.46	0.46	
v/c Ratio	0.93	0.78		0.28	0.70		0.41	0.64		0.51	0.66	
Control Delay	69.1	26.1		16.4	20.4		18.3	17.6		24.7	18.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	69.1	26.1		16.4	20.4		18.3	17.6		24.7	18.7	
LOS	E	C		B	C		B	B		C	B	
Approach Delay		38.2			20.0			17.7			19.8	
Approach LOS		D			B			B			B	
Queue Length 50th (ft)	60	141		11	110		28	162		28	140	
Queue Length 95th (ft)	#137	179		25	174		61	256		#93	#262	
Internal Link Dist (ft)		132			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	234	711		204	715		272	887		213	765	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.83	0.70		0.25	0.63		0.41	0.64		0.51	0.66	

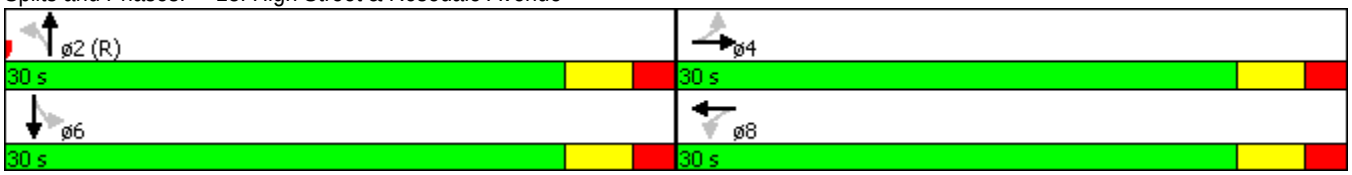
Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 24.4	Intersection LOS: C

Intersection Capacity Utilization 80.8% 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: 13: High Street & Rosedale Avenue

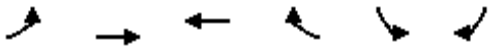


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	153	270	102	35	269	107	91	444	54	104	382	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.88	0.96		0.86	0.91		0.81	0.94		0.75
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	188.1	195.6	197.6	190.0	190.0	190.0
Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Cap, veh/h	307	517	195	276	512	203	266	694	84	251	609	116
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	884	1240	468	878	1229	488	819	1665	201	807	1461	279
Grp Volume(v), veh/h	194	0	496	50	0	447	112	0	566	108	0	505
Grp Sat Flow(s),veh/h/ln	884	0	1708	878	0	1717	819	0	1866	807	0	1740
Q Serve(g_s), s	12.7	0.0	14.3	3.0	0.0	12.3	7.8	0.0	15.2	7.8	0.0	14.3
Cycle Q Clear(g_c), s	25.0	0.0	14.3	17.3	0.0	12.3	22.1	0.0	15.2	23.0	0.0	14.3
Prop In Lane	1.00		0.27	1.00		0.28	1.00		0.11	1.00		0.16
Lane Grp Cap(c), veh/h	307	0	712	276	0	716	266	0	778	251	0	725
V/C Ratio(X)	0.63	0.00	0.70	0.18	0.00	0.62	0.42	0.00	0.73	0.43	0.00	0.70
Avail Cap(c_a), veh/h	307	0	712	276	0	716	266	0	778	251	0	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	14.4	21.5	0.0	13.8	23.5	0.0	14.7	24.3	0.0	14.4
Incr Delay (d2), s/veh	4.2	0.0	3.0	0.3	0.0	1.7	4.8	0.0	5.9	1.2	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.2	0.0	6.0	0.6	0.0	4.9	1.9	0.0	7.6	1.6	0.0	6.1
Lane Grp Delay (d), s/veh	28.0	0.0	17.4	21.8	0.0	15.5	28.3	0.0	20.6	25.4	0.0	17.3
Lane Grp LOS	C		B	C		B	C		C	C		B
Approach Vol, veh/h		690			497			678			613	
Approach Delay, s/veh		20.4			16.1			21.8			18.7	
Approach LOS		C			B			C			B	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		30.0			30.0			30.0			30.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			25.0			25.0	
Max Q Clear Time (g_c+I1), s		27.0			19.3			24.1			25.0	
Green Ext Time (p_c), s		0.0			3.3			0.6			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			19.5									
HCM 2010 LOS			B									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	421	431	14	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1892	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1892	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	458	468	15	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	474	483	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.4

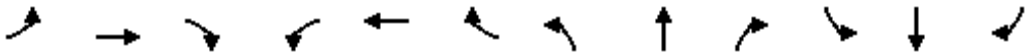
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	421	431	14	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	458	468	15	10	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	484	0	-	0	966	476
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	490	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1089	-	-	-	285	593
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	620	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1089	-	-	-	279	593
Mov Capacity-2 Maneuver	-	-	-	-	279	-
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	608	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	15.2
HCM LOS			C

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1089	-	-	-	372
HCM Lane V/C Ratio	0.015	-	-	-	0.05
HCM Control Delay (s)	8.356	0	-	-	15.2
HCM Lane LOS	A	A			C
HCM 95th %tile Q(veh)	0.046	-	-	-	0.156

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	318	13	1	494	85	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.996			0.980							
Flt Protected		0.992										
Satd. Flow (prot)	0	1859	0	0	1844	0	0	1900	0	0	0	0
Flt Permitted		0.992										
Satd. Flow (perm)	0	1859	0	0	1844	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	70	366	15	1	588	101	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	451	0	0	690	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

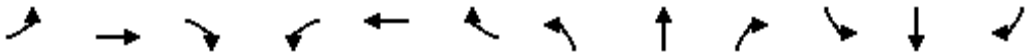
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	61	318	13	1	494	85	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	70	366	15	1	588	101	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	689	0	0	388	0	0	1162	1213	388
Stage 1	-	-	-	-	-	-	521	521	-
Stage 2	-	-	-	-	-	-	641	692	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	910	-	-	1176	-	-	218	183	665
Stage 1	-	-	-	-	-	-	600	535	-
Stage 2	-	-	-	-	-	-	528	448	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	910	-	-	1169	-	-	195	0	657
Mov Capacity-2 Maneuver	-	-	-	-	-	-	195	0	-
Stage 1	-	-	-	-	-	-	538	0	-
Stage 2	-	-	-	-	-	-	527	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.4	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	910	-	-	1169	-	-
HCM Lane V/C Ratio	+	0.077	-	-	0.001	-	-
HCM Control Delay (s)	0	9.286	0	-	8.083	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.25	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	136	96	30	146	0	302	0	77	18	62	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.944							0.850		0.973	
Flt Protected					0.992		0.950				0.991	
Satd. Flow (prot)	0	1776	0	0	1885	0	1805	0	1615	0	1832	0
Flt Permitted					0.992		0.950				0.991	
Satd. Flow (perm)	0	1776	0	0	1885	0	1805	0	1615	0	1832	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	166	117	37	180	0	339	0	97	25	87	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	283	0	0	217	0	339	0	97	0	140	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

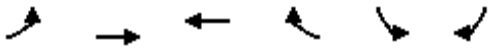
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	136	96	30	146	0	302	0	77	18	62	20
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	166	117	37	180	0	339	0	97	25	87	28
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	13.7	13	18.1	11.5
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	17%	18%
Vol Thru, %	0%	0%	59%	83%	62%
Vol Right, %	0%	100%	41%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	302	77	232	176	100
LT Vol	0	0	136	146	62
Through Vol	0	77	96	0	20
RT Vol	302	0	0	30	18
Lane Flow Rate	339	97	283	217	141
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.635	0.149	0.456	0.373	0.249
Departure Headway (Hd)	6.736	5.516	5.805	6.289	6.369
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	533	644	614	576	568
Service Time	4.517	3.297	3.9	4.289	4.369
HCM Lane V/C Ratio	0.636	0.151	0.461	0.377	0.248
HCM Control Delay	20.6	9.3	13.7	13	11.5
HCM Lane LOS	C	A	B	B	B
HCM 95th-tile Q	4.4	0.5	2.4	1.7	1

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	45	148	143	8	28	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.993		0.916	
Flt Protected		0.988			0.982	
Satd. Flow (prot)	0	1805	1887	0	1692	0
Flt Permitted		0.988			0.982	
Satd. Flow (perm)	0	1805	1887	0	1692	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		466	313		498	
Travel Time (s)		10.6	7.1		11.3	
Confl. Peds. (#/hr)	2			3	7	7
Peak Hour Factor	0.96	0.96	0.60	0.60	0.79	0.79
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Adj. Flow (vph)	47	154	238	13	35	58
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	201	251	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	45	148	143	8	28	46
Conflicting Peds, #/hr	2	0	0	3	7	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	60	60	79	79
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	47	154	238	13	35	58

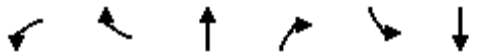
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	259	0	-	0	500	254
Stage 1	-	-	-	-	252	-
Stage 2	-	-	-	-	248	-
Follow-up Headway	2.236	-	-	-	3.509	3.309
Pot Capacity-1 Maneuver	1294	-	-	-	532	787
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	796	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1292	-	-	-	505	781
Mov Capacity-2 Maneuver	-	-	-	-	505	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	760	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	11.5
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1292	-	-	-	647
HCM Lane V/C Ratio	0.036	-	-	-	0.145
HCM Control Delay (s)	7.891	0	-	-	11.5
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.113	-	-	-	0.504

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	230	30	396	140	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.967
Satd. Flow (perm)	1791	0	1818	1546	0	1776
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	12			157		
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	235	31	483	157	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	266	0	483	157	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
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	NA		NA	Perm	Perm	NA
Protected Phases	8		2			6



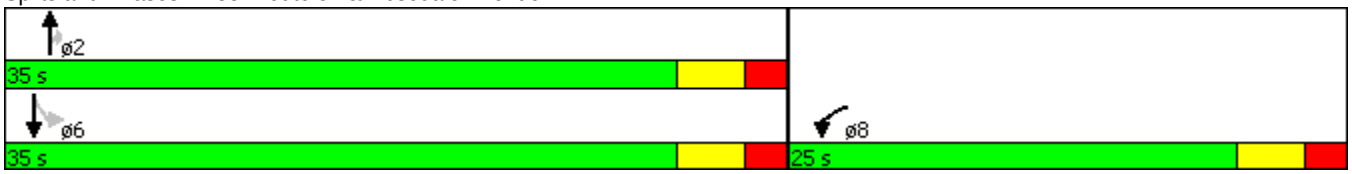
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases				2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	21.0		21.0	21.0	21.0	21.0
Total Split (s)	25.0		35.0	35.0	35.0	35.0
Total Split (%)	41.7%		58.3%	58.3%	58.3%	58.3%
Maximum Green (s)	20.0		30.0	30.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0		5.0	5.0		5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Max	Max	Max	Max
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	13.0		32.9	32.9		32.9
Actuated g/C Ratio	0.23		0.59	0.59		0.59
v/c Ratio	0.62		0.45	0.16		0.66
Control Delay	24.4		9.1	2.0		13.3
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	24.4		9.1	2.0		13.3
LOS	C		A	A		B
Approach Delay	24.4		7.4			13.3
Approach LOS	C		A			B
Queue Length 50th (ft)	70		76	0		130
Queue Length 95th (ft)	129		150	22		#316
Internal Link Dist (ft)	976		325			323
Turn Bay Length (ft)				80		
Base Capacity (vph)	649		1068	973		1044
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	0.41		0.45	0.16		0.66

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 56			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 12.8		Intersection LOS: B	
Intersection Capacity Utilization 79.3%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.

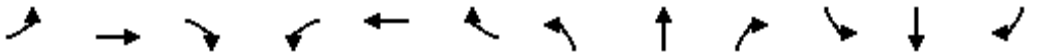
Queue shown is maximum after two cycles.

Splits and Phases: 33: Route 52 & Rosedale Avenue

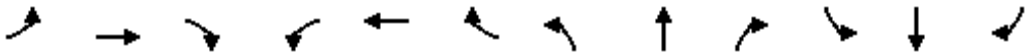


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	230	30	396	140	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	11	11	11	11
Total Lost time (s)	5.0		5.0	5.0		5.0
Lane Util. Factor	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1791		1818	1546		1832
Flt Permitted	0.96		1.00	1.00		0.97
Satd. Flow (perm)	1791		1818	1546		1776
Peak-hour factor, PHF	0.98	0.98	0.82	0.89	0.92	0.92
Adj. Flow (vph)	235	31	483	157	33	660
RTOR Reduction (vph)	9	0	0	65	0	0
Lane Group Flow (vph)	257	0	483	92	0	693
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Turn Type	NA		NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases				2	6	
Actuated Green, G (s)	13.0		32.9	32.9		32.9
Effective Green, g (s)	13.0		32.9	32.9		32.9
Actuated g/C Ratio	0.23		0.59	0.59		0.59
Clearance Time (s)	5.0		5.0	5.0		5.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	416		1069	909		1045
v/s Ratio Prot	c0.14		0.27			
v/s Ratio Perm				0.06		c0.39
v/c Ratio	0.62		0.45	0.10		0.66
Uniform Delay, d1	19.2		6.4	5.0		7.8
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	2.7		1.4	0.2		3.3
Delay (s)	21.9		7.8	5.3		11.1
Level of Service	C		A	A		B
Approach Delay (s)	21.9		7.2			11.1
Approach LOS	C		A			B

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	55.9	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



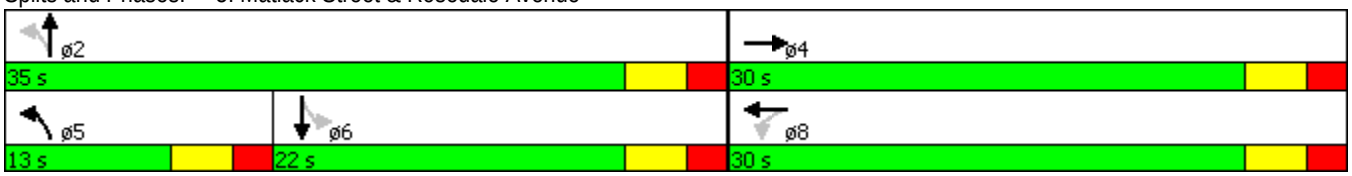
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	136	96	30	146	0	302	0	77	18	62	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		0	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor		0.99			1.00		0.97	0.93			0.96	
Frt		0.944						0.850			0.973	
Flt Protected					0.992		0.950				0.991	
Satd. Flow (prot)	0	1752	0	0	1885	0	1805	1496	0	0	1782	0
Flt Permitted					0.834		0.608				0.944	
Satd. Flow (perm)	0	1752	0	0	1580	0	1115	1496	0	0	1667	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		63						602			19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	166	117	37	180	0	339	0	97	25	87	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	283	0	0	217	0	339	97	0	0	140	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)		8			8			8			8	
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		1	2		1	2		1	2	
Detector Template		Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)		100		20	100		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)		6		20	6		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			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		NA		Perm	NA		pm+pt	NA		Perm	NA	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4			8		5	2			6	
Permitted Phases				8			2			6		
Detector Phase		4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		21.0		21.0	21.0		9.0	21.0		21.0	21.0	
Total Split (s)		30.0		30.0	30.0		13.0	35.0		22.0	22.0	
Total Split (%)		46.2%		46.2%	46.2%		20.0%	53.8%		33.8%	33.8%	
Maximum Green (s)		25.0		25.0	25.0		8.0	30.0		17.0	17.0	
Yellow Time (s)		3.0		3.0	3.0		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	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0			0.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0			5.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode		None		None	None		None	Max		Max	Max	
Walk Time (s)		5.0		5.0	5.0			5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0			11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0			0		0	0	
Act Effct Green (s)		12.0			12.0		30.2	30.2			17.3	
Actuated g/C Ratio		0.23			0.23		0.58	0.58			0.33	
v/c Ratio		0.63			0.60		0.45	0.09			0.25	
Control Delay		20.3			25.0		8.9	0.2			13.9	
Queue Delay		0.0			0.0		0.0	0.0			0.0	
Total Delay		20.3			25.0		8.9	0.2			13.9	
LOS		C			C		A	A			B	
Approach Delay		20.3			25.0			6.9			13.9	
Approach LOS		C			C			A			B	
Queue Length 50th (ft)		59			59		46	0			26	
Queue Length 95th (ft)		104			99		109	0			52	
Internal Link Dist (ft)		386			386			267			183	
Turn Bay Length (ft)							150					
Base Capacity (vph)		875			760		750	1118			563	
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		0.32			0.29		0.45	0.09			0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 52.2			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 60.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Matlack Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	136	96	30	146	0	302	0	77	18	62	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	0.94		0.98	0.96		0.91
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	188.1	190.0	190.0	190.0	0.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Cap, veh/h	0	254	179	109	335	0	727	0	888	133	386	110
Arrive On Green	0.00	0.25	0.25	0.25	0.25	0.00	0.15	0.00	0.56	0.32	0.32	0.32
Sat Flow, veh/h	0	1023	721	120	1349	0	1810	0	1576	166	1208	343
Grp Volume(v), veh/h	0	0	283	217	0	0	339	0	97	140	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1744	1468	0	0	1810	0	1576	1717	0	0
Q Serve(g_s), s	0.0	0.0	7.8	0.4	0.0	0.0	6.0	0.0	1.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.8	8.1	0.0	0.0	6.0	0.0	1.5	3.1	0.0	0.0
Prop In Lane	0.00		0.41	0.17		0.00	1.00		1.00	0.18		0.20
Lane Grp Cap(c), veh/h	0	0	433	444	0	0	727	0	888	628	0	0
V/C Ratio(X)	0.00	0.00	0.65	0.49	0.00	0.00	0.47	0.00	0.11	0.22	0.00	0.00
Avail Cap(c_a), veh/h	0	0	819	819	0	0	727	0	888	628	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.9	17.0	0.0	0.0	8.3	0.0	5.4	13.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.7	0.8	0.0	0.0	0.5	0.0	0.2	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	3.3	2.3	0.0	0.0	2.3	0.0	0.5	1.4	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	19.6	17.9	0.0	0.0	8.8	0.0	5.6	14.2	0.0	0.0
Lane Grp LOS			B	B			A		A	B		
Approach Vol, veh/h		283			217			436			140	
Approach Delay, s/veh		19.6			17.9			8.1			14.2	
Approach LOS		B			B			A			B	

