PITG Gaming, LLC

THE MAJESTIC STAR CASINO, PITTSBURGH TRANSPORTATION AND PARKING ASSESSMENT

FINAL REPORT

DECEMBER 2005 - REV OCT 2006

IBI GROUP

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1. EXECUTIVE SUMMARY

This transportation and parking assessment is intended to investigate the transportation and parking requirements of a proposed casino development on a site in the North Shore of Pittsburgh in support of an application to the Pennsylvania Gaming Control Board for a license to operate a casino in Pittsburgh. The site is located on North Shore Drive, east of the West End Bridge, and west of the Carnegie Science Center.

The casino license would permit operation of a 3,000 slot casino facility, which would be permitted to expand up to 5,000 slots after a minimum of six months of operation. This transportation analysis has considered the operation of the full site build-out with 5,000 slots as requested by City of Pittsburgh transportation staff.

The site is very well situated with respect to major highways, which provide high capacity access directly to the surface streets in the area immediately surrounding the site, and well situated for public transit service and access from the Ohio River. In addition, existing traffic volumes on adjacent streets are lowest during the times when the proposed casino is expected to be at peak operation.

The current street connections between Allegheny Avenue, Reedsdale Street and North Shore Drive (east of the site) would need some modifications due to the existing one-way configuration of adjacent streets, and the physical barriers created by the Ohio River and existing freeway and ramp structures.

With a number of relatively minor changes to the existing road network, local access to the site could be improved significantly and will be able to support the traffic generated by the proposed development. A variety of local transportation improvements (subject to approvals from City and PennDOT officials) are recommended to improve vehicular access into the casino site, including:

1. Traffic signal installation and reconfiguration of Reedsdale Street/North Shore Drive intersection;

2. Traffic signal installation and reconfiguration of Reedsdale Street/North Point Drive/Lighthill Street intersection; and

3. Traffic Signal installation and minor intersection reconfiguration at proposed Porte Cochere entrance on North Shore Drive with provision for westbound traffic on North Shore Drive to the proposed porte cochere.

The casino developer is committed to funding the above road improvements to allow construction prior to the casino opening. Further transportation infrastructure improvements such as a direct ramp from the West End Bridge present an opportunity to provide direct access for customers to the parking decks to further mitigate the transportation impacts of the casino, but will require more detailed study to determine feasibility. Issues for more detailed study include roadway geometrics, the final location of the casino parking structures, possible need for additional land acquisition, regulatory approvals, and construction cost.

In the proposed site plan, the primary casino parking entrance will be on Reedsdale Street west of North Shore Drive, with the main ceremonial entrance located on North Shore Drive. Service and truck access will also be located at the west end of the site accessed from Reedsdale Street.

A minimum of 5,100 parking spaces for patrons will be provided in structured parking on the site. The proposed parking structure presents an opportunity to supplement the existing parking supply for events at adjacent properties such as Heinz Field. Parking for employees is proposed at an off-site location within a ten minute drive of the casino that will be linked to the site by a shuttle bus. For the initial Phase 1 operation, approximately 500 off-site parking spaces are proposed for employees.

The Three Rivers Heritage Trail currently provides pedestrian and bicycle travel along the North Shore from the Carnegie Science Centre to the east past the stadium areas. At present, the roadways and land uses immediately to the north and west of the site are not very pedestrian friendly. The plan for the North Shore Casino site will include an extension of the trail system through the site and a considerable improvement to the pedestrian level of service along the property frontages that have amenable uses.

2. INTRODUCTION

This transportation and parking assessment is intended to investigate the transportation and parking requirements of a proposed casino development on a site in the North Shore of Pittsburgh in support of an application to the Pennsylvania Gaming Control Board for a license to operate a casino in Pittsburgh.

The casino license would permit operation of a 3,000 slot casino facility, which would be permitted to expand up to 5,000 slots after a minimum of six months of operation. This transportation analysis has considered the operation of the full site build-out with 5,000 slots as requested by City of Pittsburgh transportation staff.

2.1 Response to Preliminary PGCB Review

During the course of its review of casino license applications, the Pennsylvania Gaming Control Board (PGCB) entered into an agreement with the Pennsylvania Department of Transportation (PennDOT) to utilize two of its engineering consultants to conduct reviews of the traffic impact studies submitted by all applicants. Initial comments were provided to the PGCB in the letter of September 7, 2006 from McCormick Taylor to PennDOT. This report is a consolidation of the original IBI report submitted to the PGCB in December, 2005 and revisions made to address the initial comments made in the September 7, 2006 letter.

2.2 Study Scope

The objectives of this study were to:

- Determine appropriate trip generation rates and apply during weekday and weekend peak hours;
- Investigate and describe on a functional level any physical works required on adjacent streets to facilitate access, such as signalization and widening for additional lanes;
- Provide analysis of parking requirements and layouts; and
- Comment on the ability of the transportation network to accommodate a 5,000 slot Casino at the North Shore site.

The following report describes the above assessment. In addition, a proposed scope of work for the transportation and parking impact studies for casino gaming in Pittsburgh was produced by the City of Pittsburgh and issued in September 2005. The assessment detailed in this report was carried out in conformance with the City's scope of work. As noted above, changes to the scope of this report were made to address comments made in the letter of September 7, 2006 from McCormick Taylor to PennDOT.

3. PRELIMINARY REVIEW OF ALTERNATIVE SITES

Prior to selecting the proposed site, an initial review of the transportation related services was undertaken to determine the relative merits of locating the casino site on the North Shore, or at alternative locations within the City. Other locations considered included the downtown area, the Station Square area and an alternative North Shore location. This high level assessment included the following factors:

- Access to the site and the area road network;
- Transit and water travel access;
- Pedestrian facilities and access; and
- Potential parking provisions.

Provided below is a summary of this high level assessment.

Road Access

The proposed North Shore site is located in close proximity to I-279, State Route 28, State Route 65 and the West End Bridge. The arterial road network in the vicinity of the site has been developed with major generators such as Heinz Field and PNC Park in mind. As such, the arterial road facilities and the access to and from the freeway facilities are, for the most part, underutilized during the a.m. and p.m. weekday peak travel periods, and during the weekends.

Alternative site locations in the downtown and Station Square areas are impacted by weekday peak traffic periods, and casino traffic traveling to and from those locations would require a greater degree of arterial roadway travel.

Transit and Water Travel

The North Shore site will have good access to transit with the planned extension of the Light Rail Transit (LRT) system to the Reedsdale Street/Allegheny Avenue intersection. In addition, the river frontage is amenable to providing a mooring area for a water taxi facility, ferry services or personal watercraft docking.

The alternative site locations within the North Shore area and the downtown area have comparable transit access via the proposed LRT extension and existing surface routes, respectively. Although transit services are provided at the east end of the Station Street area, the west end of the site is a considerable walking distance from the transit station.

The Station Street area has some access to the river system via existing ferry services; however, none of the alternative sites considered have the degree of direct access to the river system that the North Shore site enjoys.

Pedestrian Access

The Three Rivers Heritage Trail currently provides pedestrian and bicycle travel along the North Shore from the Carnegie Science Center east past the stadium areas. There are excellent opportunities to upgrade the existing trail system through the North Shore site. Those choosing to access the site and its riverfront amenities will be able to do so with limited conflict with arterial road traffic.

The other sites considered do not directly link to the Three Rivers Heritage Trail or other major pedestrian/trail systems. In addition, the pedestrian environment provided adjacent to the alternative North Shore site, Station Street and downtown locations, is poor and consists of major arterial roadways with a primary role of moving vehicular traffic.

Parking

The North Shore site has the land area to provide at least 5,000 parking spaces in an efficient and aesthetically pleasing manner. In addition to the on-site parking facilities, there are a number of large existing and future parking facilities that may be accessible to staff and other off-site parking demands, located adjacent to Heinz Field.

A number of the other alternative sites, specifically the downtown and Station Square sites, could be constrained in terms of on-site parking provisions and readily available adjacent parking opportunities.

Summary

Of all the possible locations, the North Shore site west of North Shore Drive provides the best overall potential for accommodating a significant amount of traffic and parking demand without undue impacts on the operation of adjacent streets or significant adverse impacts on neighboring areas.

4. SITE CONTEXT

4.1 Existing Uses

At present, the subject site is largely vacant and is used for off-site parking for the nearby Allegheny General Hospital. This activity currently generates commuter traffic and shuttle bus activity in the morning and afternoon peak periods, corresponding to the shift change times at the hospital, but traffic movements to and from the site are low during other times of the day. Traffic movement to and from the site is essentially non-existent during evenings and weekends, unless parking on the site is used for an event in the North Shore area.

There are several significant land uses in the immediate vicinity of the subject site, including the Carnegie Science Center immediately to the east on North Shore Drive, Heinz Field east of Allegheny Avenue, and PNC Park on West General Robinson Street east of Mazeroski Way.

4.2 Proposed Development

The proposed casino development will include an ultimate capacity for 5,000 slot machines which, along with the associated public and service areas, will result in a building area of approximately 750,000 square feet. The development is to be undertaken in phases, with the initial development in Phase 1 providing 3,000 slots and associated parking. The Phase 2 expansion will comprise the additional 2,000 slots and increased parking provision.

The site will provide in the order of 3,100 parking spaces for Phase 1, a valet parking service and porte cochere for drop-off and pick-up, off-site parking for employees serviced by shuttle buses, and will provide for arrivals by buses. Additional parking to provide a minimum of 5,100 on-site parking spaces will be provided for the Phase 2 development. Site expansion will allow provision of additional parking spaces if required. The site is also able to provide for bus, pedestrian and cycling access, and access for people with special needs.

4.3 Study Area

The highest level of traffic activity is expected to be in the evenings and on weekends, but the facility will be open 24 hours per day and will therefore also be used during normal business hours. However, the busiest periods for the casino are not expected to coincide with the typical peak hours for commuter traffic. The transportation analysis has therefore been limited to immediate vicinity of the casino, and to the access routes to and from the state and interstate highway network.

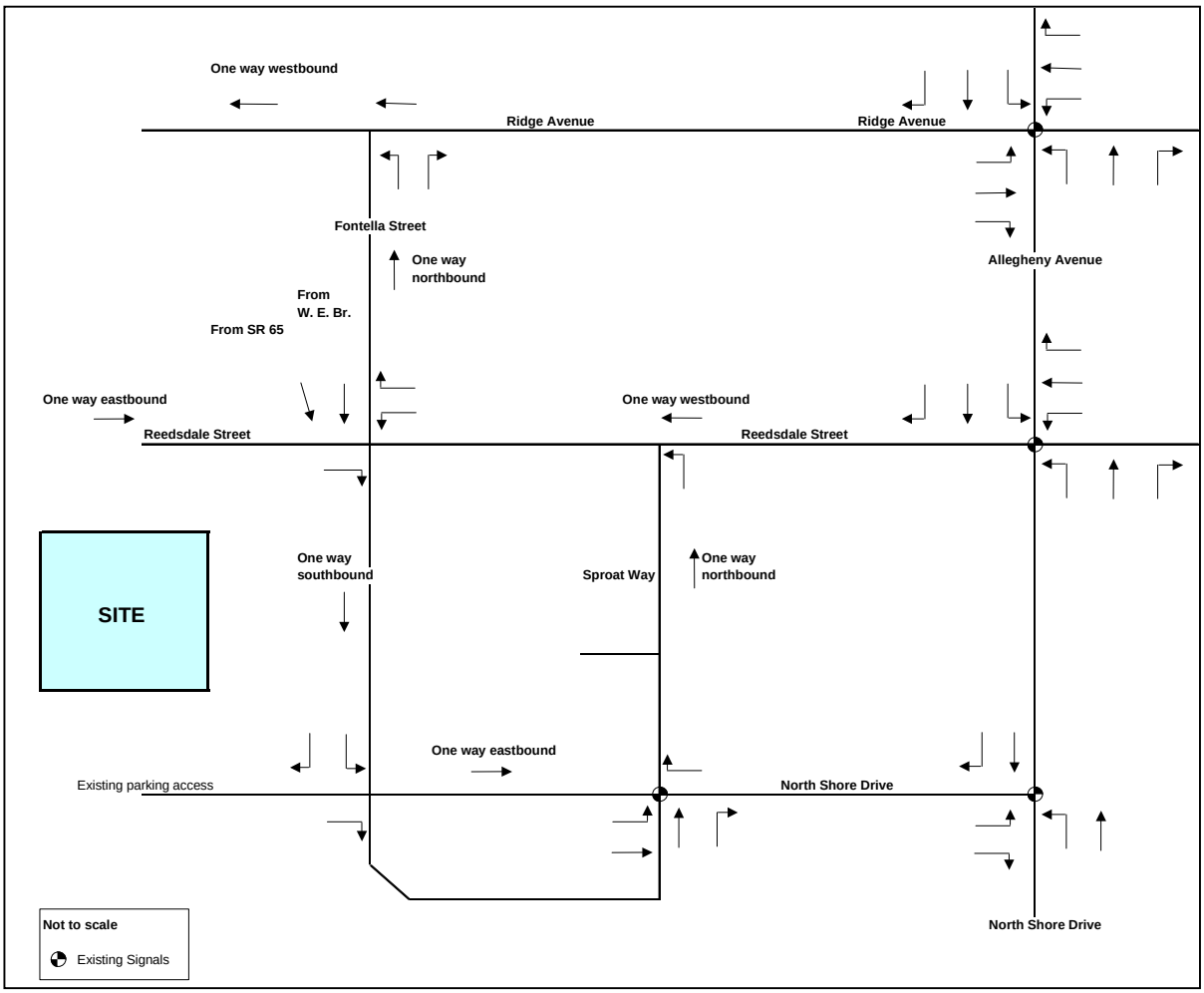
The study intersections and their existing traffic control are summarized in **Exhibit 4-1** below.

Exhibit 4-1 – Intersection Control

Intersection	Control Type
Reedsdale Street and North Shore Drive	Unsignalized ramp and street junction
Reedsdale Street and Allegheny Avenue	Signalized
North Shore Drive and Allegheny Avenue	Signalized
North Shore Drive and Sproat Way	Pedestrian signal
Reedsdale Street and Sproat Way	Stop control for Sproat Way
Ridge Avenue and Allegheny Avenue	Signalized
Ridge Avenue and Fontella Street	Unsignalized
West End Bridge and PA Route 65	Signalized
Western Avenue and Fulton Street	Signalized
Ridge Avenue and PA Route 65 interchange	Unsignalized

The existing street network immediately adjacent to the subject site is shown in Exhibit 4-2 below, indicating which street sections are currently one-way. The intersections of West End Bridge/PA Route 65, Western Avenue/Fulton Street and Ridge Avenue PA Route 65 interchange are not shown on Exhibit 4-2 but have been included in the analysis.

Exhibit 4-2 – Existing Street Network Configuration



4.4 Horizon Year and Analysis Periods

A base year of 2005 was selected for the analysis. A future horizon of 2008 was selected to reflect the possible casino opening at the request of City Transportation Planning staff. While it is expected that only the Phase 1 development would be operational at that time, it has been assumed for the purposes of the traffic and parking analysis in this report that the full Phase 2 development would be operational in 2008. This approach provides a conservative "worst-case" assessment. In addition, analysis was carried out for future conditions in 2018, 10 years after the assumed full build-out of the casino.

The weekday evening peak hour of the adjacent road network, and a Saturday casino peak hour were established as the key analysis periods to represent the worst-case traffic scenarios. The weekday evening peak period reflects moderate trip generation from the site in combination with the 4:30-5:30 p.m. traffic peaks along the adjacent roadways, and the Saturday peak reflects the highest expected arrival peak based on attendance records at other casino operations.

Traffic in the area is also significant at 7:30-8:30 a.m., however during that period, the trip generation for the casino is expected to be very low. Notwithstanding, where alterations to the

existing street network are proposed, analysis has been carried out to ensure the existing commuter traffic demand on adjacent streets can be accommodated in the future.

Due to the nature of adjacent land uses, in particular Heinz Field, Sunday afternoon traffic conditions after a Steelers home game were also considered.

In summary, this report analyzes future traffic conditions in 2008 with and without a 5,000 slot casino for the following time periods:

- Weekday a.m. street peak hour;
- Weekday p.m. street peak hour;
- Saturday evening casino peak hour; and
- Sunday Heinz Field event peak hour.

5. DATA COLLECTION

5.1 Traffic Volumes and Collision Data

Traffic count data at adjacent intersections was obtained from manual turning counts conducted in November 2005 and October 2006. Automatic count data (ATR counts) along North Shore Drive, Reedsdale Street and Allegheny Avenue were undertaken in November and December 2005. Based on our experience and through a review of the monthly variation charts in the 2004 Pennsylvania Traffic Data document, it is considered that these counts are representative of an "average" time of month, and therefore, would not require an adjustment factor. The traffic count data is summarized in **Appendix A** of this report. These volumes were compared to the traffic volumes contained in the study for the North Shore Intermodal Center (ITC) on Reedsdale Street, prepared by DMJM+HARRIS on May 15, 2003. The ITC report also contained detailed data on traffic conditions during a Steelers home game at Heinz Field.

Collision data for adjacent intersections has been requested from the City, but had not been received at the time of writing this report.

5.2 Field Studies

IBI Group staff conducted field studies including observations along the frontage of the site and at adjacent intersections, to review the following:

- General traffic operations at the study area intersections;
- Sight distance provisions at the existing and potential driveway accesses; and
- Operational concerns.

Site visits were made on January 19, 2005 and on February 9, 2005 to review intersection configurations and traffic operations, and to conduct a preliminary sight line review. The site visits included a review of intersection operations during the morning and afternoon peak hours of traffic.

6. EXISTING TRANSPORTATION ACCESS AND OPERATIONS

6.1 Area Road Network

The site is located in close proximity to I-279 (including the HOV facility), State Route 28, State Route 65, the West End Bridge, and I-376 via the Fort Duquesne Bridge. The arterial road network in the vicinity of the site has been developed with major generators such as Heinz Field and PNC Park in mind. As such, the arterial road facilities and the accesses to and from the freeway facilities are, for the most part, underutilized during the a.m. and p.m. weekday peak travel periods, and during the weekends. Exceptions to this are Heinz Field or other area events where significant congestion and queuing occurs in the vicinity of the stadiums for approximately 1-2 hours before and after the event.

A key existing constraint of the subject site is that Reedsdale Street and North Shore Drive (along the frontage of the site) are currently one-way eastbound streets. In addition, there are currently four lanes on North Shore Drive adjacent to the site, which are fed by Reedsdale Street, the West End Bridge and SR 65.

The photos below show (left) the sight distance for eastbound traffic and southbound traffic along the site's frontage on Reedsdale Street and North Shore Drive, and (right) westbound Reedsdale Street approaching Sproat Way with the North Shore Drive intersection in the background.

6.1.1 FREEWAY/ARTERIAL ROAD ACCESS

Inbound access to the site is provided via the following routes:

- The West End Bridge, SR 65 and Reedsdale Street connect directly to North Shore Drive;
- I-279 south, I-279 north (including the HOV facility) and the I-376 via the Fort Duquesne Bridge connect directly to westbound Reedsdale Street. Reedsdale Street provides access to Allegheny Avenue and North Shore Drive.

Both these major inbound routes appeared to have residual capacity during the a.m. and p.m. commuter peak and more so during the anticipated casino peak traffic generation times (Friday and Saturday evening).

Outbound egress from the site is provided via the following routes:

- The West End Bridge and SR 65 are accessed via northbound Fontella Street or Allegheny Avenue to westbound Ridge Avenue. The West End Bridge also provides access to Route 19, which links to I-279 South;

- I-279 South and the Fort Duquesne Bridge are accessed via Allegheny Avenue to eastbound Ridge Avenue. The Fort Duquesne Bridge provides access to I-376; and

- I-279 North is accessed via a ramp on eastbound General Robinson Street approximately ½ mile east of the site. Access to the I-279 HOV lanes is provided from General Robinson Street approximately ¼ mile east of the site.