Timer												
Assigned Phs		4			8		5	2			6	
Phs Duration (G+Y+Rc), s		18.2			18.2		13.0	35.0			22.0	
Change Period (Y+Rc), s		5.0			5.0		5.0	5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0		8.0	30.0			17.0	
Max Q Clear Time (g_c+I1), s		9.8			10.1		8.0	3.5			5.1	
Green Ext Time (p_c), s		2.7			2.7		0.0	1.5			1.0	

Intersection Summary		
HCM 2010 Ctrl Delay		13.9
HCM 2010 LOS		B

Notes

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	224	30	396	135	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.998
Satd. Flow (perm)	1791	0	1818	1546	0	1833
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	229	31	483	152	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	260	0	483	152	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.3%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	30.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	224	30	396	135	30	607
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	82	89	92	92
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	229	31	483	152	33	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1208	483	0	0	483	0
Stage 1	483	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Follow-up Headway	3.5	3.3	-	-	2.2	-
Pot Capacity-1 Maneuver	# 204	588	-	-	1090	-
Stage 1	625	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	# 194	588	-	-	1090	-
Mov Capacity-2 Maneuver	# 194	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	183.3	0	0.4
HCM LOS	F		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	211	1090	-
HCM Lane V/C Ratio	-	-	1.228	0.03	-
HCM Control Delay (s)	-	-	183.3	8.405	0
HCM Lane LOS			F	A	A
HCM 95th %tile Q(veh)	-	-	13.32	0.092	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	167	13	16	258	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.877	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1862	0	0	1857	1658	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1862	0	0	1857	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	178	14	18	293	2	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	192	0	0	311	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

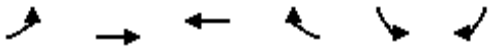
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	167	13	16	258	1	13
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	178	14	18	293	2	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	193	0	517	187
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	330	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1380	-	522	860
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	733	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1380	-	513	859
Mov Capacity-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	721	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.5
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	820	-	-	1380	-
HCM Lane V/C Ratio	0.026	-	-	0.013	-
HCM Control Delay (s)	9.5	-	-	7.644	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.081	-	-	0.04	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	230	163	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	264	179	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	266	180	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

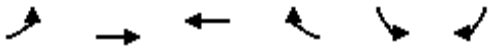
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	230	163	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	264	179	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	8.3	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	232	164	4
LT Vol	230	163	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	267	180	12
Geometry Grp	1	1	1
Degree of Util (X)	0.301	0.207	0.016
Departure Headway (Hd)	4.057	4.133	4.648
Convergence, Y/N	Yes	Yes	Yes
Cap	880	860	775
Service Time	2.107	2.198	2.648
HCM Lane V/C Ratio	0.303	0.209	0.015
HCM Control Delay	8.9	8.3	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	0.8	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	184	283	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1877	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1877	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	196	322	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	199	327	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.5

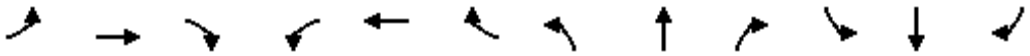
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	184	283	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	196	322	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	331	0	-	0	531	330
Stage 1	-	-	-	-	329	-
Stage 2	-	-	-	-	202	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1223	-	-	-	512	716
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	837	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1222	-	-	-	506	712
Mov Capacity-2 Maneuver	-	-	-	-	506	-
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	831	-

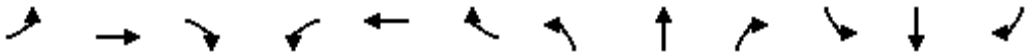
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.2
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1222	-	-	-	603
HCM Lane V/C Ratio	0.003	-	-	-	0.039
HCM Control Delay (s)	7.954	0	-	-	11.2
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.008	-	-	-	0.122

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	150	21	107	260	123	16	166	148	119	175	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
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
Ped Bike Factor		0.99									0.97	
Frt		0.985			0.966			0.939			0.990	
Flt Protected		0.994			0.989			0.998			0.982	
Satd. Flow (prot)	0	1875	0	0	1815	0	0	1629	0	0	1833	0
Flt Permitted		0.918			0.863			0.998			0.982	
Satd. Flow (perm)	0	1730	0	0	1584	0	0	1629	0	0	1798	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		10									5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)	12		12							25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	26	176	25	124	302	143	19	200	178	137	201	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	227	0	0	569	0	0	397	0	0	364	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	0.96	0.96	0.96	0.85	0.97	0.85	1.09	1.09	1.09	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								



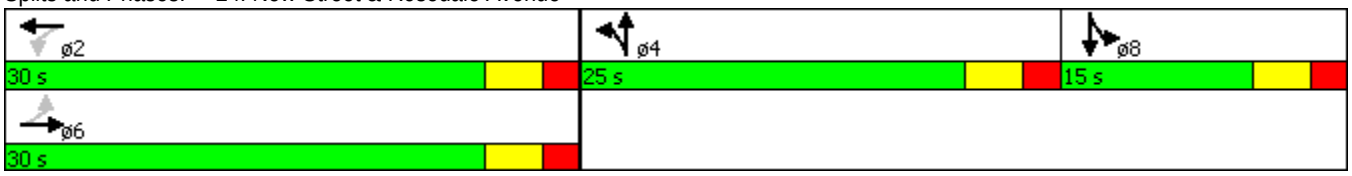
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		5.0			5.0			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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	0	0		0	0							
Act Effct Green (s)		25.0			25.0			19.1			10.0	
Actuated g/C Ratio		0.36			0.36			0.28			0.14	
v/c Ratio		0.36			0.99			0.88			1.35	
Control Delay		17.8			61.7			47.7			208.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.8			61.7			47.7			208.6	
LOS		B			E			D			F	
Approach Delay		17.8			61.7			47.7			208.6	
Approach LOS		B			E			D			F	
Queue Length 50th (ft)		67			~243			161			~212	
Queue Length 95th (ft)		112			#411			#268			#352	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		632			573			471			270	
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		0.36			0.99			0.84			1.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.1			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay: 86.1		Intersection LOS: F	
Intersection Capacity Utilization 93.1%		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: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	150	21	107	260	123	16	166	148	119	175	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	135	775	102	219	457	197	23	245	218	179	262	34
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	103	1512	200	251	891	384	82	868	772	634	930	120
Grp Volume(v), veh/h	227	0	0	569	0	0	397	0	0	364	0	0
Grp Sat Flow(s),veh/h/ln	1815	0	0	1526	0	0	1722	0	0	1684	0	0
Q Serve(g_s), s	0.0	0.0	0.0	8.0	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	0.0	13.6	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.11		0.11	0.22		0.25	0.05		0.45	0.38		0.07
Lane Grp Cap(c), veh/h	1013	0	0	872	0	0	486	0	0	475	0	0
V/C Ratio(X)	0.22	0.00	0.00	0.65	0.00	0.00	0.82	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	1013	0	0	872	0	0	706	0	0	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	9.0	0.0	0.0	16.3	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	3.8	0.0	0.0	4.9	0.0	0.0	7.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.3	0.0	0.0	5.0	0.0	0.0	4.6	0.0	0.0	4.6	0.0	0.0
Lane Grp Delay (d), s/veh	7.1	0.0	0.0	12.7	0.0	0.0	21.2	0.0	0.0	23.4	0.0	0.0
Lane Grp LOS	A			B			C			C		
Approach Vol, veh/h		227			569			397			364	
Approach Delay, s/veh		7.1			12.7			21.2			23.4	
Approach LOS		A			B			C			C	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			18.8			18.8	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		5.2			15.6			12.5			11.7	
Green Ext Time (p_c), s		5.3			3.6			1.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			16.6									
HCM 2010 LOS			B									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	357	58	33	509	47	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.954	
Flt Protected				0.997	0.968	
Satd. Flow (prot)	1827	0	0	1857	1720	0
Flt Permitted				0.997	0.968	
Satd. Flow (perm)	1827	0	0	1857	1720	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	388	63	36	553	51	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	451	0	0	589	77	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.6%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.7

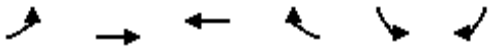
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	357	58	33	509	47	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	388	63	36	553	51	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	451	0	1045	420
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	625	-
Follow-up Headway	-	-	2.218	-	3.518	3.318
Pot Capacity-1 Maneuver	-	-	1109	-	253	633
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	534	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1109	-	241	633
Mov Capacity-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	20.8
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	305	-	-	1109	-
HCM Lane V/C Ratio	0.253	-	-	0.032	-
HCM Control Delay (s)	20.8	-	-	8.355	0
HCM Lane LOS	C			A	A
HCM 95th %tile Q(veh)	0.982	-	-	0.1	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	287	355	0	122	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	1863	1863	0	1720	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1863	1863	0	1720	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	312	386	0	133	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	312	386	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	287	355	0	122	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	312	386	0	133	68
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	11.8	13.3	11.1
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	66%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	34%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	287	355	185
LT Vol	287	355	0
Through Vol	0	0	63
RT Vol	0	0	122
Lane Flow Rate	312	386	201
Geometry Grp	1	1	1
Degree of Util (X)	0.429	0.522	0.311
Departure Headway (Hd)	5.052	4.866	5.565
Convergence, Y/N	Yes	Yes	Yes
Cap	718	733	650
Service Time	3.052	2.962	3.565
HCM Lane V/C Ratio	0.435	0.527	0.309
HCM Control Delay	11.8	13.3	11.1
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.2	3.1	1.3

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	551	87	31	489	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982					
Flt Protected				0.997		
Satd. Flow (prot)	1847	0	0	1894	1900	0
Flt Permitted				0.997		
Satd. Flow (perm)	1847	0	0	1894	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	605	96	33	515	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	701	0	0	548	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	551	87	31	489	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	605	96	33	515	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	701	0	1233	653
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	580	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	905	-	197	471
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	564	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	905	-	187	471
Mov Capacity-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	535	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	0	-	-	905	-
HCM Lane V/C Ratio	+	-	-	0.036	-
HCM Control Delay (s)	0	-	-	9.127	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	+	-	-	0.112	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	514	0	0	468	9	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.896	
Flt Protected					0.989	
Satd. Flow (prot)	1863	0	0	1881	1658	0
Flt Permitted					0.989	
Satd. Flow (perm)	1863	0	0	1881	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	565	0	0	538	12	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	565	0	0	538	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.8

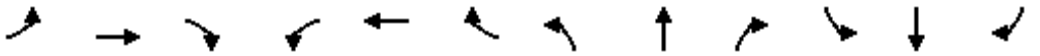
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	514	0	0	468	9	30
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	565	0	0	538	12	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	665	0	1203	666
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	538	-
Follow-up Headway	-	-	2.218	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	924	-	206	459
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	589	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	923	-	189	420
Mov Capacity-2 Maneuver	-	-	-	-	189	-
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	588	-

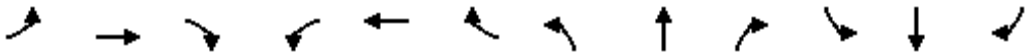
Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.1
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	328	-	-	923	-
HCM Lane V/C Ratio	0.163	-	-	-	-
HCM Control Delay (s)	18.1	-	-	0	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	0.574	-	-	0	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	227	131	43	249	107	100	444	69	76	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.93	0.94		0.93	0.94		0.97	0.96		0.90	0.93	
Frt		0.945			0.955			0.980			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1656	0	1805	1651	0	1668	1894	0	1685	1613	0
Flt Permitted	0.365			0.302			0.299			0.275		
Satd. Flow (perm)	613	1656	0	531	1651	0	508	1894	0	437	1613	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					44						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	58		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	209	303	175	61	296	127	123	505	78	79	456	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	478	0	61	423	0	123	583	0	79	556	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
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	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		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	None	None		None	None		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.4	22.4		22.4	22.4		27.6	27.6		27.6	27.6	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.46	0.46		0.46	0.46	
v/c Ratio	0.92	0.77		0.31	0.66		0.53	0.67		0.39	0.74	
Control Delay	62.8	25.7		16.9	18.8		24.6	18.8		19.9	22.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	62.8	25.7		16.9	18.8		24.6	18.8		19.9	22.0	
LOS	E	C		B	B		C	B		B	C	
Approach Delay		37.0			18.6			19.8			21.8	
Approach LOS		D			B			B			C	
Queue Length 50th (ft)	64	136		14	100		33	170		19	163	
Queue Length 95th (ft)	#142	174		29	161		#76	270		58	#329	
Internal Link Dist (ft)		132			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	255	690		221	713		233	872		201	755	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.82	0.69		0.28	0.59		0.53	0.67		0.39	0.74	

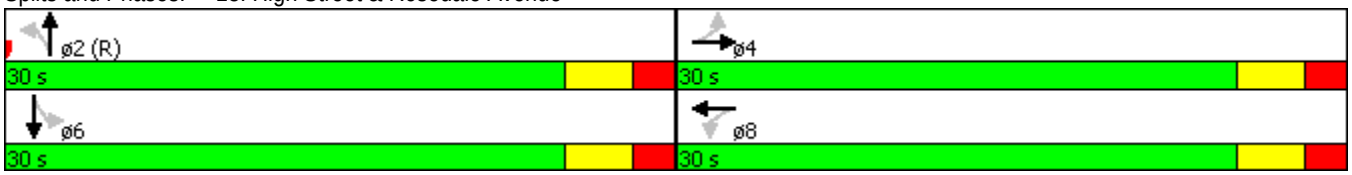
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 24.8		Intersection LOS: C	

Intersection Capacity Utilization 81.4% 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: 13: High Street & Rosedale Avenue

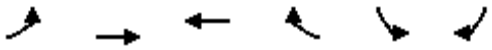


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	165	227	131	43	249	107	100	444	69	76	410	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.88	0.96		0.86	0.92		0.81	0.94		0.75
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	188.1	195.6	197.6	190.0	190.0	190.0
Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Cap, veh/h	322	439	254	282	498	214	230	666	103	238	589	129
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	901	1054	609	891	1195	513	791	1599	247	797	1413	310
Grp Volume(v), veh/h	209	0	478	61	0	423	123	0	583	79	0	556
Grp Sat Flow(s),veh/h/ln	901	0	1662	891	0	1708	791	0	1846	797	0	1723
Q Serve(g_s), s	13.5	0.0	14.1	3.6	0.0	11.5	8.3	0.0	16.2	5.6	0.0	16.7
Cycle Q Clear(g_c), s	25.0	0.0	14.1	17.7	0.0	11.5	25.0	0.0	16.2	21.8	0.0	16.7
Prop In Lane	1.00		0.37	1.00		0.30	1.00		0.13	1.00		0.18
Lane Grp Cap(c), veh/h	322	0	693	282	0	712	230	0	769	238	0	718
V/C Ratio(X)	0.65	0.00	0.69	0.22	0.00	0.59	0.54	0.00	0.76	0.33	0.00	0.77
Avail Cap(c_a), veh/h	322	0	693	282	0	712	230	0	769	238	0	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	14.3	21.6	0.0	13.6	26.3	0.0	14.9	24.2	0.0	15.1
Incr Delay (d2), s/veh	4.5	0.0	2.9	0.4	0.0	1.3	8.7	0.0	6.9	0.8	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.4	0.0	5.7	0.8	0.0	4.6	2.3	0.0	8.0	1.1	0.0	7.4
Lane Grp Delay (d), s/veh	28.0	0.0	17.2	22.0	0.0	14.9	35.0	0.0	21.8	25.0	0.0	20.4
Lane Grp LOS	C		B	C		B	C		C	C		C
Approach Vol, veh/h		687			484			706			635	
Approach Delay, s/veh		20.5			15.8			24.1			21.0	
Approach LOS		C			B			C			C	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		30.0			30.0			30.0			30.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			25.0			25.0	
Max Q Clear Time (g_c+I1), s		27.0			19.7			27.0			23.8	
Green Ext Time (p_c), s		0.0			3.0			0.0			0.9	

Intersection Summary												
HCM 2010 Ctrl Delay			20.7									
HCM 2010 LOS			C									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	401	413	14	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1892	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1892	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	436	449	15	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	452	464	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.4

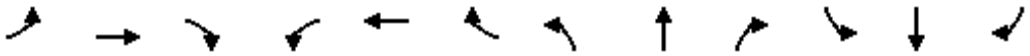
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	401	413	14	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	436	449	15	10	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	464	0	-	0	925	457
Stage 1	-	-	-	-	457	-
Stage 2	-	-	-	-	468	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1108	-	-	-	301	608
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	634	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1108	-	-	-	295	608
Mov Capacity-2 Maneuver	-	-	-	-	295	-
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	622	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.7
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1108	-	-	-	389
HCM Lane V/C Ratio	0.015	-	-	-	0.048
HCM Control Delay (s)	8.298	0	-	-	14.7
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.045	-	-	-	0.149

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	301	13	1	466	85	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.995			0.979							
Flt Protected		0.990										
Satd. Flow (prot)	0	1853	0	0	1842	0	0	1900	0	0	0	0
Flt Permitted		0.990										
Satd. Flow (perm)	0	1853	0	0	1842	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	86	346	15	1	555	101	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	447	0	0	657	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.7

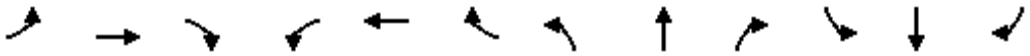
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	75	301	13	1	466	85	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	86	346	15	1	555	101	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	656	0	0	369	0	0	1142	1192	368
Stage 1	-	-	-	-	-	-	534	534	-
Stage 2	-	-	-	-	-	-	608	658	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	936	-	-	1195	-	-	224	189	682
Stage 1	-	-	-	-	-	-	592	528	-
Stage 2	-	-	-	-	-	-	547	464	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	936	-	-	1188	-	-	197	0	674
Mov Capacity-2 Maneuver	-	-	-	-	-	-	197	0	-
Stage 1	-	-	-	-	-	-	520	0	-
Stage 2	-	-	-	-	-	-	546	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.8	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	936	-	-	1188	-	-
HCM Lane V/C Ratio	+	0.092	-	-	0.001	-	-
HCM Control Delay (s)	0	9.236	0	-	8.033	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.303	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	120	111	45	133	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.935							0.850		0.970	
Flt Protected					0.987		0.950				0.995	
Satd. Flow (prot)	0	1759	0	0	1875	0	1805	0	1615	0	1834	0
Flt Permitted					0.987		0.950				0.995	
Satd. Flow (perm)	0	1759	0	0	1875	0	1805	0	1615	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	146	135	56	164	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	220	0	396	0	118	0	145	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	18
Intersection LOS	C

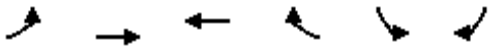
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	120	111	45	133	0	352	0	93	10	70	23
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	146	135	56	164	0	396	0	118	14	99	32
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	14.7	13.9	23.3	12
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	25%	10%
Vol Thru, %	0%	0%	52%	75%	68%
Vol Right, %	0%	100%	48%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	352	93	231	178	103
LT Vol	0	0	120	133	70
Through Vol	0	93	111	0	23
RT Vol	352	0	0	45	10
Lane Flow Rate	396	118	282	220	145
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.748	0.183	0.479	0.401	0.265
Departure Headway (Hd)	6.933	5.711	6.122	6.567	6.565
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	526	632	589	549	547
Service Time	4.633	3.411	4.144	4.591	4.6
HCM Lane V/C Ratio	0.753	0.187	0.479	0.401	0.265
HCM Control Delay	27.4	9.7	14.7	13.9	12
HCM Lane LOS	D	A	B	B	B
HCM 95th-tile Q	6.4	0.7	2.6	1.9	1.1

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	177	14	13	12	15	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.936		0.879	
Flt Protected		0.956			0.995	
Satd. Flow (prot)	0	1747	1778	0	1645	0
Flt Permitted		0.956			0.995	
Satd. Flow (perm)	0	1747	1778	0	1645	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		466	313		498	
Travel Time (s)		10.6	7.1		11.3	
Confl. Peds. (#/hr)	2			3	7	7
Peak Hour Factor	0.96	0.96	0.60	0.60	0.79	0.79
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Adj. Flow (vph)	184	15	22	20	19	165
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	199	42	0	184	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	177	14	13	12	15	130
Conflicting Peds, #/hr	2	0	0	3	7	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	60	60	79	79
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	184	15	22	20	19	165

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	422	41
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	383	-
Follow-up Headway	2.236	-	-	-	3.509	3.309
Pot Capacity-1 Maneuver	1545	-	-	-	590	1033
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	691	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1542	-	-	-	513	1025
Mov Capacity-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	9.8
HCM LOS			A

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1542	-	-	-	929
HCM Lane V/C Ratio	0.12	-	-	-	0.198
HCM Control Delay (s)	7.651	0	-	-	9.8
HCM Lane LOS	A	A			A
HCM 95th %tile Q(veh)	0.406	-	-	-	0.733

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	224	30	396	136	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1756	0	1863	1583	0	1859
Flt Permitted	0.958					0.968
Satd. Flow (perm)	1756	0	1863	1583	0	1803
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	12			148		
Link Speed (mph)	30		45			45
Link Distance (ft)	1004		717			745
Travel Time (s)	22.8		10.9			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	243	33	430	148	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	276	0	430	148	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		1	0	1	1
Detector Template			Thru	Right	Left	Thru
Leading Detector (ft)	40		350	0	20	350
Trailing Detector (ft)	0		344	0	0	344
Detector 1 Position(ft)	0		344	0	0	344
Detector 1 Size(ft)	40		6	20	20	6
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
Turn Type	NA		NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8			2	6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	25.0		21.0	21.0	21.0	21.0
Total Split (s)	25.0		35.0	35.0	35.0	35.0
Total Split (%)	41.7%		58.3%	58.3%	58.3%	58.3%

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Maximum Green (s)	20.0		30.0	30.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0		5.0	5.0		5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	Min	Min
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	12.5		22.4	22.4		22.4
Actuated g/C Ratio	0.28		0.50	0.50		0.50
v/c Ratio	0.56		0.47	0.17		0.78
Control Delay	18.6		10.2	2.3		17.8
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	18.6		10.2	2.3		17.8
LOS	B		B	A		B
Approach Delay	18.6		8.1			17.8
Approach LOS	B		A			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 45.2			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Route 52/Lenape Road & Rosedale Avenue

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	224	30	396	136	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0		5.0
Lane Util. Factor	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		1863	1583		1858
Flt Permitted	0.96		1.00	1.00		0.97
Satd. Flow (perm)	1755		1863	1583		1804
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	243	33	430	148	33	660
RTOR Reduction (vph)	9	0	0	74	0	0
Lane Group Flow (vph)	267	0	430	74	0	693
Turn Type	NA		NA	Perm	Perm	NA
Protected Phases			2			6
Permitted Phases	8			2	6	
Actuated Green, G (s)	12.5		22.4	22.4		22.4
Effective Green, g (s)	12.5		22.4	22.4		22.4
Actuated g/C Ratio	0.28		0.50	0.50		0.50
Clearance Time (s)	5.0		5.0	5.0		5.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	488		929	789		899
v/s Ratio Prot			0.23			
v/s Ratio Perm	c0.15			0.05		c0.38
v/c Ratio	0.55		0.46	0.09		0.77
Uniform Delay, d1	13.8		7.3	5.9		9.2
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	1.3		0.4	0.1		4.1
Delay (s)	15.1		7.7	6.0		13.3
Level of Service	B		A	A		B
Approach Delay (s)	15.1		7.3			13.3
Approach LOS	B		A			B

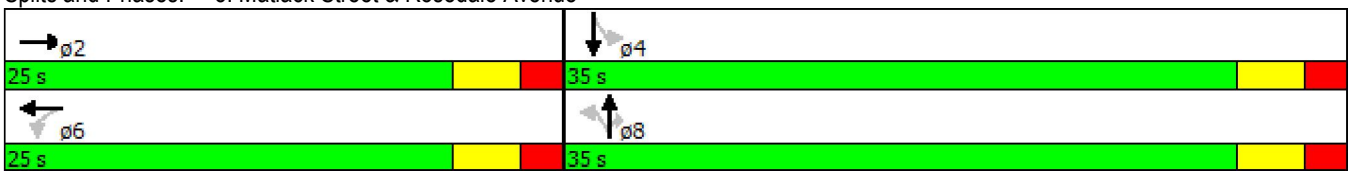
Intersection Summary			
HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	44.9	Sum of lost time (s)	10.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	120	111	45	133	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor		0.99			1.00		0.96		0.93		0.97	
Frt		0.935							0.850		0.970	
Flt Protected					0.987		0.950				0.995	
Satd. Flow (prot)	0	1733	0	0	1875	0	1805	1900	1615	0	1803	0
Flt Permitted					0.856		0.665				0.984	
Satd. Flow (perm)	0	1733	0	0	1620	0	1211	1900	1503	0	1764	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		83							594		32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	146	135	56	164	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	220	0	396	0	118	0	145	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)		8			8			8			8	
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		1	2		1	2	1	1	2	
Detector Template		Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)		100		20	100		20	100	20	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)		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	
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		NA		Perm	NA		Perm		Perm	Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases				6			8		8	4		
Detector Phase		2		6	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)		21.0		21.0	21.0		21.5	21.5	21.5	9.5	9.5	
Total Split (s)		25.0		25.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (%)		41.7%		41.7%	41.7%		58.3%	58.3%	58.3%	58.3%	58.3%	
Maximum Green (s)		20.0		20.0	20.0		30.0	30.0	30.0	30.0	30.0	
Yellow Time (s)		3.0		3.0	3.0		3.0	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	0.0		0.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0	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		Max		Max	Max		Max	Max	Max	None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0	5.0			
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0	11.0			
Pedestrian Calls (#/hr)		0		0	0		0	0	0			
Act Effct Green (s)		20.0			20.0		30.0		30.0		25.1	
Actuated g/C Ratio		0.33			0.33		0.50		0.50		0.42	
v/c Ratio		0.44			0.41		0.65		0.11		0.19	
Control Delay		13.5			18.3		17.6		0.2		7.1	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		13.5			18.3		17.6		0.2		7.1	
LOS		B			B		B		A		A	
Approach Delay		13.5			18.3						7.1	
Approach LOS		B			B						A	
Queue Length 50th (ft)		53			60		98		0		20	
Queue Length 95th (ft)		95			98		185		0		33	
Internal Link Dist (ft)		386			386			267			183	
Turn Bay Length (ft)							150					
Base Capacity (vph)		633			540		605		1048		898	
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		0.44			0.41		0.65		0.11		0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Matlack Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	120	111	45	133	0	352	0	93	10	70	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.95		0.97	0.98		0.94
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	188.1	190.0	190.0	190.0	0.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	0	1	0	0	1	0	1	1	1	0	1	0
Cap, veh/h	0	299	276	159	420	0	677	950	786	108	643	194
Arrive On Green	0.00	0.33	0.33	0.33	0.33	0.00	0.50	0.00	0.50	0.50	0.50	0.50
Sat Flow, veh/h	0	897	829	250	1260	0	1220	1900	1571	85	1287	389
Grp Volume(v), veh/h	0	0	281	220	0	0	396	0	118	145	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1726	1510	0	0	1220	1900	1571	1760	0	0
Q Serve(g_s), s	0.0	0.0	7.8	0.4	0.0	0.0	15.7	0.0	2.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.8	8.1	0.0	0.0	18.3	0.0	2.4	2.6	0.0	0.0
Prop In Lane	0.00		0.48	0.25		0.00	1.00		1.00	0.10		0.22
Lane Grp Cap(c), veh/h	0	0	575	579	0	0	677	950	786	946	0	0
V/C Ratio(X)	0.00	0.00	0.49	0.38	0.00	0.00	0.59	0.00	0.15	0.15	0.00	0.00
Avail Cap(c_a), veh/h	0	0	575	579	0	0	677	950	786	946	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	15.9	15.1	0.0	0.0	13.1	0.0	8.1	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.9	1.9	0.0	0.0	3.7	0.0	0.4	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	3.5	2.6	0.0	0.0	4.9	0.0	0.9	1.0	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	18.9	17.0	0.0	0.0	16.8	0.0	8.5	8.2	0.0	0.0
Lane Grp LOS			B	B			B		A	A		
Approach Vol, veh/h		281			220			514			145	
Approach Delay, s/veh		18.9			17.0			14.9			8.2	
Approach LOS		B			B			B			A	

Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		25.0			25.0			35.0			35.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		20.0			20.0			30.0			30.0	
Max Q Clear Time (g_c+I1), s		9.8			10.1			20.3			4.6	
Green Ext Time (p_c), s		2.2			2.2			1.9			2.6	

Intersection Summary												
HCM 2010 Ctrl Delay			15.4									
HCM 2010 LOS			B									

Notes

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	219	30	396	133	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.998
Satd. Flow (perm)	1791	0	1818	1546	0	1833
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	223	31	483	149	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	254	0	483	149	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	28.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	219	30	396	133	30	607
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	82	89	92	92
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	223	31	483	149	33	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1208	483	0	0	483	0
Stage 1	483	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Follow-up Headway	3.5	3.3	-	-	2.2	-
Pot Capacity-1 Maneuver	# 204	588	-	-	1090	-
Stage 1	625	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	# 194	588	-	-	1090	-
Mov Capacity-2 Maneuver	# 194	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	174.6	0	0.4
HCM LOS	F		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	211	1090	-
HCM Lane V/C Ratio	-	-	1.204	0.03	-
HCM Control Delay (s)	-	-	174.6	8.405	0
HCM Lane LOS			F	A	A
HCM 95th %tile Q(veh)	-	-	12.818	0.092	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	166	13	16	253	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.877	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1862	0	0	1857	1658	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1862	0	0	1857	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	177	14	18	288	2	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	191	0	0	306	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.7