These outbound routes appeared to have residual capacity during the a.m. and p.m. commuter peak and more so during the anticipated casino peak traffic generation time.

Based on our preliminary assessment of the freeway and arterial road access, the provision of "wayfinding" guide signage and tourist-oriented destination signage (TODs) for the proposed casino would be relatively straightforward.

6.1.2 EXISTING LOCAL ACCESS

Inbound Access

Under existing conditions, localized access to the site could be provided via eastbound Reedsdale Street and North Shore Drive. At present the connections between Allegheny Avenue, Reedsdale Westbound and North Shore Drive (east of the site) are poor. Provided below are the access issues that need to be addressed by a road improvement plan:

Reedsdale Street Westbound – connects to North Shore Drive via a single, stop-controlled left turn lane. Without modifications to the intersection, drivers inbound to the casino must cross four lanes of southbound traffic on North Shore Drive to enter the site access.

Allegheny Avenue – inbound drivers can use Allegheny Avenue to connect to Reedsdale Street or North Shore Drive, which takes westbound drivers to northbound Sproat Way, with no direct access to the subject site. All access from the east must use westbound Reedsdale Street.

Merge Activity - Ramps from West End Bridge and SR 65 to North Shore Drive feed into the intersection of Reedsdale Street and North Shore Drive. Inbound drivers on the West End Bridge must merge across three lanes on North Shore Drive to access the site. Inbound drivers from SR 65 must merge across two lanes on North Shore Drive to access the site. Without modifications to the intersection, both of these merge movements to the site are problematic as only 300 feet of road length is available along the site frontage on North Shore Drive.

Access to West end of Site - Beaver Avenue/Reedsdale Street provides the only access to the west end of the site. West of the site, Beaver Avenue/Reedsdale Street is a one-way southbound/eastbound street, and due to the physical barriers of the Ohio River and State Route 65, is only accessible from the east at a point approximately ½ mile north of the site. Under existing conditions, access to the west of the site is difficult, but could be considered for service (truck) access.

Outbound Access

Under existing road conditions direct egress to the west is not possible. All vehicles exiting the site must travel on eastbound Reedsdale Street to North Shore Drive. However, during peak hours of casino operation, we do not see capacity issues with the current egress opportunities from the site.

Game Day at Heinz Field

Special traffic conditions occur on days when the Steelers have a home game, which take place approximately 10-12 days per year, predominantly on Sundays. During these occasions, vehicles arriving for the game cause significant congestion on North Shore Drive for up to two hours before the game start time. The ability to provide access to the proposed casino will be limited during these times. Of particular importance will be the ability to provide access to the casino without reducing the ability to accommodate the existing traffic demands caused by Steelers home games.

It is understood that there is very little traffic activity on Reedsdale Street and North Shore Drive while the game is in progress from 12 p.m., but that vehicles leave the parking lots after approximately 4 pm depending on the length of the game, and that considerable queuing occurs between 4 p.m. and 5 p.m. Overall, the impact of traffic generated by Steelers home games is expected to impact the casino between 10 a.m. and 12 p.m., and 4 p.m. to 6 p.m. on approximately ten Sundays per year.

6.2 Transit System

Planned extension of the Port Authority's Light Rail Transit (LRT) system will provide transit access via the North Shore Connector to the proposed Allegheny Avenue Station located at the Reedsdale Street/Allegheny Avenue intersection. The LRT station will be located above the intersection and will be located approximately 1,200 ft from the primary casino access.

From consultation with the Port Authority, it is understood that the earliest completion date for the North Shore Connector LRT is estimated at 2010. This date is outside the 2008 time horizon being considered in this study, and the use of the future LRT connection has not been explicitly taken into account in analysis of traffic conditions in 2008.

A proposal was made by the Port Authority for a 2,400 space parking structure and bus terminal at the proposed LRT station. The overall facility would be known as the North Shore Intermodal Transportation Center (ITC). It is expected that the North Shore ITC would not be constructed until the LRT station is completed, and the ITC has also not been included in the 2008 horizon year. However, from consultation with the Port Authority, it is understood that the parking structure is not currently being considered for implementation, as the Port Authority's focus is on a proposed parking structure at the proposed North Side Station east of Mazeroski Way.

Current public transit services in the study area include three routes provided by the Port Authority and one route operated by the Beaver County Transit Authority (BCTA). Only one of the existing Port Authority routes (Route 16A Ohio River Boulevard) provides service directly past the site. The other two Port Authority routes (16D Manchester and 501 Manchester-Wilkinsburg) provide access to Allegheny Avenue. The BCTA route provides service from Chippewa to downtown Pittsburgh, and travels from SR 65 to General Robinson Street. The routes generally provide service at headways of 30 minutes, although routes 16A and 16D provide 15 minute service during peak periods.

For Steelers home games at Heinz Field, the Port Authority provided 16 special bus routes in 2005, including 11 Steelers Suburban Routes and five Heinz Field Shuttles for fans parking in or near

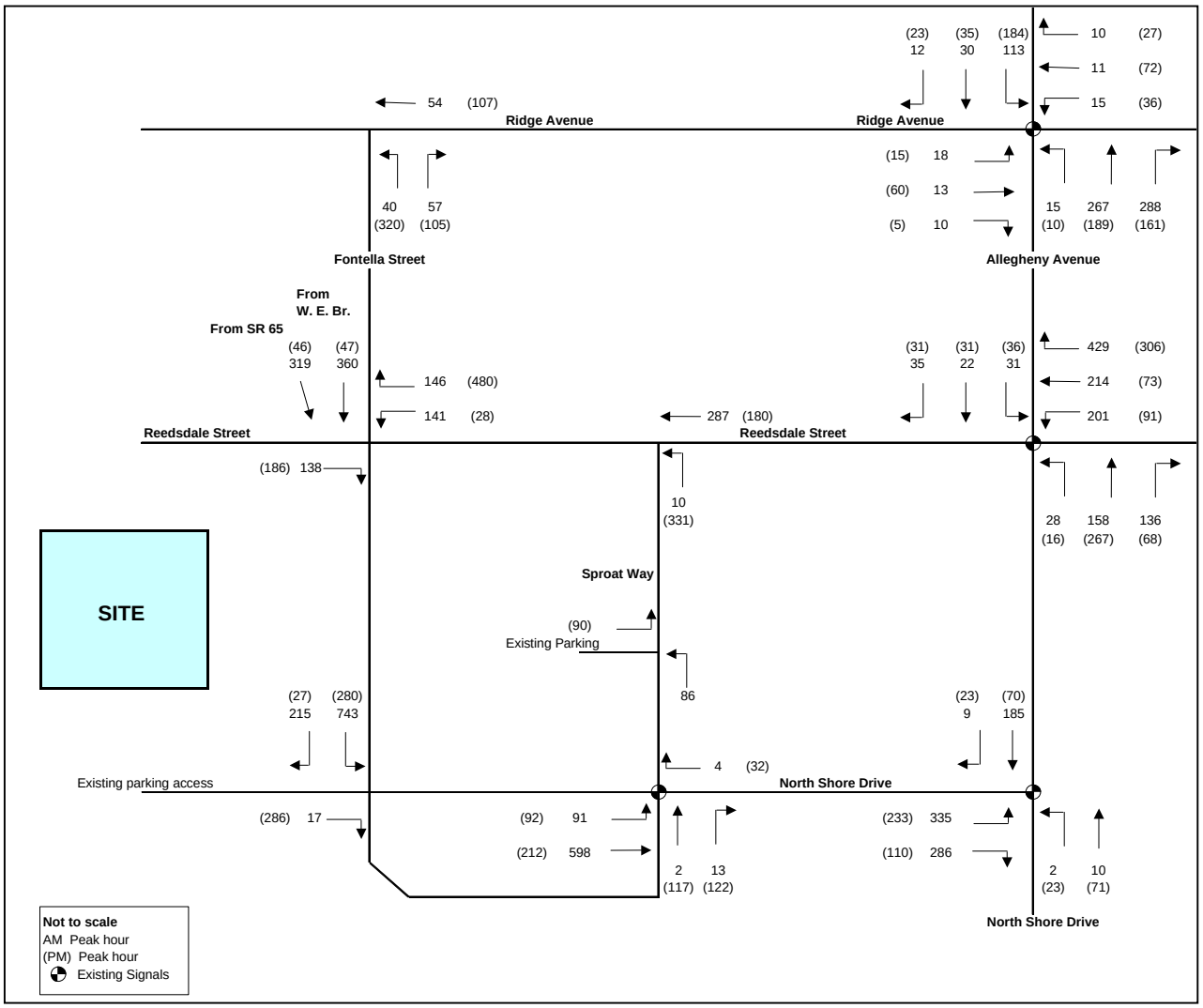
Downtown Pittsburgh. The BCTA also provides two “Steelers Express” routes to Heinz Field. A reduced number of suburban routes and shuttles are provided for Panthers Games.

The routes and frequencies could be modified to better service the casino, subject to discussion with the Port Authority and BCTA. Road improvements proposed to facilitate development of the casino would also provide opportunities for improved transit access to North Shore Drive in the vicinity of the proposed casino and the Carnegie Science Center.

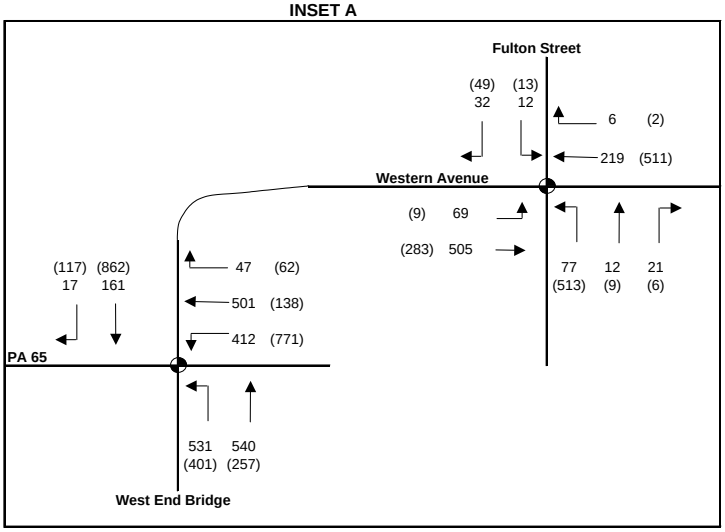
6.3 Existing Traffic Volumes

Included in Exhibit 6.1 is a summary of the existing (2005) traffic volumes based on the counts listed in Section 5 of this report.