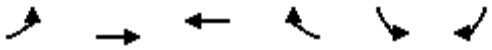
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	166	13	16	253	1	13
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	177	14	18	288	2	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	192	0	510	186
Stage 1	-	-	-	-	186	-
Stage 2	-	-	-	-	324	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1381	-	527	861
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	738	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1381	-	518	860
Mov Capacity-2 Maneuver	-	-	-	-	518	-
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	726	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	9.5
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	821	-	-	1381	-
HCM Lane V/C Ratio	0.026	-	-	0.013	-
HCM Control Delay (s)	9.5	-	-	7.642	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.081	-	-	0.04	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	227	159	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	261	175	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	263	176	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

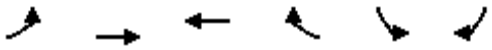
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	227	159	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	261	175	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.8	8.3	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	229	160	4
LT Vol	227	159	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	263	176	12
Geometry Grp	1	1	1
Degree of Util (X)	0.296	0.202	0.016
Departure Headway (Hd)	4.054	4.131	4.63
Convergence, Y/N	Yes	Yes	Yes
Cap	882	862	778
Service Time	2.103	2.193	2.63
HCM Lane V/C Ratio	0.298	0.204	0.015
HCM Control Delay	8.8	8.3	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.2	0.8	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	182	277	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1877	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1877	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	194	315	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	197	320	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.5

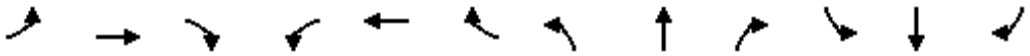
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	182	277	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	194	315	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	324	0	-	0	522	323
Stage 1	-	-	-	-	322	-
Stage 2	-	-	-	-	200	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1230	-	-	-	519	723
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	838	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1229	-	-	-	513	719
Mov Capacity-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	736	-
Stage 2	-	-	-	-	832	-

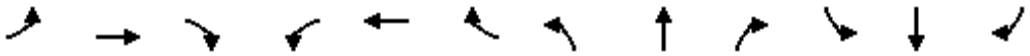
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.1
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1229	-	-	-	610
HCM Lane V/C Ratio	0.003	-	-	-	0.039
HCM Control Delay (s)	7.937	0	-	-	11.1
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.008	-	-	-	0.121

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	148	21	107	254	123	16	166	148	119	175	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
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
Ped Bike Factor		0.99									0.97	
Frt		0.985			0.966			0.939			0.990	
Flt Protected		0.994			0.989			0.998			0.982	
Satd. Flow (prot)	0	1875	0	0	1815	0	0	1629	0	0	1833	0
Flt Permitted		0.919			0.863			0.998			0.982	
Satd. Flow (perm)	0	1732	0	0	1584	0	0	1629	0	0	1798	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		10									5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)	12		12							25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	26	174	25	124	295	143	19	200	178	137	201	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	225	0	0	562	0	0	397	0	0	364	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	0.96	0.96	0.96	0.85	0.97	0.85	1.09	1.09	1.09	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								



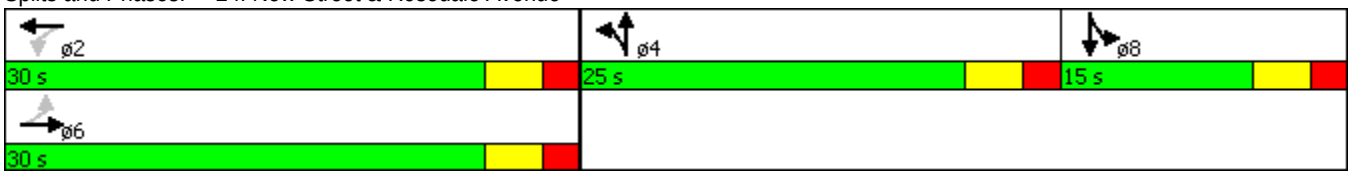
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		5.0			5.0			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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	0	0		0	0							
Act Effct Green (s)		25.0			25.0			19.1			10.0	
Actuated g/C Ratio		0.36			0.36			0.28			0.14	
v/c Ratio		0.36			0.98			0.88			1.35	
Control Delay		17.7			58.6			47.7			208.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.7			58.6			47.7			208.6	
LOS		B			E			D			F	
Approach Delay		17.7			58.6			47.7			208.6	
Approach LOS		B			E			D			F	
Queue Length 50th (ft)		67			236			161			~212	
Queue Length 95th (ft)		112			#405			#268			#352	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		633			573			471			270	
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		0.36			0.98			0.84			1.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.1			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay: 85.2		Intersection LOS: F	
Intersection Capacity Utilization 92.8%		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: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	148	21	107	254	123	16	166	148	119	175	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	136	773	103	220	452	199	23	245	218	179	262	34
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	104	1507	201	254	883	388	82	868	772	634	930	120
Grp Volume(v), veh/h	225	0	0	562	0	0	397	0	0	364	0	0
Grp Sat Flow(s),veh/h/ln	1812	0	0	1524	0	0	1722	0	0	1684	0	0
Q Serve(g_s), s	0.0	0.0	0.0	7.8	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	0.0	13.4	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.12		0.11	0.22		0.25	0.05		0.45	0.38		0.07
Lane Grp Cap(c), veh/h	1012	0	0	872	0	0	486	0	0	475	0	0
V/C Ratio(X)	0.22	0.00	0.00	0.64	0.00	0.00	0.82	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	1012	0	0	872	0	0	706	0	0	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	8.9	0.0	0.0	16.3	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	3.7	0.0	0.0	4.9	0.0	0.0	7.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.3	0.0	0.0	4.9	0.0	0.0	4.6	0.0	0.0	4.6	0.0	0.0
Lane Grp Delay (d), s/veh	7.1	0.0	0.0	12.6	0.0	0.0	21.2	0.0	0.0	23.4	0.0	0.0
Lane Grp LOS	A			B			C			C		
Approach Vol, veh/h		225			562			397			364	
Approach Delay, s/veh		7.1			12.6			21.2			23.4	
Approach LOS		A			B			C			C	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			18.8			18.8	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		5.2			15.4			12.5			11.7	
Green Ext Time (p_c), s		5.3			3.6			1.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			16.5									
HCM 2010 LOS			B									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	354	58	33	498	47	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.954	
Flt Protected				0.997	0.968	
Satd. Flow (prot)	1827	0	0	1857	1720	0
Flt Permitted				0.997	0.968	
Satd. Flow (perm)	1827	0	0	1857	1720	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	385	63	36	541	51	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	448	0	0	577	77	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.0%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.7

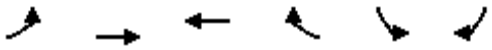
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	354	58	33	498	47	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	385	63	36	541	51	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	448	0	1029	416
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	613	-
Follow-up Headway	-	-	2.218	-	3.518	3.318
Pot Capacity-1 Maneuver	-	-	1112	-	259	637
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	541	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1112	-	247	637
Mov Capacity-2 Maneuver	-	-	-	-	247	-
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	516	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	20.4
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	311	-	-	1112	-
HCM Lane V/C Ratio	0.248	-	-	0.032	-
HCM Control Delay (s)	20.4	-	-	8.345	0
HCM Lane LOS	C			A	A
HCM 95th %tile Q(veh)	0.959	-	-	0.1	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	284	348	0	122	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	1863	1863	0	1720	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1863	1863	0	1720	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	309	378	0	133	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	309	378	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	284	348	0	122	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	309	378	0	133	68
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	11.7	13	11
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	66%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	34%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	284	348	185
LT Vol	284	348	0
Through Vol	0	0	63
RT Vol	0	0	122
Lane Flow Rate	309	378	201
Geometry Grp	1	1	1
Degree of Util (X)	0.423	0.511	0.309
Departure Headway (Hd)	4.938	4.859	5.537
Convergence, Y/N	Yes	Yes	Yes
Cap	719	734	654
Service Time	3.037	2.952	3.537
HCM Lane V/C Ratio	0.43	0.515	0.307
HCM Control Delay	11.7	13	11
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.1	2.9	1.3

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	545	87	31	479	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981					
Flt Protected				0.997		
Satd. Flow (prot)	1845	0	0	1894	1900	0
Flt Permitted				0.997		
Satd. Flow (perm)	1845	0	0	1894	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	599	96	33	504	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	695	0	0	537	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	545	87	31	479	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	599	96	33	504	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	695	0	1216	647
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	569	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	910	-	202	475
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	570	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	910	-	192	475
Mov Capacity-2 Maneuver	-	-	-	-	192	-
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	542	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	0	-	-	910	-
HCM Lane V/C Ratio	+	-	-	0.036	-
HCM Control Delay (s)	0	-	-	9.103	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	+	-	-	0.111	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	509	0	0	458	9	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.896	
Flt Protected					0.989	
Satd. Flow (prot)	1863	0	0	1881	1658	0
Flt Permitted					0.989	
Satd. Flow (perm)	1863	0	0	1881	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	559	0	0	526	12	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	559	0	0	526	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.8

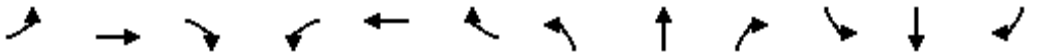
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	509	0	0	458	9	30
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	559	0	0	526	12	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	659	0	1185	660
Stage 1	-	-	-	-	659	-
Stage 2	-	-	-	-	526	-
Follow-up Headway	-	-	2.218	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	929	-	211	463
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	597	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	928	-	193	424
Mov Capacity-2 Maneuver	-	-	-	-	193	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	596	-

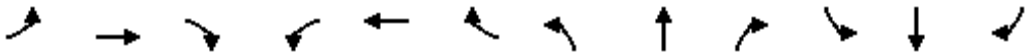
Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.9
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	332	-	-	928	-
HCM Lane V/C Ratio	0.161	-	-	-	-
HCM Control Delay (s)	17.9	-	-	0	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	0.566	-	-	0	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	225	131	43	244	107	100	444	69	76	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.93	0.94		0.93	0.94		0.97	0.96		0.89	0.93	
Frt		0.945			0.954			0.980			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1656	0	1805	1647	0	1668	1894	0	1685	1613	0
Flt Permitted	0.363			0.295			0.307			0.283		
Satd. Flow (perm)	609	1656	0	519	1647	0	522	1894	0	448	1613	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					44						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	58		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	209	300	175	61	290	127	123	505	78	79	456	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	475	0	61	417	0	123	583	0	79	556	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
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	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	29.0	29.0		29.0	29.0		31.0	31.0		31.0	31.0	
Total Split (%)	48.3%	48.3%		48.3%	48.3%		51.7%	51.7%		51.7%	51.7%	
Maximum Green (s)	24.0	24.0		24.0	24.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		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	None	None		None	None		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	21.8	21.8		21.8	21.8		28.2	28.2		28.2	28.2	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.47	0.47		0.47	0.47	
v/c Ratio	0.95	0.79		0.32	0.67		0.50	0.66		0.38	0.72	
Control Delay	70.5	27.4		18.1	19.5		21.9	17.6		18.4	20.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	70.5	27.4		18.1	19.5		21.9	17.6		18.4	20.7	
LOS	E	C		B	B		C	B		B	C	
Approach Delay		40.6			19.3			18.3			20.4	
Approach LOS		D			B			B			C	
Queue Length 50th (ft)	66	139		14	102		31	164		19	157	
Queue Length 95th (ft)	#147	179		30	164		71	261		55	#318	
Internal Link Dist (ft)		132			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	243	662		207	685		245	888		210	769	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.86	0.72		0.29	0.61		0.50	0.66		0.38	0.72	

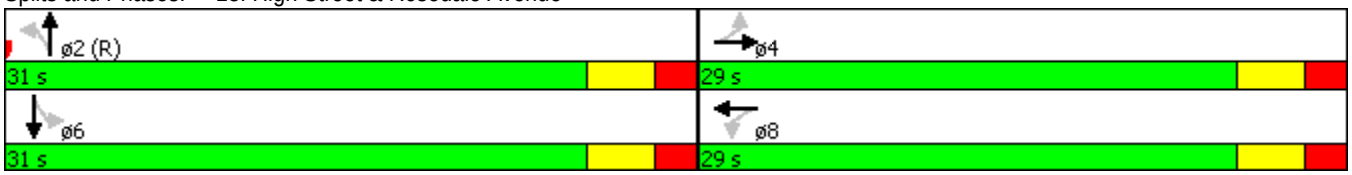
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 25.1		Intersection LOS: C	

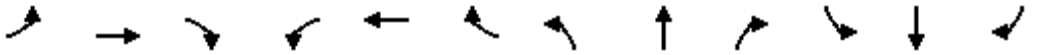
Intersection Capacity Utilization 81.2% ICU Level of Service D

Analysis Period (min) 15

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

Splits and Phases: 13: High Street & Rosedale Avenue



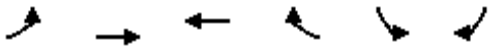


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	165	225	131	43	244	107	100	444	69	76	410	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.88	0.96		0.85	0.92		0.82	0.94		0.76
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	188.1	195.6	197.6	190.0	190.0	190.0
Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Cap, veh/h	305	419	244	262	473	207	250	694	107	257	614	135
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	904	1047	610	893	1183	518	791	1602	247	798	1417	311
Grp Volume(v), veh/h	209	0	475	61	0	417	123	0	583	79	0	556
Grp Sat Flow(s),veh/h/ln	904	0	1657	893	0	1701	791	0	1849	798	0	1728
Q Serve(g_s), s	12.3	0.0	14.5	3.7	0.0	11.7	9.2	0.0	15.7	5.5	0.0	16.1
Cycle Q Clear(g_c), s	24.0	0.0	14.5	18.2	0.0	11.7	25.3	0.0	15.7	21.1	0.0	16.1
Prop In Lane	1.00		0.37	1.00		0.30	1.00		0.13	1.00		0.18
Lane Grp Cap(c), veh/h	305	0	663	262	0	680	250	0	801	257	0	749
V/C Ratio(X)	0.68	0.00	0.72	0.23	0.00	0.61	0.49	0.00	0.73	0.31	0.00	0.74
Avail Cap(c_a), veh/h	305	0	663	262	0	680	250	0	801	257	0	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.5	0.0	15.1	22.8	0.0	14.3	24.8	0.0	14.1	22.8	0.0	14.2
Incr Delay (d2), s/veh	6.2	0.0	3.7	0.5	0.0	1.6	6.8	0.0	5.7	0.7	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.5	0.0	6.0	0.8	0.0	4.7	2.2	0.0	7.6	1.1	0.0	6.9
Lane Grp Delay (d), s/veh	30.7	0.0	18.8	23.2	0.0	15.9	31.5	0.0	19.8	23.5	0.0	18.2
Lane Grp LOS	C		B	C		B	C		B	C		B
Approach Vol, veh/h		684			478			706			635	
Approach Delay, s/veh		22.5			16.9			21.9			18.9	
Approach LOS		C			B			C			B	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		29.0			29.0			31.0			31.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		24.0			24.0			26.0			26.0	
Max Q Clear Time (g_c+I1), s		26.0			20.2			27.3			23.1	
Green Ext Time (p_c), s		0.0			2.3			0.0			2.0	

Intersection Summary												
HCM 2010 Ctrl Delay			20.3									
HCM 2010 LOS			C									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	397	404	14	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1892	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1892	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	432	439	15	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	454	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	397	404	14	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	432	439	15	10	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	454	0	-	0	911	447
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	464	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1117	-	-	-	307	616
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	637	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1117	-	-	-	301	616
Mov Capacity-2 Maneuver	-	-	-	-	301	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	625	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.5
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1117	-	-	-	396
HCM Lane V/C Ratio	0.015	-	-	-	0.047
HCM Control Delay (s)	8.271	0	-	-	14.5
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.044	-	-	-	0.146

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	298	13	1	456	85	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.995			0.979							
Flt Protected		0.990										
Satd. Flow (prot)	0	1853	0	0	1842	0	0	1900	0	0	0	0
Flt Permitted		0.990										
Satd. Flow (perm)	0	1853	0	0	1842	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	86	343	15	1	543	101	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	444	0	0	645	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.7