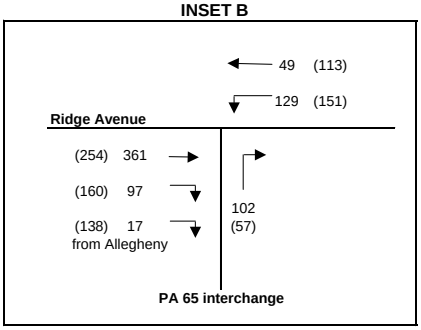
Exhibit 6-1 – Existing (2005) a.m. and p.m. Peak Traffic Volumes



INSET A



INSET B

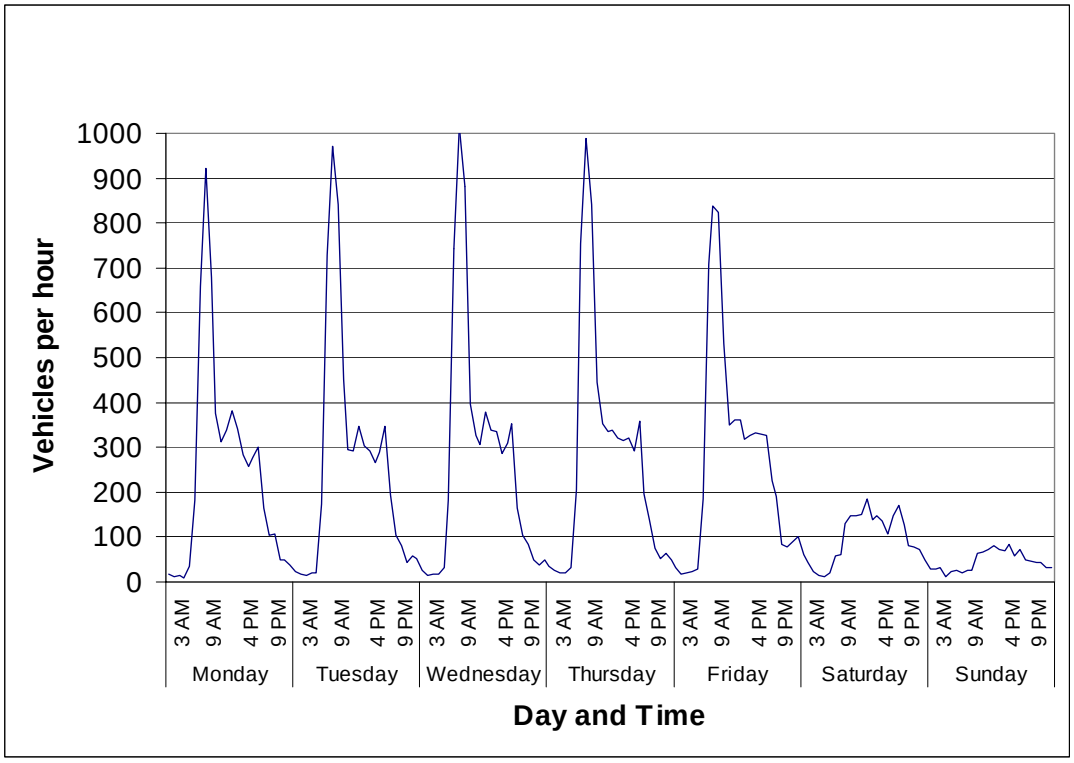


The traffic volumes indicate the study area experiences a very strong tidal traffic flow effect. In the a.m. peak hour, approximately 1,000 southbound vehicles pass the site on North Shore Drive, while in the p.m. peak hour, this volume is greatly reduced to approximately 300 vehicles per hour. The traffic volumes leaving the study area on Fontella Street and Allegheny Avenue to the north do not exhibit as much variation between the a.m. and p.m. commuter peak hours, with an increase of only 250 outbound vehicles from the a.m. to the p.m. peak hours. This indicates that the bulk of vehicles entering the study area in the morning appear to park east of Heinz Field and choose another route to leave the area in the evening.

The traffic count data also indicates that approximately 215 vehicles enter the subject site in the morning peak hour, and approximately 290 vehicles leave the subject site during the evening peak hour. These vehicles are related to the existing parking operation on the site and have been removed from the immediate road network for analysis of future casino traffic conditions.

Seven day automatic traffic recorder (ATR) counts were also conducted on selected streets in the study area in November and December 2005. The seven day traffic pattern on North Shore Drive outside the subject site is shown in **Exhibit 6-2** below.

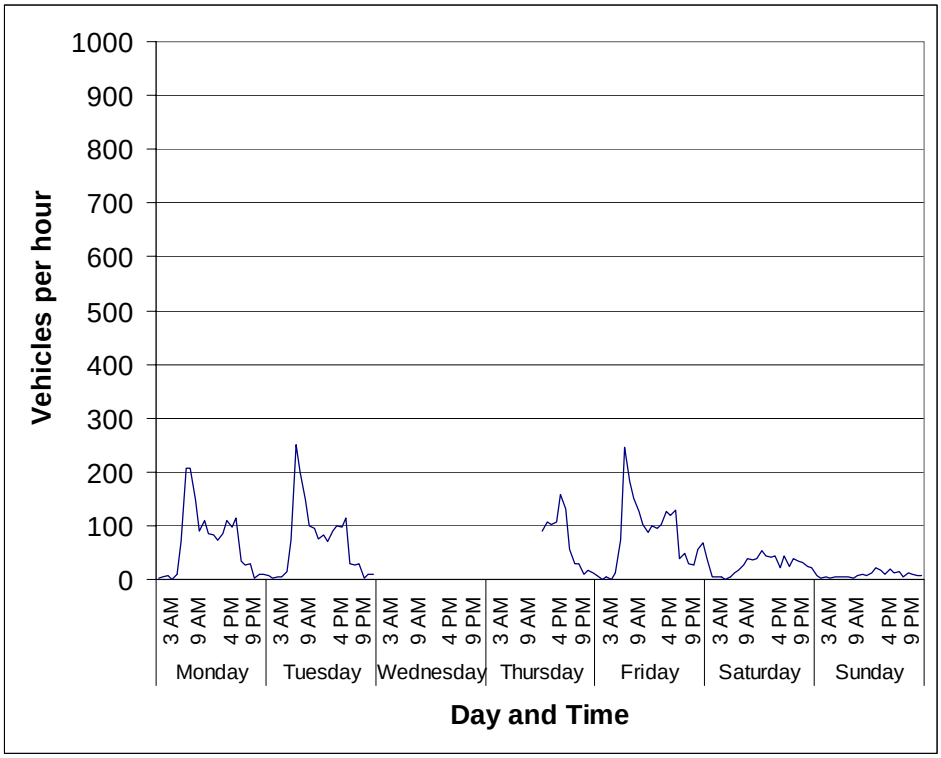
Exhibit 6-2 – Seven Day Traffic Pattern on North Shore Drive



The above exhibit clearly shows the existing sharp peak in traffic demand at approximately 8 a.m., followed by a relatively steady traffic demand of approximately 300-350 vehicles per hour until 5 p.m., after which traffic demand reduces to below 100 vehicles per hour from 7 p.m. to 5 a.m. On Saturday, traffic volumes on North Shore Drive reach a maximum of 200 vehicles per hour, and on Sunday the volume does not exceed 100 vehicles per hour.

Seven day traffic counts were also undertaken on Reedsdale Street between Allegheny Avenue and Fontella Street. Due to the need to avoid counting over the Thanksgiving period, and repeated public interference with the counting equipment, a full count record was not obtained for this location. However, the traffic pattern on Reedsdale Street east of the subject site is shown in **Exhibit 6-3** below.

Exhibit 6-3 – Seven Day Traffic Pattern on Reedsdale Street



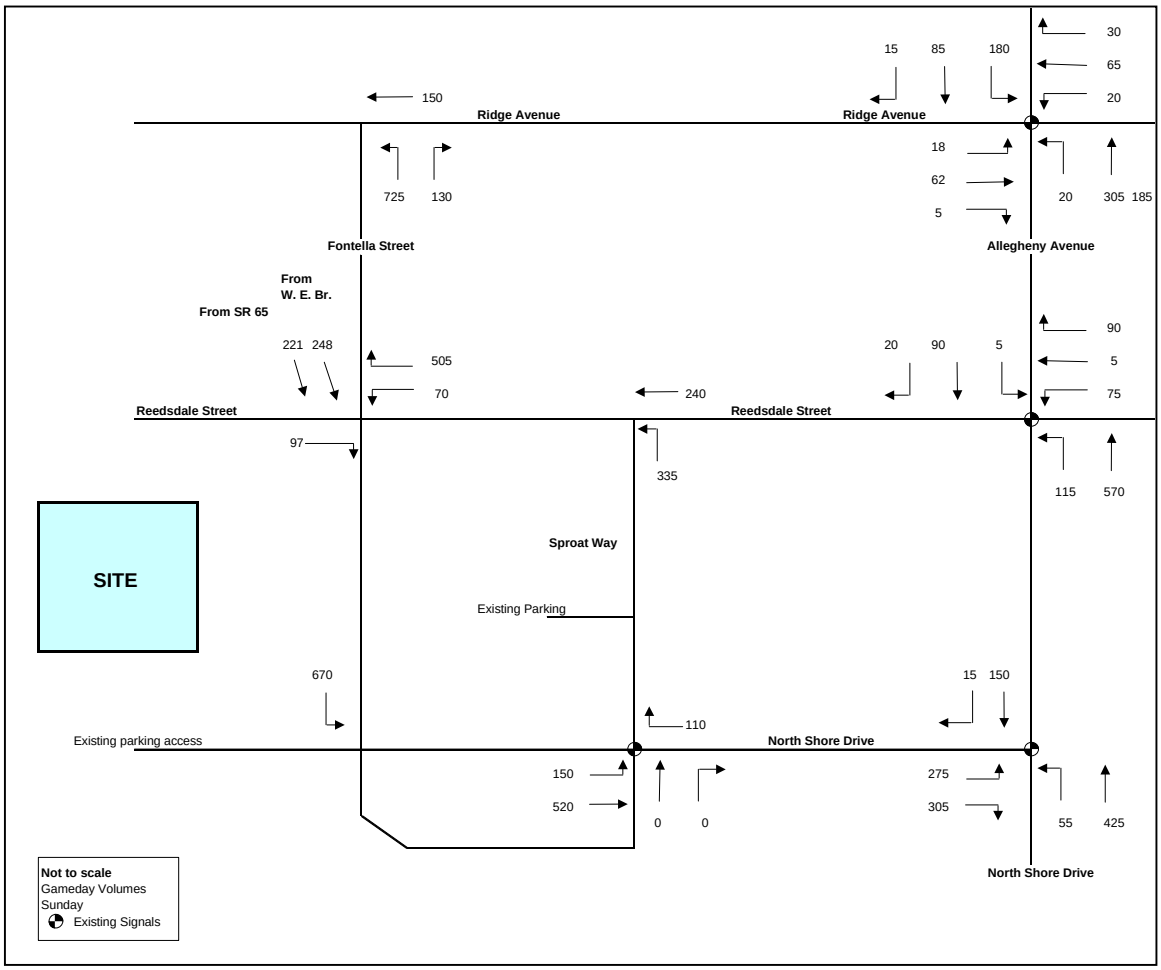
The above exhibit shows existing peaks in weekday traffic demand at approximately 8 a.m., followed by a relatively steady traffic demand of approximately 100 vehicles per hour until 5 p.m., after which traffic demand reduces to below 50 vehicles per hour from 7 p.m. to 5 a.m.. On Saturday and Sunday, traffic volumes on Reedsdale Street reach a maximum of 50 vehicles per hour.

Exhibits 6-2 and 6-3 above confirm that when the peak evening traffic demands occur for the proposed casino, the adjacent streets experience minimal existing traffic volumes.

6.3.1 EVENT PEAK TRAFFIC

Traffic volumes for a Steelers home game were obtained from the traffic assessment conducted for the proposed North Shore ITC, which contained traffic data for a 4 p.m. to 5 p.m. event peak hour. The event peak hour traffic volumes are shown below in **Exhibit 6-4**.

Exhibit 6-4 – Event Peak Hour Traffic Volumes



The volumes are generally lower than those experienced during weekday peak hours, but the congestion at parking and entrance areas and queue spillbacks from access points to the highway network reduce traffic capacity.

6.4 Existing Traffic Operations

Intersection capacity analysis was undertaken using the Highway Capacity Manual (HCM) methodology and in particular, the Synchro 6.0 software package. The analysis reflects 2005 traffic, current signal timings, and existing lane configurations. The a.m. and p.m. peak hour analysis results as analyzed for a peak 15-minute period are included in **Exhibit 6-5**. Full analysis summaries are included in **Appendix B**.

Exhibit 6-5 – Existing 2005 Intersection Operations

Intersection	Period	Overall	Critical			Comments
		LOS	LOS	V/C	Queue Length (95th %ile) (ft)	
Allegheny/Reedsdale	A.M. Peak	A	B	0.34	75 NBT	No capacity issues
Allegheny/North Shore		A	B	0.38	65 EBL	No capacity issues
Allegheny/Ridge		A	A	0.30	30 NBR	No capacity issues
Ridge/PA 65		A	B	0.29	20 NBR	No capacity issues
Ridge/Fontella		A	A	0.06	5 NBR	No capacity issues
West End Br./PA 65		C	D	0.88	480 WBT	Queue leaving PA 65
Western/Fulton		A	A	0.43	220 EBT	480 ft available
Allegheny/Reedsdale	P.M. Peak	A	B	0.51	110 NBT	No capacity issues
Allegheny/North Shore		A	B	0.29	45 EBL	No capacity issues
Allegheny/Ridge		A	B	0.30	90 SBL	No capacity issues
Ridge/PA 65		A	A	0.26	15 WBL	No capacity issues
Ridge/Fontella		A	A	0.17	15 NBL	No capacity issues
West End Br./PA 65		C	D	0.90	380 SBT	380 ft available
Western/Fulton		C	D	0.49	290 EBT	480 ft available
Allegheny/Reedsdale	Sat. Evening Peak	A	B	0.34	55 SBT	No capacity issues
Allegheny/North Shore		A	B	0.10	15 EBL	No capacity issues
Allegheny/Ridge		B	B	0.38	120 SBL	No capacity issues
Ridge/PA 65		A	A	0.10	5 EBT	No capacity issues
Ridge/Fontella		A	A	0.00	0	No capacity issues
West End Br./PA 65		A	B	0.54	100 NBL	No capacity issues
Western/Fulton		C	D	0.38	220 EBT	480 ft available

Note: Critical movements generally defined as V/C >0.85

Based on a review of the above analysis, the following are apparent for the streets and intersections in the study area:

- Under existing conditions, the weekday a.m. peak hour experiences higher traffic demand than the p.m. peak hour;
- There are no capacity issues at adjacent signalized intersections during the a.m., p.m. or Saturday evening peak hours.

6.4.1 EXISTING EVENT PEAK TRAFFIC OPERATIONS

At the conclusion of Steelers home games at Heinz Field, traffic signals are switched to manual police control. For games finishing at 4 p.m., intersections adjacent to Heinz Field are under police control from approximately 4 p.m. to 5 p.m., subject to vehicular traffic and pedestrian demand. Extensive queuing was observed as vehicles merged onto highway ramps or were delayed at other intersections outside the study area. During this period, pedestrian activity was observed to be very heavy on Allegheny Avenue. The observations noted that traffic decreased dramatically at 5 p.m., and that parking lots were generally empty and queues dissipated by 5:15-5:30 p.m.

The traffic analysis of event traffic conditions carried out in the traffic assessment for the proposed North Shore ITC indicated failure of the intersection of Allegheny Avenue and Reedsdale Street during the hour following the conclusion of the football game.

7. ACCESS REQUIREMENTS

The assessment of the required number of accesses and their configurations included the following components:

- The anticipated number of peak hour trips to/from the site, i.e. the trip generation;
- The direction of arrival/departure of these trips, i.e., trip distribution;
- The capacity of the roadway and the access intersections now and into the foreseeable future; and
- Other roadway and site operational requirements.

Each of these factors is outlined below, followed by a summary of the access requirements for the proposed casino development.

7.1 Trip Generation Potential

7.1.1 TRIP GENERATION FOR CASINO

Trip generation for the proposed casino was estimated using a combined approach incorporating a first principles estimate, estimates based on trip generation rates available in ITE literature, and checked against the expected turnover of the parking facility during peak hour conditions. The expected number of daily person visits was used in conjunction with assumptions of the number of people expected to use an automobile to arrive at the site. The following section describes the process used to arrive at the estimated peak hour traffic for design purposes.

Daily Visits

Daily attendance estimates were derived from attendance data at the Majestic Star Casino and Trump Casino in Indiana, which together contain approximately 3,265 slot machines. However, the Indiana data represents a case where there are a total of five casinos that patrons can visit in the immediate area. The total annual person visits for the five casinos in Indiana in 2004 was 14 million visits for a total of 8,900 slots. For an equivalent 5,000 slot facility, the annual attendance would be 8 million people per year. In the case of a Pittsburgh casino, attendance could be higher due to the lack of other gaming venues in the immediate area. Accordingly, the design levels for daily attendance have been increased for the proposed North Shore Casino, as shown in **Exhibit 7-1** below.

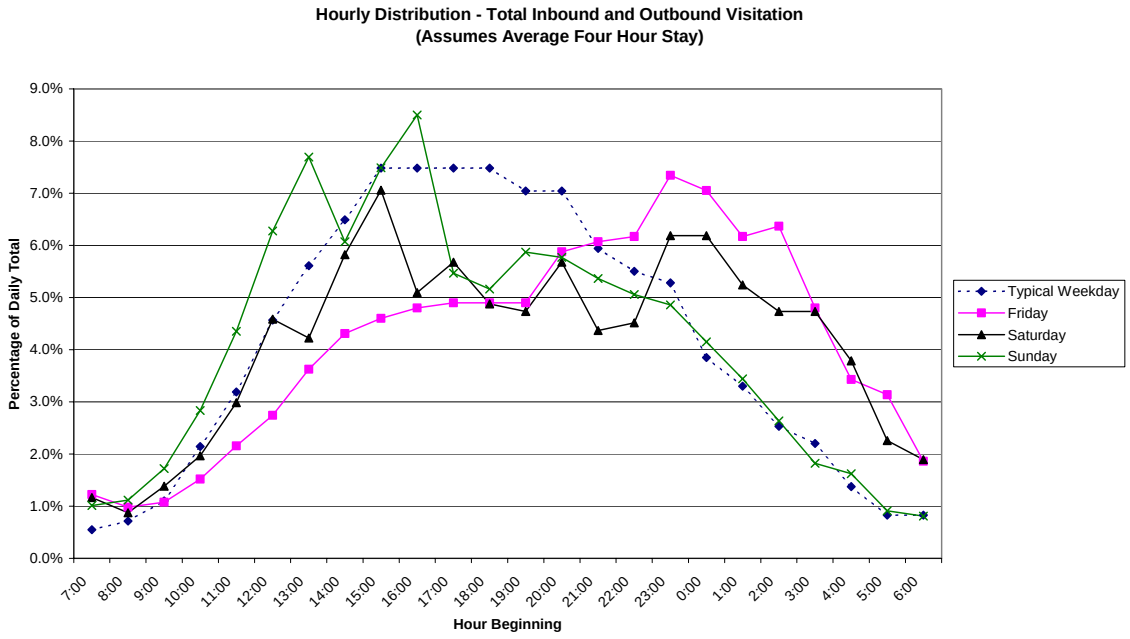
Exhibit 7-1 - Design Level of Daily Person Visits

Day	Recorded Average Visits (MSC/Trump 3265 slots)	Estimated Daily Visits Per Slot	Estimated Daily Visits Per 5000 Slots	Daily Visit Design Levels
Sunday	15600	4.8	23,890	30,000
Weekday	11500	3.5	17,611	20,000
Friday	16500	5.1	25,268	30,000
Saturday	20200	6.2	30,934	36,000

Hourly Variation

Hourly arrival and departure patterns were obtained from data measured at Casino Niagara in Niagara Falls, Canada. When surveyed, Casino Niagara had annual attendance of approximately 10 million per year for a 3,000 slot facility. The proposed North Shore Casino is expected to draw a maximum of 10 million visits per year. The total inbound hourly visits as a percentage of the daily visits are shown in **Exhibit 7-2** below.