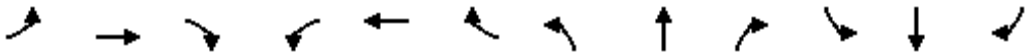
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	75	298	13	1	456	85	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	86	343	15	1	543	101	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	644	0	0	365	0	0	1126	1176	365
Stage 1	-	-	-	-	-	-	530	530	-
Stage 2	-	-	-	-	-	-	596	646	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	946	-	-	1199	-	-	229	193	685
Stage 1	-	-	-	-	-	-	594	530	-
Stage 2	-	-	-	-	-	-	554	470	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	946	-	-	1192	-	-	201	0	676
Mov Capacity-2 Maneuver	-	-	-	-	-	-	201	0	-
Stage 1	-	-	-	-	-	-	523	0	-
Stage 2	-	-	-	-	-	-	553	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.8	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	946	-	-	1192	-	-
HCM Lane V/C Ratio	+	0.091	-	-	0.001	-	-
HCM Control Delay (s)	0	9.187	0	-	8.023	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.3	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	119	111	45	131	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.935							0.850		0.970	
Flt Protected					0.987		0.950				0.995	
Satd. Flow (prot)	0	1759	0	0	1875	0	1805	0	1615	0	1834	0
Flt Permitted					0.987		0.950				0.995	
Satd. Flow (perm)	0	1759	0	0	1875	0	1805	0	1615	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	145	135	56	162	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	280	0	0	218	0	396	0	118	0	145	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.4%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	17.9
Intersection LOS	C

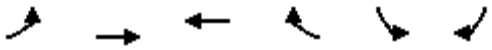
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	119	111	45	131	0	352	0	93	10	70	23
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	145	135	56	162	0	396	0	118	14	99	32
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	14.6	13.8	23.2	11.9
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	26%	10%
Vol Thru, %	0%	0%	52%	74%	68%
Vol Right, %	0%	100%	48%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	352	93	230	176	103
LT Vol	0	0	119	131	70
Through Vol	0	93	111	0	23
RT Vol	352	0	0	45	10
Lane Flow Rate	396	118	280	217	145
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.746	0.182	0.476	0.396	0.264
Departure Headway (Hd)	6.917	5.695	6.109	6.559	6.543
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	526	633	592	550	550
Service Time	4.617	3.395	4.129	4.581	4.578
HCM Lane V/C Ratio	0.753	0.186	0.473	0.395	0.264
HCM Control Delay	27.2	9.7	14.6	13.8	11.9
HCM Lane LOS	D	A	B	B	B
HCM 95th-tile Q	6.4	0.7	2.6	1.9	1.1

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	176	14	13	12	15	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.936		0.879	
Flt Protected		0.956			0.995	
Satd. Flow (prot)	0	1747	1778	0	1645	0
Flt Permitted		0.956			0.995	
Satd. Flow (perm)	0	1747	1778	0	1645	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		466	313		498	
Travel Time (s)		10.6	7.1		11.3	
Confl. Peds. (#/hr)	2			3	7	7
Peak Hour Factor	0.96	0.96	0.60	0.60	0.79	0.79
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Adj. Flow (vph)	183	15	22	20	19	162
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	198	42	0	181	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	176	14	13	12	15	128
Conflicting Peds, #/hr	2	0	0	3	7	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	60	60	79	79
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	183	15	22	20	19	162

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	420	41
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	381	-
Follow-up Headway	2.236	-	-	-	3.509	3.309
Pot Capacity-1 Maneuver	1545	-	-	-	592	1033
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	693	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1542	-	-	-	515	1025
Mov Capacity-2 Maneuver	-	-	-	-	515	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	606	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	9.8
HCM LOS			A

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1542	-	-	-	929
HCM Lane V/C Ratio	0.119	-	-	-	0.195
HCM Control Delay (s)	7.649	0	-	-	9.8
HCM Lane LOS	A	A			A
HCM 95th %tile Q(veh)	0.404	-	-	-	0.72

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	219	30	396	136	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1756	0	1863	1583	0	1859
Flt Permitted	0.958					0.968
Satd. Flow (perm)	1756	0	1863	1583	0	1803
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	12			148		
Link Speed (mph)	30		45			45
Link Distance (ft)	1004		717			745
Travel Time (s)	22.8		10.9			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	238	33	430	148	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	271	0	430	148	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		1	0	1	1
Detector Template			Thru	Right	Left	Thru
Leading Detector (ft)	40		350	0	20	350
Trailing Detector (ft)	0		344	0	0	344
Detector 1 Position(ft)	0		344	0	0	344
Detector 1 Size(ft)	40		6	20	20	6
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
Turn Type	NA		NA	Prot	Perm	NA
Protected Phases			2	2		6
Permitted Phases	8				6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	25.0		21.0	21.0	21.0	21.0
Total Split (s)	25.0		35.0	35.0	35.0	35.0
Total Split (%)	41.7%		58.3%	58.3%	58.3%	58.3%

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Maximum Green (s)	20.0		30.0	30.0	30.0	30.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0		5.0	5.0		5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	Min	Min
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	12.4		22.5	22.5		22.5
Actuated g/C Ratio	0.27		0.50	0.50		0.50
v/c Ratio	0.55		0.46	0.17		0.77
Control Delay	18.6		10.0	2.3		17.4
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	18.6		10.0	2.3		17.4
LOS	B		B	A		B
Approach Delay	18.6		8.0			17.4
Approach LOS	B		A			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 45.2			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 14.1		Intersection LOS: B	
Intersection Capacity Utilization 78.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Route 52/Lenape Road & Rosedale Avenue

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	219	30	396	136	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0		5.0
Lane Util. Factor	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1755		1863	1583		1858
Flt Permitted	0.96		1.00	1.00		0.97
Satd. Flow (perm)	1755		1863	1583		1804
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	238	33	430	148	33	660
RTOR Reduction (vph)	9	0	0	74	0	0
Lane Group Flow (vph)	262	0	430	74	0	693
Turn Type	NA		NA	Prot	Perm	NA
Protected Phases			2	2		6
Permitted Phases	8				6	
Actuated Green, G (s)	12.4		22.5	22.5		22.5
Effective Green, g (s)	12.4		22.5	22.5		22.5
Actuated g/C Ratio	0.28		0.50	0.50		0.50
Clearance Time (s)	5.0		5.0	5.0		5.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	484		933	793		904
v/s Ratio Prot			0.23	0.05		
v/s Ratio Perm	c0.15					c0.38
v/c Ratio	0.54		0.46	0.09		0.77
Uniform Delay, d1	13.8		7.3	5.9		9.1
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	1.2		0.4	0.1		3.9
Delay (s)	15.1		7.6	5.9		13.0
Level of Service	B		A	A		B
Approach Delay (s)	15.1		7.2			13.0
Approach LOS	B		A			B

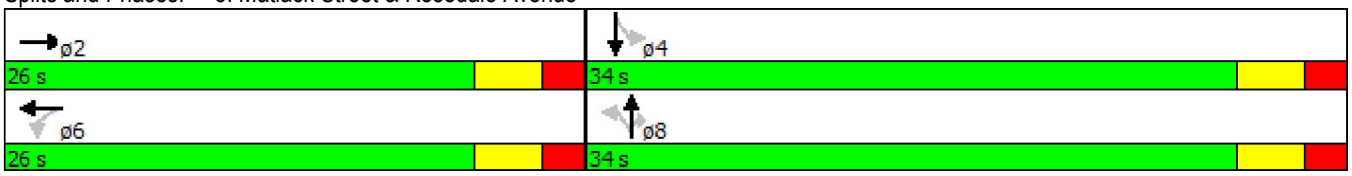
Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	44.9	Sum of lost time (s)	10.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	119	111	45	131	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor		0.99			1.00		0.96		0.93		0.96	
Frt		0.935							0.850		0.970	
Flt Protected					0.987		0.950				0.995	
Satd. Flow (prot)	0	1733	0	0	1875	0	1805	1900	1615	0	1783	0
Flt Permitted					0.858		0.665				0.984	
Satd. Flow (perm)	0	1733	0	0	1623	0	1211	1900	1503	0	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		86							614		32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	145	135	56	162	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	280	0	0	218	0	396	0	118	0	145	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)		8			8			8			8	
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		1	2		1	2	1	1	2	
Detector Template		Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)		100		20	100		20	100	20	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)		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	
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		NA		Perm	NA		Perm		Perm	Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases				6			8		8	4		
Detector Phase		2		6	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)		21.0		21.0	21.0		21.0	21.0	21.0	21.0	21.0	
Total Split (s)		26.0		26.0	26.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)		43.3%		43.3%	43.3%		56.7%	56.7%	56.7%	56.7%	56.7%	
Maximum Green (s)		21.0		21.0	21.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)		3.0		3.0	3.0		3.0	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	0.0		0.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0	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		Max		Max	Max		None	None	None	Max	Max	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0	0	0	0	
Act Effct Green (s)		21.0			21.0		29.0		29.0		29.0	
Actuated g/C Ratio		0.35			0.35		0.48		0.48		0.48	
v/c Ratio		0.42			0.38		0.68		0.11		0.17	
Control Delay		12.4			17.2		19.3		0.2		7.4	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		12.4			17.2		19.3		0.2		7.4	
LOS		B			B		B		A		A	
Approach Delay		12.4			17.2						7.4	
Approach LOS		B			B						A	
Queue Length 50th (ft)		50			58		102		0		21	
Queue Length 95th (ft)		90			95		193		0		35	
Internal Link Dist (ft)		386			386			267			183	
Turn Bay Length (ft)							150					
Base Capacity (vph)		662			568		585		1043		859	
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		0.42			0.38		0.68		0.11		0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Matlack Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	119	111	45	131	0	352	0	93	10	70	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.95		0.97	0.98		0.94
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	188.1	190.0	190.0	190.0	0.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	0	1	0	0	1	0	1	1	1	0	1	0
Cap, veh/h	0	313	291	168	443	0	654	918	759	106	623	188
Arrive On Green	0.00	0.35	0.35	0.35	0.35	0.00	0.48	0.00	0.48	0.48	0.48	0.48
Sat Flow, veh/h	0	894	832	264	1265	0	1218	1900	1570	84	1288	388
Grp Volume(v), veh/h	0	0	280	218	0	0	396	0	118	145	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1726	1529	0	0	1218	1900	1570	1760	0	0
Q Serve(g_s), s	0.0	0.0	7.6	0.3	0.0	0.0	16.2	0.0	2.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.6	7.9	0.0	0.0	19.0	0.0	2.5	2.7	0.0	0.0
Prop In Lane	0.00		0.48	0.26		0.00	1.00		1.00	0.10		0.22
Lane Grp Cap(c), veh/h	0	0	604	611	0	0	654	918	759	917	0	0
V/C Ratio(X)	0.00	0.00	0.46	0.36	0.00	0.00	0.61	0.00	0.16	0.16	0.00	0.00
Avail Cap(c_a), veh/h	0	0	604	611	0	0	654	918	759	917	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	15.1	14.4	0.0	0.0	14.0	0.0	8.7	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.5	1.6	0.0	0.0	1.6	0.0	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	3.4	2.5	0.0	0.0	4.7	0.0	0.8	1.1	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	17.7	16.0	0.0	0.0	15.6	0.0	8.8	9.1	0.0	0.0
Lane Grp LOS			B	B			B		A	A		
Approach Vol, veh/h		280			218			514			145	
Approach Delay, s/veh		17.7			16.0			14.1			9.1	
Approach LOS		B			B			B			A	

Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		26.0			26.0			34.0			34.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		21.0			21.0			29.0			29.0	
Max Q Clear Time (g_c+I1), s		9.6			9.9			21.0			4.7	
Green Ext Time (p_c), s		2.4			2.3			1.7			2.6	

Intersection Summary												
HCM 2010 Ctrl Delay			14.7									
HCM 2010 LOS			B									

Notes

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	226	30	396	135	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	0		80	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1791	0	1818	1546	0	1833
Flt Permitted	0.958					0.998
Satd. Flow (perm)	1791	0	1818	1546	0	1833
Link Speed (mph)	30		30			30
Link Distance (ft)	1056		405			403
Travel Time (s)	24.0		9.2			9.2
Peak Hour Factor	0.98	0.98	0.82	0.89	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	231	31	483	152	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	262	0	483	152	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	30.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	226	30	396	135	30	607
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	82	89	92	92
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	231	31	483	152	33	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1208	483	0	0	483	0
Stage 1	483	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Follow-up Headway	3.5	3.3	-	-	2.2	-
Pot Capacity-1 Maneuver	# 204	588	-	-	1090	-
Stage 1	625	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	# 194	588	-	-	1090	-
Mov Capacity-2 Maneuver	# 194	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	186.9	0	0.4
HCM LOS	F		

Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	211	1090	-
HCM Lane V/C Ratio	-	-	1.238	0.03	-
HCM Control Delay (s)	-	-	186.9	8.405	0
HCM Lane LOS			F	A	A
HCM 95th %tile Q(veh)	-	-	13.522	0.092	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	167	13	16	260	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.877	
Flt Protected				0.997	0.995	
Satd. Flow (prot)	1862	0	0	1857	1658	0
Flt Permitted				0.997	0.995	
Satd. Flow (perm)	1862	0	0	1857	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1056			400	279	
Travel Time (s)	24.0			9.1	6.3	
Confl. Peds. (#/hr)					2	2
Peak Hour Factor	0.94	0.94	0.88	0.88	0.65	0.65
Heavy Vehicles (%)	1%	1%	2%	2%	0%	0%
Adj. Flow (vph)	178	14	18	295	2	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	192	0	0	313	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.6

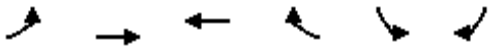
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	167	13	16	260	1	13
Conflicting Peds, #/hr	0	0	0	0	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	88	88	65	65
Heavy Vehicles, %	1	1	2	2	0	0
Mvmt Flow	178	14	18	295	2	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	193	0	519	187
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	332	-
Follow-up Headway	-	-	2.218	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1380	-	521	860
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	731	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1380	-	512	859
Mov Capacity-2 Maneuver	-	-	-	-	512	-
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	719	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.5
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	819	-	-	1380	-
HCM Lane V/C Ratio	0.026	-	-	0.013	-
HCM Control Delay (s)	9.5	-	-	7.644	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	0.081	-	-	0.04	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	230	164	1	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.932	
Flt Protected					0.976	
Satd. Flow (prot)	0	1900	1879	0	1728	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1900	1879	0	1728	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		400	1056		285	
Travel Time (s)		9.1	24.0		6.5	
Confl. Peds. (#/hr)				1		
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Adj. Flow (vph)	2	264	180	1	6	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	266	181	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

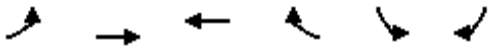
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	2	230	164	1	2	2
Peak Hour Factor	0.87	0.87	0.91	0.91	0.33	0.33
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	264	180	1	6	6
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	8.3	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	0%	50%
Vol Thru, %	99%	99%	0%
Vol Right, %	0%	1%	50%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	232	165	4
LT Vol	230	164	0
Through Vol	0	1	2
RT Vol	2	0	2
Lane Flow Rate	267	181	12
Geometry Grp	1	1	1
Degree of Util (X)	0.301	0.208	0.016
Departure Headway (Hd)	4.058	4.133	4.65
Convergence, Y/N	Yes	Yes	Yes
Cap	880	859	774
Service Time	2.108	2.198	2.65
HCM Lane V/C Ratio	0.303	0.211	0.016
HCM Control Delay	8.9	8.3	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	0.8	0

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	184	285	4	4	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.927	
Flt Protected		0.999			0.978	
Satd. Flow (prot)	0	1843	1877	0	1723	0
Flt Permitted		0.999			0.978	
Satd. Flow (perm)	0	1843	1877	0	1723	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	371		305	
Travel Time (s)		24.0	8.4		6.9	
Confl. Peds. (#/hr)	1			12	5	5
Peak Hour Factor	0.94	0.94	0.88	0.88	0.38	0.38
Heavy Vehicles (%)	3%	3%	1%	1%	0%	0%
Adj. Flow (vph)	3	196	324	5	11	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	199	329	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.5