Exhibit 7-2 – Hourly Variation of Visits



The number of automobiles entering the proposed North Shore Casino site was calculated using the following assumed parameters, based on Casino Niagara data, but adjusted to reflect a lower percentage of people walking to the site for the North Shore location.

- Automobile modal split: 90% by car (assumes remaining 10% arrives by taxi, charter bus, water taxi or walking); and

- Vehicle occupancy: 1.5 persons per vehicle on weekdays and 2.0 persons per vehicle on weekends (2.3 persons per vehicle measured at Casino Niagara).

A peak hour factor was used to determine the percentage of the daily attendance that arrives during the peak hours of the casino. For the Friday p.m. peak, the 5% factor measured at Casino Niagara was increased to 10% for this analysis. For the Saturday casino peak, the 10% factor measured at Casino Niagara was increased to 15% for this analysis.

The number of vehicles expected to enter the site was calculated for each of the peak hours identified in **Exhibit 7-2** above, and the resulting estimated peak inbound and outbound trips are shown in **Exhibit 7-3** below for the full development.

Exhibit 7-3 – Estimated Maximum Trip Generation for 5,000 Slot Casino

	Persons		Vehicle Trips	
Peak	**Inbound**	**Outbound**	**Inbound**	**Outbound**
A.M. Friday	420	350	210	180
P.M. Weekday	2,690	2,100	1,350	1,050
P.M. Saturday	4,010	2,940	2,000	1,470
Steelers Sunday	2,130	490	1,060	240

7.1.2 TRIP GENERATION FOR NON-CASINO COMPONENTS

The site is generally designed to operate as one facility with associated restaurants, bars and entertainment for patrons. For the purposes of this traffic assessment, only the proposed uses that may attract trips independently of the casino have been included separately in calculation of trip generation. These uses include specialty restaurants and other entertainment uses that may draw some patrons that do not visit any other components of the site. However, these uses are still expected to have a significant amount of synergy with the casino, and reductions in trip rates have been applied accordingly.

The peak hours for attraction to specific non-casino uses do not necessarily coincide with the peak hours of the casino itself. Peak adjustment factors were therefore applied to represent non-casino trips generated during the peak casino times. The non-casino areas used in the analysis include 65,000 ft^2 speciality retail, 6,000 ft^2 general retail, 40,000 ft^2 of other entertainment uses, which reflect approximate sizes of the proposed facility. Given the nature and location of the development, it is considered that these ancillary uses will be primarily used by casino attendees and those using the Three Rivers trail system, i.e., they will not generate a large portion of new vehicle trips above those already generated for the casino patrons. The peak hour adjustment factors and internalization factors are estimates based on engineering judgement; however, they have purposefully been set at very conservative levels taking into account the preceding statement. The peak adjustment factors and shared trips are shown in **Exhibit 7-4** below.

Exhibit 7-4 – Modification Factors for Non-casino Components

	Peak Adjustment Factor	Shared trips (synergy)
Specialty Restaurant	80%	50%
Retail	50%	50%
Other Entertainment	80%	70%

The total combined trip generation used in the analysis is shown in **Exhibit 7-5** below.

Exhibit 7-5 – Estimated Maximum Trip Generation for 5,000 Slot Casino

	Vehicle Trips	
Peak	**Inbound**	**Outbound**
A.M. Friday	600	500
P.M. Weekday	1,510	1,260
P.M. Saturday	2,350	1,620
Steelers Sunday	1,590	360

7.1.3 REALITY CHECK FOR TRIP GENERATION

To determine the maximum hourly trip generation for the casino, a simple check was carried out assuming a daily total of 36,000 visitors. If 90% of visitors are assumed to arrive by automobile at a rate of two people per vehicle, this would generate approximately 32,400 two-way vehicle trips per day. If the peak hour is assumed to be 10% of the daily total, then approximately 3,240 two way vehicle trips would result. This compares with the approach used above where approximately 3,500 two-way vehicle trips are estimated during the Saturday peak hour. It is also noted that this level of trip generation represents a turnover of 40% of the proposed 5,100 space parking structure in one hour. This is considered to be a high hourly turnover for a parking facility servicing a 24-hour casino, and indicates that that the trip generation assumptions have resulted in a conservatively high estimate of traffic.

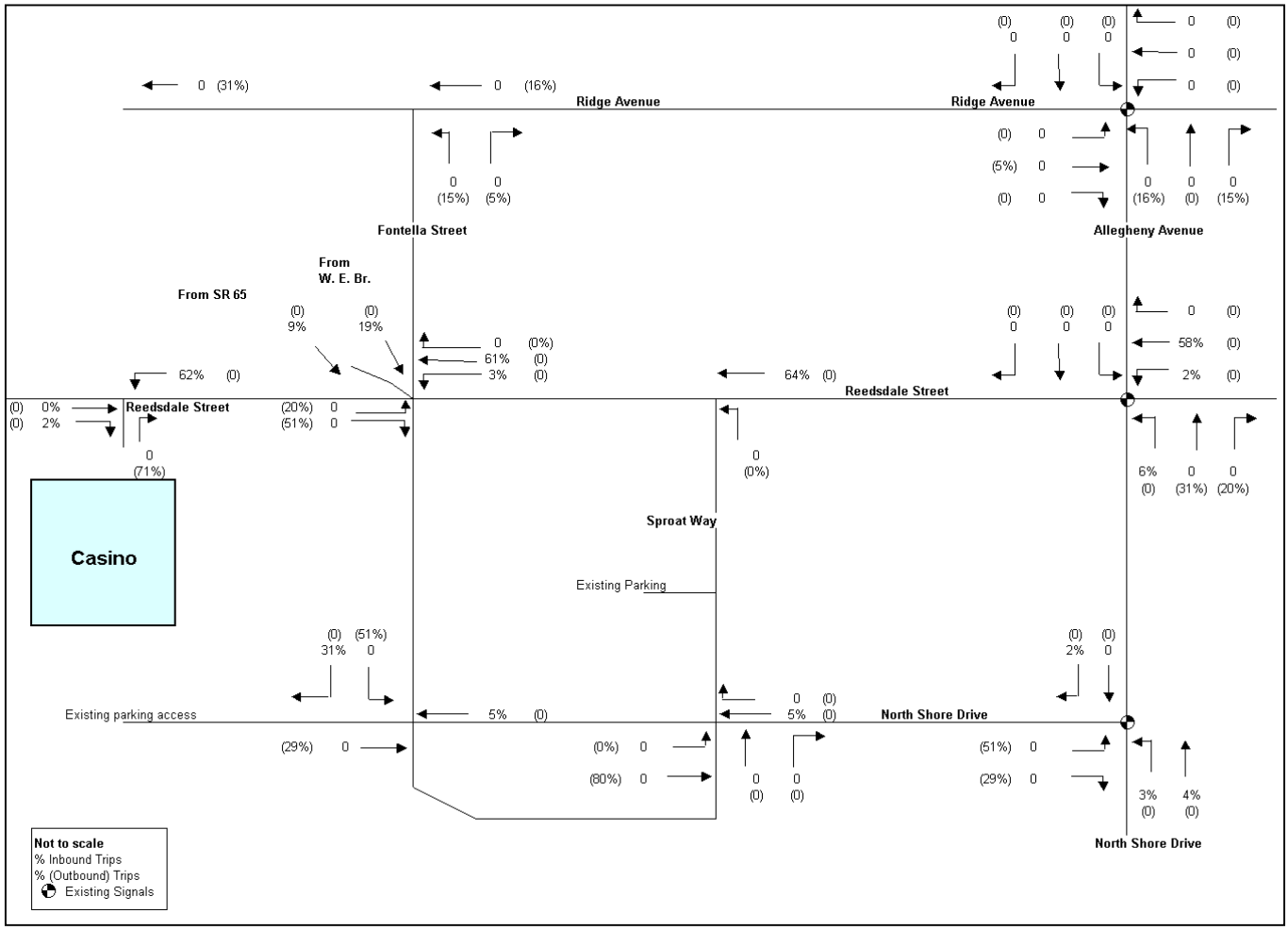
7.2 Trip Distribution and Assignment

Trips to and from the proposed casino were assigned and distributed to the street network using similar assumptions used in the traffic assessment for the proposed North Shore Intermodal Transportation Center. These assumptions were based on the Regional Travel Demand Model maintained by the Southwest Pennsylvania Commission (SPC). The traffic assignment is as follows:

- North Side neighborhoods 5%
- North 40%
- West 30%
- East/South 25%

The automobile trip distribution based on the above assignment is illustrated in **Exhibit 7-6** below, based on the trip distribution matrix issued by the City of Pittsburgh, and modified to take account of the adjacent street and highway network. For analysis of future total traffic, casino trips have been distributed based on the minor road network changes discussed in Section 8 of this report.

Exhibit 7-6 – Automobile Trip Distribution



7.3 Truck Access

The main need for truck access is generated by the need for armored trucks, food service trucks and garbage trucks. This type of servicing is typically carried out by single unit trucks, with occasional deliveries by semi-trailer trucks depending on the other types of land use activities that may be included on the site. Separate loading areas will be provided for the casino and for other restaurant uses on the site, and access to all the loading areas will be from Reedsdale Street.