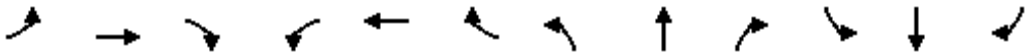
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	3	184	285	4	4	5
Conflicting Peds, #/hr	1	0	0	12	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	88	88	38	38
Heavy Vehicles, %	3	3	1	1	0	0
Mvmt Flow	3	196	324	5	11	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	333	0	-	0	533	332
Stage 1	-	-	-	-	331	-
Stage 2	-	-	-	-	202	-
Follow-up Headway	2.227	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1221	-	-	-	511	714
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	837	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1220	-	-	-	505	710
Mov Capacity-2 Maneuver	-	-	-	-	505	-
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	831	-

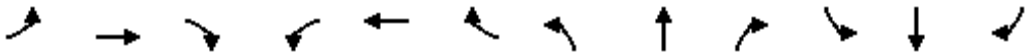
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.2
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1220	-	-	-	601
HCM Lane V/C Ratio	0.003	-	-	-	0.039
HCM Control Delay (s)	7.959	0	-	-	11.2
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.008	-	-	-	0.123

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	150	21	107	262	123	16	166	148	119	175	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	13	13	13	16	16	16	10	10	10	16	16	16
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
Ped Bike Factor		0.99									0.97	
Frt		0.985			0.966			0.939			0.990	
Flt Protected		0.994			0.989			0.998			0.982	
Satd. Flow (prot)	0	1875	0	0	1815	0	0	1629	0	0	1833	0
Flt Permitted		0.917			0.864			0.998			0.982	
Satd. Flow (perm)	0	1729	0	0	1586	0	0	1629	0	0	1798	0
Right Turn on Red			Yes			No			No			Yes
Satd. Flow (RTOR)		10									5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		371			351			394			414	
Travel Time (s)		8.4			8.0			9.0			9.4	
Confl. Peds. (#/hr)	12		12							25		25
Peak Hour Factor	0.85	0.85	0.85	0.86	0.86	0.86	0.83	0.83	0.83	0.87	0.87	0.87
Parking (#/hr)				0	0	0				0	0	0
Adj. Flow (vph)	26	176	25	124	305	143	19	200	178	137	201	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	227	0	0	572	0	0	397	0	0	364	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	0.96	0.96	0.96	0.85	0.97	0.85	1.09	1.09	1.09	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	1	
Detector Template	Left			Left			Left			Left		
Leading Detector (ft)	20	100		20	100		20	100		20	35	
Trailing Detector (ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Position(ft)	0	0		0	0		0	-5		0	-5	
Detector 1 Size(ft)	20	0		20	0		20	40		20	40	
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				
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	NA		Split	NA		Split	NA	
Protected Phases		6			2		4	4		8	8	
Permitted Phases	6			2								



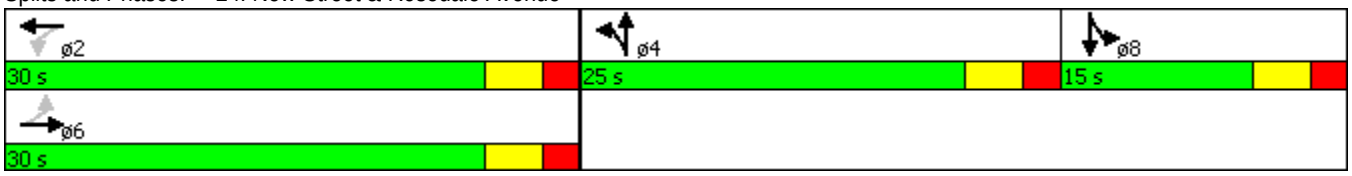
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	15.0	15.0		15.0	15.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (s)	30.0	30.0		30.0	30.0		25.0	25.0		15.0	15.0	
Total Split (%)	42.9%	42.9%		42.9%	42.9%		35.7%	35.7%		21.4%	21.4%	
Maximum Green (s)	25.0	25.0		25.0	25.0		20.0	20.0		10.0	10.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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)		5.0			5.0			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	Max	Max		Max	Max		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0							
Flash Dont Walk (s)	11.0	11.0		11.0	11.0							
Pedestrian Calls (#/hr)	0	0		0	0							
Act Effct Green (s)		25.0			25.0			19.1			10.0	
Actuated g/C Ratio		0.36			0.36			0.28			0.14	
v/c Ratio		0.36			1.00			0.88			1.35	
Control Delay		17.8			62.5			47.7			208.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		17.8			62.5			47.7			208.6	
LOS		B			E			D			F	
Approach Delay		17.8			62.5			47.7			208.6	
Approach LOS		B			E			D			F	
Queue Length 50th (ft)		67			~247			161			~212	
Queue Length 95th (ft)		112			#414			#268			#352	
Internal Link Dist (ft)		291			271			314			334	
Turn Bay Length (ft)												
Base Capacity (vph)		632			574			471			270	
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		0.36			1.00			0.84			1.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.1			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.35			
Intersection Signal Delay: 86.3		Intersection LOS: F	
Intersection Capacity Utilization 93.2%		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: 24: New Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	150	21	107	262	123	16	166	148	119	175	23
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow veh/h/ln	197.6	193.7	197.6	197.6	193.7	197.6	190.0	186.3	190.0	197.6	193.7	197.6
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Cap, veh/h	135	775	102	218	459	196	23	245	218	179	262	34
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	103	1512	200	250	895	382	82	868	772	634	930	120
Grp Volume(v), veh/h	227	0	0	572	0	0	397	0	0	364	0	0
Grp Sat Flow(s),veh/h/ln	1815	0	0	1527	0	0	1722	0	0	1684	0	0
Q Serve(g_s), s	0.0	0.0	0.0	8.2	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	0.0	13.7	0.0	0.0	10.5	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.11		0.11	0.22		0.25	0.05		0.45	0.38		0.07
Lane Grp Cap(c), veh/h	1013	0	0	873	0	0	486	0	0	475	0	0
V/C Ratio(X)	0.22	0.00	0.00	0.66	0.00	0.00	0.82	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	1013	0	0	873	0	0	706	0	0	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	9.0	0.0	0.0	16.3	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	3.8	0.0	0.0	4.9	0.0	0.0	7.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.3	0.0	0.0	5.1	0.0	0.0	4.6	0.0	0.0	4.6	0.0	0.0
Lane Grp Delay (d), s/veh	7.1	0.0	0.0	12.8	0.0	0.0	21.2	0.0	0.0	23.4	0.0	0.0
Lane Grp LOS	A			B			C			C		
Approach Vol, veh/h		227			572			397			364	
Approach Delay, s/veh		7.1			12.8			21.2			23.4	
Approach LOS		A			B			C			C	

Timer												
Assigned Phs		6			2			4			8	
Phs Duration (G+Y+Rc), s		30.0			30.0			18.8			18.8	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			20.0			10.0	
Max Q Clear Time (g_c+I1), s		5.2			15.7			12.5			11.7	
Green Ext Time (p_c), s		5.4			3.6			1.3			0.0	

Intersection Summary												
HCM 2010 Ctrl Delay			16.6									
HCM 2010 LOS			B									

Notes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	357	58	33	514	47	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.981				0.954	
Flt Protected				0.997	0.968	
Satd. Flow (prot)	1827	0	0	1857	1720	0
Flt Permitted				0.997	0.968	
Satd. Flow (perm)	1827	0	0	1857	1720	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	351			1056	303	
Travel Time (s)	8.0			24.0	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	388	63	36	559	51	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	451	0	0	595	77	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.8%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	1.7

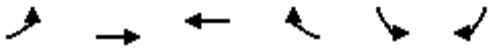
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	357	58	33	514	47	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	388	63	36	559	51	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	451	0	1050	420
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	630	-
Follow-up Headway	-	-	2.218	-	3.518	3.318
Pot Capacity-1 Maneuver	-	-	1109	-	252	633
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	531	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	1109	-	240	633
Mov Capacity-2 Maneuver	-	-	-	-	240	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	506	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	20.8
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	304	-	-	1109	-
HCM Lane V/C Ratio	0.254	-	-	0.032	-
HCM Control Delay (s)	20.8	-	-	8.355	0
HCM Lane LOS	C			A	A
HCM 95th %tile Q(veh)	0.986	-	-	0.1	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	287	358	0	122	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.954	
Flt Protected					0.968	
Satd. Flow (prot)	0	1863	1863	0	1720	0
Flt Permitted					0.968	
Satd. Flow (perm)	0	1863	1863	0	1720	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1056	70		257	
Travel Time (s)		24.0	1.6		5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	312	389	0	133	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	312	389	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Stop	Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	287	358	0	122	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	312	389	0	133	68
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	11.8	13.3	11.1
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	66%
Vol Thru, %	100%	100%	0%
Vol Right, %	0%	0%	34%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	287	358	185
LT Vol	287	358	0
Through Vol	0	0	63
RT Vol	0	0	122
Lane Flow Rate	312	389	201
Geometry Grp	1	1	1
Degree of Util (X)	0.429	0.526	0.311
Departure Headway (Hd)	5.055	4.866	5.572
Convergence, Y/N	Yes	Yes	Yes
Cap	718	732	650
Service Time	3.055	2.962	3.572
HCM Lane V/C Ratio	0.435	0.531	0.309
HCM Control Delay	11.8	13.3	11.1
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.2	3.1	1.3

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	551	87	31	494	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982					
Flt Protected				0.997		
Satd. Flow (prot)	1847	0	0	1894	1900	0
Flt Permitted				0.997		
Satd. Flow (perm)	1847	0	0	1894	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	70			358	315	
Travel Time (s)	1.6			8.1	7.2	
Peak Hour Factor	0.91	0.91	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%
Adj. Flow (vph)	605	96	33	520	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	701	0	0	553	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	551	87	31	494	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	95	95	92	92
Heavy Vehicles, %	1	1	0	0	0	0
Mvmt Flow	605	96	33	520	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	701	0	1238	653
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	585	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	905	-	196	471
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	561	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	905	-	186	471
Mov Capacity-2 Maneuver	-	-	-	-	186	-
Stage 1	-	-	-	-	522	-
Stage 2	-	-	-	-	532	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	0	-	-	905	-
HCM Lane V/C Ratio	+	-	-	0.036	-
HCM Control Delay (s)	0	-	-	9.127	0
HCM Lane LOS	A			A	A
HCM 95th %tile Q(veh)	+	-	-	0.112	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	514	0	0	472	9	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt					0.896	
Flt Protected					0.989	
Satd. Flow (prot)	1863	0	0	1881	1658	0
Flt Permitted					0.989	
Satd. Flow (perm)	1863	0	0	1881	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	358			212	325	
Travel Time (s)	8.1			4.8	7.4	
Confl. Peds. (#/hr)		2	1		100	100
Peak Hour Factor	0.91	0.92	0.92	0.87	0.73	0.73
Heavy Vehicles (%)	2%	2%	2%	1%	0%	2%
Adj. Flow (vph)	565	0	0	543	12	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	565	0	0	543	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			11	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	0.8

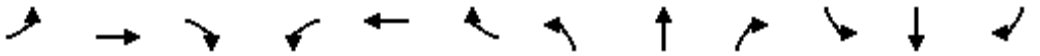
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	514	0	0	472	9	30
Conflicting Peds, #/hr	0	2	1	0	100	100
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	92	92	87	73	73
Heavy Vehicles, %	2	2	2	1	0	2
Mvmt Flow	565	0	0	543	12	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	665	0	1208	666
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	543	-
Follow-up Headway	-	-	2.218	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	924	-	204	459
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	586	-
Time blocked-Platoon, %	-	-		-		
Mov Capacity-1 Maneuver	-	-	923	-	187	420
Mov Capacity-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	585	-

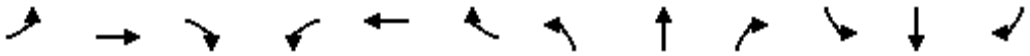
Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.2
HCM LOS			C

Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	326	-	-	923	-
HCM Lane V/C Ratio	0.164	-	-	-	-
HCM Control Delay (s)	18.2	-	-	0	-
HCM Lane LOS	C			A	
HCM 95th %tile Q(veh)	0.578	-	-	0	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	227	131	43	252	107	100	444	69	76	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	11	11	10	14	14	10	10	10
Storage Length (ft)	115		0	100		0	165		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	65			25			100			75		
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
Ped Bike Factor	0.93	0.94		0.93	0.94		0.97	0.96		0.90	0.93	
Frt		0.945			0.955			0.980			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1711	1656	0	1805	1652	0	1668	1894	0	1685	1613	0
Flt Permitted	0.359			0.300			0.301			0.277		
Satd. Flow (perm)	603	1656	0	527	1652	0	512	1894	0	440	1613	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					44						23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		212			184			385			523	
Travel Time (s)		4.8			4.2			8.8			11.9	
Confl. Peds. (#/hr)	96		96	120		120	58		156	210		210
Peak Hour Factor	0.79	0.75	0.75	0.70	0.84	0.84	0.81	0.88	0.88	0.96	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Adj. Flow (vph)	209	303	175	61	300	127	123	505	78	79	456	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	478	0	61	427	0	123	583	0	79	556	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			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.04	1.04	1.09	0.92	0.92	1.09	1.09	1.09
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	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		29.0	29.0		29.0	29.0	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.0	25.0		25.0	25.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		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		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		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	None	None		None	None		C-Max	C-Max		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	13.0	13.0		13.0	13.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	22.3	22.3		22.3	22.3		27.7	27.7		27.7	27.7	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.46	0.46		0.46	0.46	
v/c Ratio	0.93	0.78		0.31	0.67		0.52	0.67		0.39	0.73	
Control Delay	67.0	25.8		17.0	19.1		24.2	18.7		19.7	21.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	67.0	25.8		17.0	19.1		24.2	18.7		19.7	21.9	
LOS	E	C		B	B		C	B		B	C	
Approach Delay		38.4			18.8			19.7			21.7	
Approach LOS		D			B			B			C	
Queue Length 50th (ft)	65	136		14	102		33	170		19	163	
Queue Length 95th (ft)	#144	174		29	164		#75	270		57	#329	
Internal Link Dist (ft)		132			104			305			443	
Turn Bay Length (ft)	115			100			165			115		
Base Capacity (vph)	251	690		219	714		236	874		203	757	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.83	0.69		0.28	0.60		0.52	0.67		0.39	0.73	

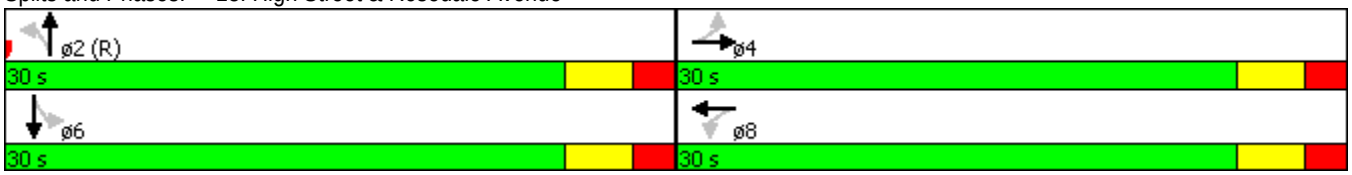
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 25.1		Intersection LOS: C	

Intersection Capacity Utilization 81.5% 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: 13: High Street & Rosedale Avenue

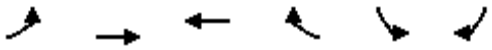


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	165	227	131	43	252	107	100	444	69	76	410	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.88	0.96		0.86	0.92		0.81	0.94		0.75
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	186.3	186.3	190.0	190.0	190.0	190.0	188.1	195.6	197.6	190.0	190.0	190.0
Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Cap, veh/h	320	439	254	282	500	212	230	666	103	238	589	129
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	898	1054	609	891	1201	508	791	1599	247	797	1413	310
Grp Volume(v), veh/h	209	0	478	61	0	427	123	0	583	79	0	556
Grp Sat Flow(s),veh/h/ln	898	0	1662	891	0	1710	791	0	1846	797	0	1723
Q Serve(g_s), s	13.3	0.0	14.1	3.6	0.0	11.7	8.3	0.0	16.2	5.6	0.0	16.7
Cycle Q Clear(g_c), s	25.0	0.0	14.1	17.7	0.0	11.7	25.0	0.0	16.2	21.8	0.0	16.7
Prop In Lane	1.00		0.37	1.00		0.30	1.00		0.13	1.00		0.18
Lane Grp Cap(c), veh/h	320	0	693	282	0	712	230	0	769	238	0	718
V/C Ratio(X)	0.65	0.00	0.69	0.22	0.00	0.60	0.54	0.00	0.76	0.33	0.00	0.77
Avail Cap(c_a), veh/h	320	0	693	282	0	712	230	0	769	238	0	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	14.3	21.6	0.0	13.6	26.3	0.0	14.9	24.2	0.0	15.1
Incr Delay (d2), s/veh	4.7	0.0	2.9	0.4	0.0	1.4	8.7	0.0	6.9	0.8	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	3.4	0.0	5.7	0.8	0.0	4.7	2.3	0.0	8.0	1.1	0.0	7.4
Lane Grp Delay (d), s/veh	28.3	0.0	17.2	22.0	0.0	15.0	35.0	0.0	21.8	25.0	0.0	20.4
Lane Grp LOS	C		B	C		B	C		C	C		C
Approach Vol, veh/h		687			488			706			635	
Approach Delay, s/veh		20.6			15.9			24.1			21.0	
Approach LOS		C			B			C			C	

Timer												
Assigned Phs		4			8			2			6	
Phs Duration (G+Y+Rc), s		30.0			30.0			30.0			30.0	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		25.0			25.0			25.0			25.0	
Max Q Clear Time (g_c+I1), s		27.0			19.7			27.0			23.8	
Green Ext Time (p_c), s		0.0			3.0			0.0			0.9	

Intersection Summary												
HCM 2010 Ctrl Delay			20.8									
HCM 2010 LOS			C									

Notes



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	401	417	14	9	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.936	
Flt Protected		0.998			0.974	
Satd. Flow (prot)	0	1896	1892	0	1732	0
Flt Permitted		0.998			0.974	
Satd. Flow (perm)	0	1896	1892	0	1732	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		184	169		259	
Travel Time (s)		4.2	3.8		5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	16	436	453	15	10	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	452	468	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.4

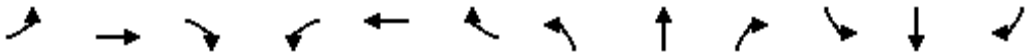
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	15	401	417	14	9	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	436	453	15	10	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	468	0	-	0	929	461
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	468	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1104	-	-	-	300	605
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	634	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1104	-	-	-	294	605
Mov Capacity-2 Maneuver	-	-	-	-	294	-
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	622	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.7
HCM LOS			B

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1104	-	-	-	388
HCM Lane V/C Ratio	0.015	-	-	-	0.048
HCM Control Delay (s)	8.31	0	-	-	14.7
HCM Lane LOS	A	A			B
HCM 95th %tile Q(veh)	0.045	-	-	-	0.15

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	301	13	1	470	85	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Ped Bike Factor												
Frt		0.995			0.979							
Flt Protected		0.990										
Satd. Flow (prot)	0	1853	0	0	1842	0	0	1900	0	0	0	0
Flt Permitted		0.990										
Satd. Flow (perm)	0	1853	0	0	1842	0	0	1900	0	0	0	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			466			386			260	
Travel Time (s)		3.8			10.6			8.8			5.9	
Confl. Peds. (#/hr)				7		7	8		8	42		42
Peak Hour Factor	0.87	0.87	0.87	0.84	0.84	0.84	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	86	346	15	1	560	101	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	447	0	0	662	0	0	0	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)		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	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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	0.7

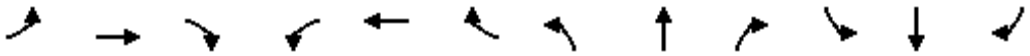
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	75	301	13	1	470	85	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	7	0	7	8	0	8	42	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	84	84	84	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	1	1	0	0	0	0	0	0
Mvmt Flow	86	346	15	1	560	101	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	661	0	0	369	0	0	1147	1197	368
Stage 1	-	-	-	-	-	-	534	534	-
Stage 2	-	-	-	-	-	-	613	663	-
Follow-up Headway	2.209	-	-	2.209	-	-	3.5	4	3.3
Pot Capacity-1 Maneuver	932	-	-	1195	-	-	222	187	682
Stage 1	-	-	-	-	-	-	592	528	-
Stage 2	-	-	-	-	-	-	544	462	-
Time blocked-Platoon, %		-	-		-	-			
Mov Capacity-1 Maneuver	932	-	-	1188	-	-	195	0	674
Mov Capacity-2 Maneuver	-	-	-	-	-	-	195	0	-
Stage 1	-	-	-	-	-	-	520	0	-
Stage 2	-	-	-	-	-	-	543	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1.8	0	0
HCM LOS			A

Minor Lane / Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	0	932	-	-	1188	-	-
HCM Lane V/C Ratio	+	0.092	-	-	0.001	-	-
HCM Control Delay (s)	0	9.256	0	-	8.033	0	-
HCM Lane LOS	A	A	A		A	A	
HCM 95th %tile Q(veh)	+	0.305	-	-	0.003	-	-

Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	120	111	45	135	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor												
Frt		0.935							0.850		0.970	
Flt Protected					0.988		0.950				0.995	
Satd. Flow (prot)	0	1759	0	0	1877	0	1805	0	1615	0	1834	0
Flt Permitted					0.988		0.950				0.995	
Satd. Flow (perm)	0	1759	0	0	1877	0	1805	0	1615	0	1834	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	146	135	56	167	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	223	0	396	0	118	0	145	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)		8			8			8			8	
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
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	18.1
Intersection LOS	C

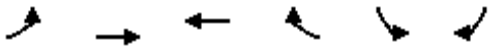
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	120	111	45	135	0	352	0	93	10	70	23
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles, %	1	1	1	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	146	135	56	167	0	396	0	118	14	99	32
Number of Lanes	0	1	0	0	1	0	1	0	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	14.7	14	23.4	12
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	25%	10%
Vol Thru, %	0%	0%	52%	75%	68%
Vol Right, %	0%	100%	48%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	352	93	231	180	103
LT Vol	0	0	120	135	70
Through Vol	0	93	111	0	23
RT Vol	352	0	0	45	10
Lane Flow Rate	396	118	282	222	145
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.749	0.183	0.48	0.406	0.265
Departure Headway (Hd)	6.944	5.722	6.132	6.57	6.575
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	526	631	589	549	547
Service Time	4.644	3.422	4.153	4.594	4.615
HCM Lane V/C Ratio	0.753	0.187	0.479	0.404	0.265
HCM Control Delay	27.5	9.7	14.7	14	12
HCM Lane LOS	D	A	B	B	B
HCM 95th-tile Q	6.4	0.7	2.6	2	1.1

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	177	14	13	12	15	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.936		0.879	
Flt Protected		0.956			0.995	
Satd. Flow (prot)	0	1747	1778	0	1645	0
Flt Permitted		0.956			0.995	
Satd. Flow (perm)	0	1747	1778	0	1645	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		466	313		498	
Travel Time (s)		10.6	7.1		11.3	
Confl. Peds. (#/hr)	2			3	7	7
Peak Hour Factor	0.96	0.96	0.60	0.60	0.79	0.79
Heavy Vehicles (%)	4%	4%	0%	0%	1%	1%
Adj. Flow (vph)	184	15	22	20	19	167
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	199	42	0	186	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	177	14	13	12	15	132
Conflicting Peds, #/hr	2	0	0	3	7	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	60	60	79	79
Heavy Vehicles, %	4	4	0	0	1	1
Mvmt Flow	184	15	22	20	19	167

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	49	0	-	0	422	41
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	383	-
Follow-up Headway	2.236	-	-	-	3.509	3.309
Pot Capacity-1 Maneuver	1545	-	-	-	590	1033
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	691	-
Time blocked-Platoon, %		-	-	-		
Mov Capacity-1 Maneuver	1542	-	-	-	513	1025
Mov Capacity-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	9.8
HCM LOS			A

Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1542	-	-	-	930
HCM Lane V/C Ratio	0.12	-	-	-	0.2
HCM Control Delay (s)	7.651	0	-	-	9.8
HCM Lane LOS	A	A			A
HCM 95th %tile Q(veh)	0.406	-	-	-	0.744

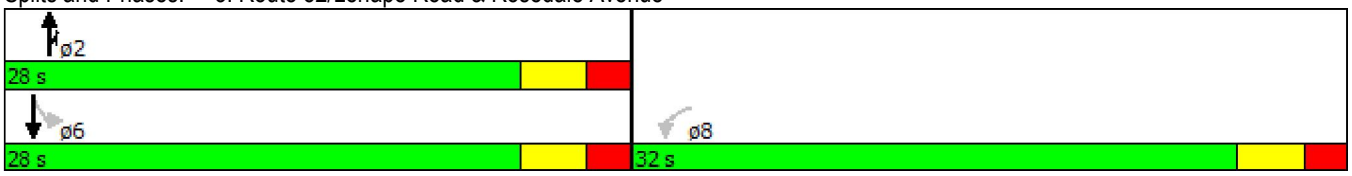
Notes
~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	226	30	396	135	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984			0.850		
Flt Protected	0.958					0.998
Satd. Flow (prot)	1756	0	1863	1583	0	1859
Flt Permitted	0.958					0.969
Satd. Flow (perm)	1756	0	1863	1583	0	1805
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	15			147		
Link Speed (mph)	30		45			45
Link Distance (ft)	1004		717			745
Travel Time (s)	22.8		10.9			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	246	33	430	147	33	660
Shared Lane Traffic (%)						
Lane Group Flow (vph)	279	0	430	147	0	693
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		1	0	1	1
Detector Template			Thru	Right	Left	Thru
Leading Detector (ft)	40		350	0	20	350
Trailing Detector (ft)	0		344	0	0	344
Detector 1 Position(ft)	0		344	0	0	344
Detector 1 Size(ft)	40		6	20	20	6
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
Turn Type	NA		NA	Prot	Perm	NA
Protected Phases			2	2		6
Permitted Phases	8				6	
Detector Phase	8		2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	25.0		21.0	21.0	21.0	21.0
Total Split (s)	32.0		28.0	28.0	28.0	28.0
Total Split (%)	53.3%		46.7%	46.7%	46.7%	46.7%

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Maximum Green (s)	27.0		23.0	23.0	23.0	23.0
Yellow Time (s)	3.0		3.0	3.0	3.0	3.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0		5.0	5.0		5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		Min	Min	Min	Min
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	12.3		25.2	25.2		25.2
Actuated g/C Ratio	0.26		0.53	0.53		0.53
v/c Ratio	0.60		0.44	0.16		0.72
Control Delay	19.7		9.5	2.3		16.5
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	19.7		9.5	2.3		16.5
LOS	B		A	A		B
Approach Delay	19.7		7.6			16.5
Approach LOS	B		A			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 47.5			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 79.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Route 52/Lenape Road & Rosedale Avenue



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	226	30	396	135	30	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0		5.0
Lane Util. Factor	1.00		1.00	1.00		1.00
Frt	0.98		1.00	0.85		1.00
Flt Protected	0.96		1.00	1.00		1.00
Satd. Flow (prot)	1756		1863	1583		1858
Flt Permitted	0.96		1.00	1.00		0.97
Satd. Flow (perm)	1756		1863	1583		1805
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	246	33	430	147	33	660
RTOR Reduction (vph)	11	0	0	69	0	0
Lane Group Flow (vph)	268	0	430	78	0	693
Turn Type	NA		NA	Prot	Perm	NA
Protected Phases			2	2		6
Permitted Phases	8				6	
Actuated Green, G (s)	12.3		25.2	25.2		25.2
Effective Green, g (s)	12.3		25.2	25.2		25.2
Actuated g/C Ratio	0.26		0.53	0.53		0.53
Clearance Time (s)	5.0		5.0	5.0		5.0
Vehicle Extension (s)	3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	454		988	839		957
v/s Ratio Prot			0.23	0.05		
v/s Ratio Perm	c0.15					c0.38
v/c Ratio	0.59		0.44	0.09		0.72
Uniform Delay, d1	15.4		6.8	5.5		8.5
Progression Factor	1.00		1.00	1.00		1.00
Incremental Delay, d2	2.1		0.3	0.0		2.7
Delay (s)	17.4		7.1	5.6		11.2
Level of Service	B		A	A		B
Approach Delay (s)	17.4		6.7			11.2
Approach LOS	B		A			B

Intersection Summary			
HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	47.5	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

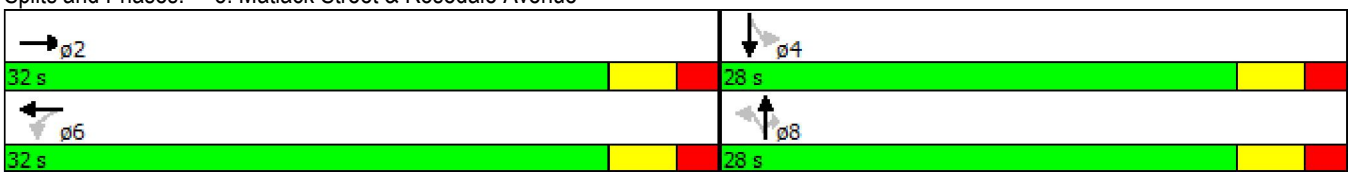
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	120	111	45	135	0	352	0	93	10	70	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			75			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
Ped Bike Factor		0.99			1.00		0.96		0.93		0.96	
Frt		0.935							0.850		0.970	
Flt Protected					0.988		0.950				0.995	
Satd. Flow (prot)	0	1733	0	0	1877	0	1805	1900	1615	0	1783	0
Flt Permitted					0.839		0.665				0.982	
Satd. Flow (perm)	0	1733	0	0	1587	0	1213	1900	1503	0	1741	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		101							697		28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		466			466			347			263	
Travel Time (s)		10.6			10.6			7.9			6.0	
Confl. Peds. (#/hr)	6		6	14		14	27		27	58		58
Peak Hour Factor	0.92	0.82	0.82	0.81	0.81	0.92	0.89	0.92	0.79	0.71	0.71	0.71
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	146	135	56	167	0	396	0	118	14	99	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	223	0	396	0	118	0	145	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)		8			8			8			8	
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		1	2		1	2	1	1	2	
Detector Template		Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)		100		20	100		20	100	20	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)		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	
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		NA		Perm	NA		Perm		Perm	Perm	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases				6			8		8	4		
Detector Phase		2		6	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)		21.0		21.0	21.0		21.0	21.0	21.0	21.0	21.0	
Total Split (s)		32.0		32.0	32.0		28.0	28.0	28.0	28.0	28.0	
Total Split (%)		53.3%		53.3%	53.3%		46.7%	46.7%	46.7%	46.7%	46.7%	
Maximum Green (s)		27.0		27.0	27.0		23.0	23.0	23.0	23.0	23.0	
Yellow Time (s)		3.0		3.0	3.0		3.0	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	0.0		0.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0	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		None		None	None		None	None	None	None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0	0	0	0	
Act Effct Green (s)		10.9			10.9		16.7		16.7		16.7	
Actuated g/C Ratio		0.29			0.29		0.44		0.44		0.44	
v/c Ratio		0.49			0.49		0.75		0.11		0.19	
Control Delay		11.4			16.5		20.1		0.2		6.4	
Queue Delay		0.0			0.0		0.0		0.0		0.0	
Total Delay		11.4			16.5		20.1		0.2		6.4	
LOS		B			B		C		A		A	
Approach Delay		11.4			16.5						6.4	
Approach LOS		B			B						A	
Queue Length 50th (ft)		29			38		61		0		13	
Queue Length 95th (ft)		75			85		#198		0		30	
Internal Link Dist (ft)		386			386			267			183	
Turn Bay Length (ft)							150					
Base Capacity (vph)		1311			1177		768		1207		1113	
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		0.21			0.19		0.52		0.10		0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 38			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			