The proposed site plan contains casino truck docks accessed from Lighthill Street for two semi-trailer trucks, and three large single-unit trucks. An additional loading dock is provided to accommodate a trash compactor. This loading area will accommodate the truck loading demands generated by the casino and its food court, buffet and entertainment areas. A minimum height clearance of approximately 15 feet will be provided to any loading areas that are internal to the structure. A separate secure loading area to serve armored trucks will be provided with access from Reedsdale Street.

Following award of the casino license to this site, a detailed truck loading management plan (TLMP) will be prepared in consultation with the City of Pittsburgh and adjacent stakeholders as discussed in Section 12 of this report. Delivery routes would be specified in service contracts and, subject to the TLMP, would be expected to require trucks to approach the site from the west along Beaver Avenue to North Point Drive or Reedsdale Street.

7.3.1 TRUCK TRIP GENERATION

Truck deliveries are expected to occur mainly during normal working hours. During the peak Saturday evening peak hour (7-8 p.m.) no significant truck activity is expected, other than potential visits by armored trucks. During peak loading activity, demands of up to approximately 20 trucks per hour are anticipated for the entire site. Collection of compacted refuse and recyclables is expected to occur once each per day.

7.4 Emergency Access Considerations

Consideration must be given to the site operations in emergency situations. In addition, there may be circumstances where the primary access is fully or partially unavailable due to an incident or for maintenance or construction activities. In these cases, reasonable alternative accesses are required for inbound and outbound traffic and for emergency vehicles.

The site is accessible from Reedsdale Street and North Shore Drive, providing two alternate routes for emergency access. For response to an emergency incident, emergency vehicles could access the Riverfront Trail from Lighthill Street to access the river frontage of the proposed casino building.

7.5 Transit and Ferry Access

7.5.1 TRANSIT ACCESS

Port Authority Transit

Based on existing bus service in the vicinity of the subject site, there is little capacity for Port Authority buses to carry a significant number of passengers destined to and from the casino site.

However, if the Port Authority wishes to provide service to and from the casino site to meet the expected demand from visitors and employees, one of the bus platforms at the proposed on-site bus terminal can be designated for use by Port Authority buses. Alternatively, a bus stop would be provided on the south side of North Shore Drive just east of the proposed porte cochere access. The final location of bus stops would be determined through consultation with the City and Port Authority.

The proposed LRT station at the intersection of Reedsdale Street and Allegheny Avenue is anticipated to be operating in 2010, at which time the transit connection to the North Shore in general, and to the vicinity of the casino site in particular, will be improved significantly. Following completion of the Intermodal Transportation Center, Port Authority buses will service the LRT station on a regular basis. As the LRT station will be one block east of the casino site, it is not envisaged that Port Authority buses would service the subject site directly.

Charter Buses and Patron Shuttle Buses

The proposed site design will provide a bus facility on Reedsdale Street that will accommodate six tour buses, with any long-term bus parking provided at an off-site bus parking area. The pick-up/drop-off facility will facilitate bus access for off-site parking shuttles and for charter buses. An indoor waiting room and a direct pedestrian connection will be provided from the bus facility into the casino.

Access will be provided only for charter bus operators licensed by the casino, which will allow the casino to control and schedule charter bus arrivals and departures to ensure effective use of the proposed bus facility. Patron shuttle buses may also be provided to link the site to nearby parking facilities and potentially to either the Wood Street or Gateway Center LRT stations, subject to agreement with the City and Port Authority.

From Monday to Thursday, charter buses would likely be scheduled at 15 minute intervals on four of the bus platforms, resulting in approximately 16 charter buses per hour. The remaining two platforms would be reserved for use by arriving and departing shuttle buses to carry casino patrons to and from off-site destinations. The overall number of buses serviced on the site is estimated to be approximately 25 buses per hour.

On Friday evenings, charter bus activity is expected to be lower than experienced from Monday to Thursday, which would free up one additional bus platform for parking shuttle buses. On Saturdays and Sundays, charter bus activity would be approximately 8-10 buses per hour and could be accommodated by two of the six proposed bus platforms, leaving four platforms for use by shuttle buses. Assuming shuttle buses arrive at 10-15 minute headways, the bus facility would accommodate approximately 25 shuttle buses per hour, totaling approximately 35 charter and shuttle buses during peak Saturday operation.

Employee Shuttle Buses

A dedicated area will be provided at the west end of the site for employee pick-up and drop-off activity, including accommodation of employee shuttle bus activity. It is expected that the casino operator will provide employees a minimum of two shuttle buses scheduled for continuous operation with headways of 20 minutes or less to an off-site employee parking facility and potentially to either the Wood Street or Gateway Center LRT stations, subject to agreement with the City and Port Authority. Service would be increased during major shift changes.

7.5.2 FERRY ACCESS

The river frontage will provide a mooring area for ferries as well as a facility for water taxis or personal watercraft. While use of ferries may be high during weekday evenings and weekends, it is expected that only a small proportion of total daily visitors to the casino will arrive by ferry and the automobile trip generation has not been adjusted to account for patrons using this mode of travel.

7.6 Limousine and Taxi Access

The main ceremonial entrance to the casino with the porte cochere will be located at the southeast of the site on North Shore Drive. This access will be used by limousines, taxis, and patrons requiring valet parking. A set down area will be provided adjacent to the main entrance to the building. Valet retrieval and an on-site holding area for taxis and limousines will be located in the basement of the parking structure, with direct ramp access to and from the porte cochere to the valet parking area on the basement level.

7.7 Pedestrian Access

The Three Rivers Heritage Trail currently provides pedestrian and bicycle travel along the North Shore from the Carnegie Science Centre east past the stadium areas. The casino site plan includes an extension of the trail system along the river frontage through the subject site. A design competition is currently being held by the Riverlife Task Force to design an improved pedestrian connection across the West End Bridge in order to improve accessibility through the Three Rivers Park.

The West End Pedestrian Bridge Competition invites entrants to design a new pedestrian crossing, anchored to the existing West End Bridge. Entrants are asked to consider creative approaches for connecting pedestrians, cyclists, boaters and other users to both shores of the river. The preferred designs for further development will be selected in February 2006.

The proposed casino site plan will not adversely impact existing access to the West End Bridge, but will provide improved pedestrian, cyclist and boating access along the frontage of the casino site.

7.8 Summary of Access Requirements

Based on the review of future intersection operations and the traffic demands associated with the proposed casino, it has been concluded that two permanent accesses are required from a capacity and operational perspective. One full turns signalized access and one right-in/right-out access are considered the minimum access provisions necessary for future site traffic operations.

The accesses will be required to accommodate a peak of approximately 2,350 inbound and 1,620 outbound vehicle trips for the casino activity during the Saturday evening peak hour. A minimum of two inbound and two outbound lanes are considered necessary to accommodate these volumes. At other times, when the level of background traffic on the adjacent street network is at its peak, traffic generated by the casino is estimated at lower levels, reaching approximately 1,500 inbound and 1,260 outbound vehicle trips during the weekday p.m. peak hour of traffic.

The proposed access points must also to be able to accommodate the existing high commuter traffic volumes on North Shore Drive during the a.m. peak hour, and provide flexibility to deal with peak volumes during event traffic generated by Steelers home games at Heinz Field.

8. ACCESS ANALYSIS

During preparation of the proposed site plan, investigation of potential access configurations was carried out. The following section describes the results of the qualitative analysis and describes the recommended configuration and operation of access points and the need for modifications to the existing street network.

8.1 Study Area Constraints/Considerations

In determining the proposed location for the access, the following factors were considered:

- **Safety** – proper roadway alignment, sight distances and intersection design must be provided;
- **Operations at the Reedsdale Street/North Shore Drive Intersection** – will require approvals from City and PennDOT transportation staff to ensure proposed site accesses do not compromise the operation of this intersection;
- **Ability to accommodate existing and future background traffic volumes in addition to site traffic** – The access position and configuration should present minimal adverse impacts to traffic travelling through the study area to reach other sites, and maintain the ability to accommodate event peak traffic demand and queuing; and
- **Access restrictions created by existing road and highway configurations** – the physical barriers presented by SR 65 and the restrictions caused by adjacent one-way streets limit the route choices for traffic to get to and from the site.

8.1.1 SIGHT DISTANCE

The sight lines for eastbound vehicles on Reedsdale Street are currently limited by the horizontal curve at the intersection with North Shore Drive. Sight distances to any proposed access points should meet the criteria outlined in the American Association of State Highway Officials (AASHTO) Geometric Design of Highways and Streets. Sight distance requirements will be reviewed in detail with City and PennDOT staff when detailed design is carried out, but the functional access plans have been prepared with the stopping sight distance criteria in mind.

In this case, should a motorist leave the subject site access with an approaching vehicle on North Shore Drive, the sight distance should be sufficient for either motorist to stop and avert a collision. For a design speed of 40 mph, a distance of 305 feet is required for a passenger vehicle to come to a complete stop.

8.2 General Access Options

The following sections describe the general options for access to the site. Recommendations for changes to the road network to facilitate access to the site are contained below.

8.2.1 USE EXISTING ROAD NETWORK WITHOUT MODIFICATION

The existing intersection of Reedsdale Street and North Shore Drive is also the termination point for exit ramps from West End Bridge and State Route 65 to North Shore Drive. Reedsdale Street

westbound connects to North Shore Drive via a single, stop-controlled left turn lane, and access to Reedsdale Street west of North Shore Drive is not possible.

While the intersection appears to function adequately under existing conditions, the addition of a significant amount of inbound traffic to the proposed casino site cannot be easily accommodated without physical modification and/or signalization.

Inbound casino traffic from the West End Bridge must merge across three lanes of southbound traffic on North Shore Drive to access the site. Inbound casino traffic from State Route 65 must merge across two lanes on North Shore Drive to access the site. Inbound casino traffic from westbound Reedsdale Street must cross four lanes on North Shore Drive to enter the site access. All of these merge movements to the site would be problematic without signalization to separate and control the conflicting movements on North Shore Drive. In addition, the existing intersection configuration does not provide for traffic leaving the proposed casino and wishing to travel northbound to Fontella Street.