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

Splits and Phases: 5: Matlack Street & Rosedale Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	120	111	45	135	0	352	0	93	10	70	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	0.95		0.97	0.97		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	0.0	188.1	190.0	190.0	190.0	0.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	0	1	0	0	1	0	1	1	1	0	1	0
Cap, veh/h	0	261	241	182	383	0	669	840	692	132	583	173
Arrive On Green	0.00	0.29	0.29	0.29	0.29	0.00	0.44	0.00	0.44	0.44	0.44	0.44
Sat Flow, veh/h	0	896	829	213	1316	0	1213	1900	1566	59	1319	390
Grp Volume(v), veh/h	0	0	281	223	0	0	396	0	118	145	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1725	1529	0	0	1213	1900	1566	1769	0	0
Q Serve(g_s), s	0.0	0.0	5.2	0.2	0.0	0.0	11.0	0.0	1.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.2	5.4	0.0	0.0	12.9	0.0	1.7	1.8	0.0	0.0
Prop In Lane	0.00		0.48	0.25		0.00	1.00		1.00	0.10		0.22
Lane Grp Cap(c), veh/h	0	0	502	565	0	0	669	840	692	888	0	0
V/C Ratio(X)	0.00	0.00	0.56	0.39	0.00	0.00	0.59	0.00	0.17	0.16	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1242	1257	0	0	877	1166	960	1182	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.3	10.7	0.0	0.0	10.2	0.0	6.3	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.4	0.0	0.0	0.8	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.0	0.0	1.9	1.4	0.0	0.0	2.7	0.0	0.5	0.6	0.0	0.0
Lane Grp Delay (d), s/veh	0.0	0.0	12.2	11.1	0.0	0.0	11.1	0.0	6.4	6.4	0.0	0.0
Lane Grp LOS			B	B			B		A	A		
Approach Vol, veh/h		281			223			514			145	
Approach Delay, s/veh		12.2			11.1			10.0			6.4	
Approach LOS		B			B			B			A	

Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		15.9			15.9			21.6			21.6	
Change Period (Y+Rc), s		5.0			5.0			5.0			5.0	
Max Green Setting (Gmax), s		27.0			27.0			23.0			23.0	
Max Q Clear Time (g_c+I1), s		7.2			7.4			14.9			3.8	
Green Ext Time (p_c), s		3.0			3.0			1.7			2.4	

Intersection Summary												
HCM 2010 Ctrl Delay			10.3									
HCM 2010 LOS			B									

Notes

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
1918 TO 2008: CELEBRATING NINETY YEARS OF ENGINEERING EXCELLENCE

JOB 13-03030T ROSEDALE AVE CORRIDOR STUDY
SHEET NO. 1 OF 1
CALCULATED BY JFC DATE 11/19/2013
CHECKED BY KMN DATE 11/19/2013
SCALE N.T.S.

ENGINEER'S OPINION OF PROBABLE COST - STADIUM DRIVE CONNECTION - Widening and Slip Ramp

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Widening of Tigue Road and Stadium Drive				
	Full Depth Pavement - 24' average x 8500'	SY	$60.00	22,700	$1,362,000
	Pavement markings	LF	$1.00	34,000	$34,000
	Earthwork (assumes avg of 20 sf per lf of widening)	CY	$20.00	6,300	$126,000
	Utility Pole Relocation (assumes 1/2 of poles)	EA	$15,000.00	15	$225,000
	Drainage Structures (assume structure every 300')	EA	$2,500.00	26	$65,000
	Pipe (assume 18" Pipe 1/4 length)	LF	$50.00	2,000	$100,000
	Signing (assume 9 SF every 100')	SF	$45.00	765	$34,425
	SLIP RAMP FROM 202				
	Full Depth Pavement - (32' average x1200')	SY	$60.00	4,300	$258,000
	Pavement markings	LF	$1.00	4,800	$4,800
	Earthwork (assumes avg of 300 sf per lf of ramp)	CY	$20.00	15,100	$302,000
	Guide Rail (assumes required both sides 1/2 length)	LF	$20.00	1,200	$24,000
	Drainage Structures (assume structure every 300')	EA	$2,500.00	4	$10,000
	Pipe (assume 18" Pipe 1/4 length)	LF	$50.00	400	$20,000
	Signing	SF	$45.00	50	$2,250
	Signalization	LS	$250,000.00	1	$250,000

	SUBTOTAL		$2,817,475
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$140,874
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$140,874
	CONSTRUCTION SUBTOTAL		**$3,099,223**
	CONTINGENCY	20%	$619,845
	CONSTRUCTION AND CONTINGENCIES		**$3,719,067**
	ENGINEERING	15%	$557,860
	NPDES/SWM	2%	$74,381
	CONTRACT MGMT/INSPECTION	5%	$185,953
	SURVEY	1%	$37,191
	TOTAL		**$4,574,452**

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ENGINEERING & CONSULTING SERVICES
1918 TO 2008: CELEBRATING NINETY YEARS OF ENGINEERING EXCELLENCE

JOB 13-03030T ROSEDALE AVE CORRIDOR STUDY
SHEET NO. 1 OF 1
CALCULATED BY JFC DATE 11/19/2013
CHECKED BY KMN DATE 11/19/2013
SCALE N.T.S.

ENGINEER'S OPINION OF PROBABLE COST - One Way Pairs

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Signage (assume 30 sf per intersection)	SF	$45.00	510	$22,950
	Pavement Marking and eradication	LF	$1	21,300	$21,300

	SUBTOTAL		$44,250
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$2,213
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	50%	$22,125
	CONSTRUCTION SUBTOTAL		**$68,588**
MPT ASSUMES EXTENSIVE	CONTINGENCY	20%	$13,718
PUBLIC NOTIFICATION PERIOD PRE			
INSTALLATION	**CONSTRUCTION AND CONTINGENCIES**		**$82,305**
	ENGINEERING	15%	$12,346
	NPDES/SWM	0%	$0
	CONTRACT MGMT/INSPECTION	0%	$0.00
	SURVEY	0%	$0.00
	TOTAL		**$94,651**

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GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
1918 TO 2008: CELEBRATING NINETY YEARS OF ENGINEERING EXCELLENCE

JOB 13-03030T ROSEDALE AVE CORRIDOR STUDY
SHEET NO. 1 OF 1
CALCULATED BY JFC DATE 11/19/2013
CHECKED BY KMN DATE 11/19/2013
SCALE N.T.S.

ENGINEER'S OPINION OF PROBABLE COST - Rosedale Extension to Bolmar

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Full Depth Pavement - 24' average x 700'	SY	$60	1,870	$112,200
	Curb	LF	$30	1,400	$42,000
	Sidewalk (1 side, full length)	SY	$65	700	$45,500
	Pavement markings	LF	$1	1,400	$1,400
	Railroad Crossing	LS	$60,000	1	$60,000
	Drainage Structures (assume structure every 150')	EA	$2,500	4	$10,000
	Pipe (assume 18" Pipe 1/2 length)	LF	$50	350	$17,500
	ADA Accessible Ramps	EA	$5,000	8	$40,000
	Signing (assume 9 SF every 100')	SF	$45.00	63	$2,835

	SUBTOTAL		$331,435
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$16,572
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$16,572
	CONSTRUCTION SUBTOTAL		**$364,579**
	CONTINGENCY	20%	$72,916
	CONSTRUCTION AND CONTINGENCIES		**$437,494**
	ENGINEERING	15%	$65,624
	NPDES/SWM	5%	$21,875
	CONTRACT MGMT/INSPECTION	5%	$21,875
	SURVEY	1%	$4,374.94
	TOTAL		**$551,243**

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ENGINEER'S OPINION OF PROBABLE COST - Rosedale Extension, Bolmar to Westtown

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Full Depth Pavement - 24' average x 1200'	SY	$60	1,870	$112,200
	Curb (1 side, full length)	LF	$30	1,200	$36,000
	Sidewalk (1 side, full length)	SY	$65	670	$43,550
	Pavement markings	LF	$1	3,600	$3,600
	Drainage Structures (assume structure every 150')	EA	$2,500	8	$20,000
	Pipe (assume 18" Pipe 1/2 length)	LF	$50	600	$30,000
	ADA Accessible Ramps	EA	$5,000	10	$50,000
	Stream bank protection/remediation	LS	$75,000	1	$75,000
	Signing (assume 9 SF every 100')	SF	$45.00	108	$4,860
	Signalization	LS	$250,000.00	1	$250,000

	SUBTOTAL		$625,210
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$31,261
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$31,261
	CONSTRUCTION SUBTOTAL		**$687,731**
	CONTINGENCY	20%	$137,546
	CONSTRUCTION AND CONTINGENCIES		**$825,277**
	ENGINEERING	15%	$123,792
	NPDES/SWM	5%	$41,264
	CONTRACT MGMT/INSPECTION	5%	$41,264
	SURVEY	1%	$8,253
	TOTAL		**$1,039,849**

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ENGINEER'S OPINION OF PROBABLE COST - Rosedale Ped Crossing Rapid Rectangular Flashing Beacons

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Rectangular Rapid Flashing Beacons	EA	$20,000	2	$40,000
	(complete installation with solar and signs)				

	SUBTOTAL		$40,000
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$2,000
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$2,000
	CONSTRUCTION SUBTOTAL		**$44,000**
	CONTINGENCY	10%	$4,400
	CONSTRUCTION AND CONTINGENCIES		**$48,400**
Engineering assumes exist permit plan available	ENGINEERING	10%	$4,840
	NPDES/SWM	0%	$0
	CONTRACT MGMT/INSPECTION	5%	$2,420
	SURVEY	0%	$0
	TOTAL		**$55,660**

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ENGINEER'S OPINION OF PROBABLE COST - Rosedale Ped Crossing, New Traffic Signals at Both Crossings

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Proposed new Traffic Signalization (per crossing)	EA	$100,000	2	$200,000
	(per crossing cost includes signing and striping)				

	SUBTOTAL		$200,000
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$10,000
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$10,000
	CONSTRUCTION SUBTOTAL		**$220,000**
	CONTINGENCY	5%	$11,000
	CONSTRUCTION AND CONTINGENCIES		**$231,000**
	ENGINEERING	10%	$23,100
	NPDES/SWM	0%	$0
	CONTRACT MGMT/INSPECTION	5%	$11,550
	SURVEY	0%	$0
	TOTAL		**$265,650**

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ENGINEER'S OPINION OF PROBABLE COST - Rosedale Pedestrian Overpass

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Proposed Pedestrian Overpass	SF	$90	4,000	$360,000
	(Assumes 8' width x (100' span + 400' Ramps))				
	Sidewalk (Assume 12' x 20' landing)	SY	$65	26	$1,690

	SUBTOTAL		$361,690
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$18,085
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	7%	$25,318
	CONSTRUCTION SUBTOTAL		**$405,093**
	CONTINGENCY	5%	$20,255
	CONSTRUCTION AND CONTINGENCIES		**$425,347**
	ENGINEERING	15%	$63,802
	NPDES/SWM	0%	$0
	CONTRACT MGMT/INSPECTION	5%	$21,267
	SURVEY	3%	$12,760
	TOTAL		**$523,177**

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ENGINEER'S OPINION OF PROBABLE COST - Rosedale & High Pedestrian Overpass

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Proposed Pedestrian Overpass	SF	$90	9,600	$864,000
	(Assumes 8' width x (200' span + 1000' Ramps))				
	Sidewalk (Assume 12' x 20' landing)	SY	$65	26	$1,690

	SUBTOTAL		$865,690
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$43,285
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	7%	$60,598
	CONSTRUCTION SUBTOTAL		**$969,573**
	CONTINGENCY	20%	$193,915
	CONSTRUCTION AND CONTINGENCIES		**$1,163,487**
	ENGINEERING	15%	$174,523
	NPDES/SWM	0%	$0
	CONTRACT MGMT/INSPECTION	5%	$58,174
	SURVEY	3%	$34,905
	TOTAL		**$1,431,089**

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ENGINEER'S OPINION OF PROBABLE COST - Pleasant Grove Widening, New St to Wilmington Pike

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Full Depth Pavement (30' average x 4300')	SY	$60	14,350	$861,000
	Curb at driveway returns	LF	$30	300	$9,000
	Signalization of Wilmington and W Pleasant Grove	LS	$250,000	1	$250,000
	Pavement markings	LF	$1	17,200	$17,200
	Utility Pole Relocation (Approx 1/3 of poles)	EA	$15,000	10	$150,000
	Drainage Structures (assume structure every 300')	EA	$2,500	15	$37,500
	Pipe (assume 18" Pipe 1/4 length)	LF	$50	1,100	$55,000
	Signing (assume 9 SF every 100')	SF	$45.00	390	$17,550

	SUBTOTAL		$1,397,250
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$69,863
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$69,863
	CONSTRUCTION SUBTOTAL		**$1,536,975**
	CONTINGENCY	5%	$76,849
	CONSTRUCTION AND CONTINGENCIES		**$1,613,824**
	ENGINEERING	15%	$242,074
	NPDES/SWM	4%	$64,553
	CONTRACT MGMT/INSPECTION	5%	$80,691
	SURVEY	4%	$64,553
	TOTAL		**$2,065,694**

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ENGINEER'S OPINION OF PROBABLE COST - Pleasant Grove Extension - New Street to S. Birmingham Rd

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Full Depth Pavement (30' average x 2900')	SY	$60	9,700	$582,000
	Pavement markings	LF	$1	11,600	$11,600
	Utility Pole Relocation (Approx 1/3 of poles)	EA	$15,000	7	$105,000
	Drainage Structures (assume structure every 300')	EA	$2,500	12	$30,000
	Pipe (assume 18" Pipe 1/4 length)	LF	$50	725	$36,250
	Roadway Structure (30'x60')	SF	$175	1,800	$315,000
	Signing (assume 9 SF every 100')	SF	$45.00	261	$11,745

	SUBTOTAL		$1,091,595
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$54,580
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$54,580
	CONSTRUCTION SUBTOTAL		**$1,200,755**
	CONTINGENCY	5%	$60,038
	CONSTRUCTION AND CONTINGENCIES		**$1,260,792**
	ENGINEERING	15%	$189,119
	NPDES/SWM	4%	$50,432
	CONTRACT MGMT/INSPECTION	5%	$63,040
	SURVEY	4%	$50,432
	TOTAL		**$1,613,814**

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ENGINEER'S OPINION OF PROBABLE COST - West Street Road Widening Creek Road to Wilmington Pike

ITEM NUMBER	DESCRIPTION	UNITS	UNIT COST	QUANTITY	TOTAL PRICE
	Full Depth Pavement (11' average x13,600')	SY	$60	16,650	$999,000
	Pavement markings	LF	$1	54,400	$54,400
	Utility Pole Relocation (Approx 1/2 of poles)	EA	$15,000	45	$675,000
	Drainage Structures (assume structure every 300')	EA	$2,500	45	$112,500
	Pipe (assume 18" Pipe 1/4 length)	LF	$50	3,400	$170,000
	Replace Mastarms	SF	$30,000	10	$300,000
	Signing (assume 9 SF every 100')	SF	$45.00	1,225	$55,125

	SUBTOTAL		$2,366,025
COMMENTS:		**%**	
ESTIMATE DOES NOT INCLUDE	MOBILIZATION	5%	$118,301
RIGHT-0F-WAY COSTS	MAINTENANCE OF TRAFFIC	5%	$118,301
	CONSTRUCTION SUBTOTAL		**$2,602,628**
	CONTINGENCY	5%	$130,131
	CONSTRUCTION AND CONTINGENCIES		**$2,732,759**
	ENGINEERING	15%	$409,914
	NPDES/SWM	4%	$109,310
	CONTRACT MGMT/INSPECTION	5%	$136,638
	SURVEY	4%	$109,310
	TOTAL		**$3,497,931**

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