Due to the combination of safety and operational issues, use of the existing road network without modifications to accommodate the casino related trips is not recommended.

8.2.2 POTENTIAL ROADWAY IMPROVEMENTS

As noted earlier, the existing unsignalized intersection of Reedsdale Street and North Shore Drive provides poor access for the casino site due to the existing one-way configuration of adjacent streets, and physical barriers created by existing freeway and ramp structures.

Preliminary qualitative assessment of the intersection of Reedsdale Street and North Shore Drive indicated that only a limited number of modifications would be feasible, and that some modifications may not provide significant benefits for casino traffic, or may result in disadvantages for traffic circulation for other stakeholders such as the Steelers and the Science Center.

However, the preliminary quantitative analysis carried out to determine the traffic impact of modifying the intersection indicated that signalization (using the configuration recommended in this report) could be carried out without significant adverse impacts to other traffic on the SR 65 exit ramp and the West End Bridge exit ramp.

Any intersection modifications would be subject to detailed design and approvals from City and PennDOT officials.

8.2.3 LOCATE PRIMARY SIGNALIZED INTERSECTION ON REEDSDALE STREET

The main entrance and exit to the proposed parking structure is proposed at the west end of the site on Reedsdale Street, at the intersection of Reedsdale Street and North Point Drive.

Signalizing the intersection of Reedsdale Street and North Shore Drive, and provision of two-way traffic on Reedsdale Street between North Point Drive and North Shore Drive is required to provide access to and from the primary casino site entrance at Lighthill Street. In order to provide westbound traffic lanes on Reedsdale Street between the site access and North Shore Drive, widening of Reedsdale Street is required. A 24-foot wide piece of property along the northern casino site boundary would be conveyed to the City of Pittsburgh to provide the required road right of way.

Provision of the signal at Reedsdale Street/North Shore Drive will also serve to separate movements approaching the casino and allow traffic from SR 65 and the West End Bridge exit

ramps to change lanes on North Shore Drive in order to enter the porte cochere. Due to geometric and safety considerations, right turns would not be permitted from the SR 65 and the West End Bridge ramps to westbound Reedsdale Street.

8.2.4 LOCATE PORTE COCHERE SIGNALIZED ACCESS AT NORTH SHORE DRIVE

The main ceremonial entrance to the casino with the porte cochere will be located at the southeast of the site on North Shore Drive. This access can also serve as an alternative access for traffic arriving from the east along North Shore Drive and from the stadium areas.

Sufficient distance is provided for lane changes to permit traffic arriving from the east on Reedsdale Street to merge across southbound lanes and enter the site. It is noted that the recommended phasing for the proposed signalized intersection of North Shore Drive and Reedsdale Street separates movements from Reedsdale Street and SR 65/West End Bridge to ensure that lane changes can occur safely.

The location provides the maximum possible queuing space for southbound traffic on North Shore Drive, reducing potential for queuing to extend onto the exit ramps for SR 65 and the West End Bridge during peak traffic conditions.

8.2.5 ACCESS TO SELF-PARK GARAGE FROM REEDSDALE STREET

The primary access to the self-park garage is to be located on Lighthill Street at North Point Drive/Reedsdale Street. Due to the low volumes on Reedsdale Street and North Point Drive west of the subject site, it is expected that the access intersection could operate without signalization. However, two lanes for left turning inbound traffic would be provided, along with two lanes for outbound right turning traffic. Therefore, a traffic signal is proposed at this location to provide entering and exiting traffic with a dedicated signal phase for safe and efficient operation.

8.2.6 ALTERNATIVE ROAD ACCESS MODIFICATIONS

To provide further improvements beyond the changes proposed on Reedsdale Street, a number of other roadway network improvements were investigated. Potential exists to construct a ramp directly to the second level of the proposed parking structure from the West End Bridge Ramp to Reedsdale Street. This would have the advantage of reducing congestion at the North Shore Drive casino access, but would require area for stacking/queuing distance where the ramp enters the parking structure.

The above potential alternative change to the road network has not been analyzed in detail as analysis indicates that the proposed signal at the North Shore Drive/Reedsdale Street intersection can accommodate the traffic generated by the casino. Following operation of the casino for one year, detailed traffic analysis will be carried out to determine the benefits of these alternative road improvements. Following detailed traffic analysis, consultation with the City of Pittsburgh, PennDOT, or other approval agencies will be required in order to secure approvals for these other potential changes to the road network.

8.2.7 PEDESTRIAN ACCESS AND CIRCULATION

The Three Rivers Heritage Trail currently provides pedestrian and bicycle travel along the North Shore from the Carnegie Science Centre to the east past the stadium areas. At present, the roadways and land uses immediately to the north and west of the site are not very pedestrian friendly.

The overall plan for the North Shore Casino site will include an extension of the trail system through the site and a considerable improvement to the pedestrian level of service along the property frontages that have amenable uses.

Pedestrian access to and from the casino will be directed to the Three Rivers Heritage Trail and North Shore Drive. The Reedsdale Street road frontage and the intersection with North Shore/ West End Bridge and State Route 65 will be the primary vehicular access locations. Accordingly, our pedestrian circulation plan will ensure that pedestrians are directed into the site along the east and south frontages. In addition, the southwest area of the site will be designed to provide future opportunities to connect the waterfront pedestrian facilities to any redevelopment of like uses to the west.

The balcony, patio and amphitheatre facilities located on the south building frontage will provide an active pedestrian environment, which will create a safe and secure environment during all times of the day.

Pedestrian travel to and from the east will be accommodated along the trail system or via a signalized intersection at North Shore Drive and casino's porte cochere area. With the redevelopment of the subject site, there are great opportunities to improve the pedestrian sidewalk facilities along North Shore Drive to Heinz Field and along the frontage of the Science Center.

8.3 Operations at Proposed Signalized Intersections

Traffic control signal opportunities will be reviewed with City and PennDOT staff to provide the best possible access operations while maintaining capacity for through traffic during all times of the day. In general, it is recommended that the traffic signals be operated in semi-actuated mode of control with provisions to maximize main street green times.

Provided below is a summary of the justification for installation of signals, and a summary of potential traffic signal operations.

8.3.1 TRAFFIC SIGNAL WARRANT

As proposed, traffic signal control is recommend at the North Shore/Casino Porte Cochere, the North Shore/Reedsdale Street/West End Bridge/SR 65 intersection and the Reedsdale Street/Casino Parking Access intersection. Traffic signal warrants were reviewed based on PennDOT guidelines, specifically:

- Warrant 1 – Minimum Vehicular Volume;
- Warrant 2 – Interruption of Continuous Flow; and
- Warrant 8 – Combination Warrant.

The standard Penn DOT signal warrant is generally based on three and four legged intersections with the major street approach being defined as the higher volume roadway or the one with the lesser form of traffic control. The three intersections being considered for traffic signal control do not reflect "typical" configurations; therefore, we have provided below our assumptions relating to the input into the traffic signal warrant method.

Intersection	Main Street (Movements Included)	Minor Street (Movements Included)
North Shore/ Reedsdale/ West End Bridge/ SR 65	Reedsdale - Eastbound and westbound approaches	West End Bridge/SR 65 – Southbound traffic from both ramps
North Shore/ Casino South Access	North Shore Drive – Southbound traffic from West End Bridge and SR 65	Casino Access – Eastbound approach
Reedsdale/ Casino North Access	Reedsdale – Eastbound Reedsdale traffic and westbound left turns into Casino north access	Casino Access - Northbound right turn movement

Eight hour traffic volumes were not readily available for all existing turning movement and link volumes. In addition, casino trip generation was not available on an hour-by-hour basis.

Eight hour traffic volume estimates were generated for the main street approaches and highest minor street approach based on the following:

- Existing hourly counts collected by automatic traffic recorders on North Shore Drive and Reedsdale Street east of North Shore Drive;
- Peak period turning movement counts undertaken at the North Shore/Reedsdale/West End Bridge/SR 65 intersection;
- P.M. peak design hourly volumes from the Casino trip assignment factored to reflect a typical casino demand profile for the remainder of the day;
- Engineering judgment to apply time-of-day factors where hourly volume data was not available and where an appropriate surrogate with similar operating characteristics was not accessible.

Although the above methodology for predicting future volumes for the eight highest hours of the roadway and site is not ideal, it does provide us with a relative assessment of the need for traffic signal control at the three proposed intersections.

The proposed signalized intersections generally have major street and minor street approaches with two or more lanes. Provided below is a description of the threshold criteria outlined in the PennDOT guidelines for traffic signal justification at these two locations.

Exhibit 8-1 – Applicable PennDOT Warrant Requirements at North Shore Drive Intersections

Warrant	Requirement	
	Major Street	**Minor Street**
Warrant 1	> 600 vehicles per hour on both approaches for each of the eight highest hours of a typical day	> 200 vehicles per hour on the higher volume approach for each of the eight highest hours of a typical day
Warrant 2	> 900 vehicles per hour on both approaches for each of the eight highest hours of a typical day	> 100 vehicles per hour on the higher volume approach for each of the eight highest hours of a typical day
Combination Warrant	Warrant 1 and Warrant 2 satisfied a minimum of 80%	Warrant 1 and Warrant 2 satisfied a minimum of 80%

Included in **Exhibit 8-2, Exhibit 8-3 and Exhibit 8-4** are the traffic signal warrant calculations for the three proposed intersections.

Exhibit 8-2 - Traffic Signal Warrant - North Shore/Reedsdale Strret/West End Bridge/SR 65

Warrant 1	**Hour Ending**								
	7:00- 8:00	8:00-9:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	7:00-8:00	
Vehicles per hour on Major Street (total of both approaches)	1115	1241	1582	1650	1668	1980	1821	1598	
	600	600	600	600	600	600	600	600	
	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicles per hour on higher-volume minor-street approach (one direction only)	1156	1061	649	642	655	760	595	483	
	200	200	200	200	200	200	200	200	
	100%	100%	100%	100%	100%	100%	100%	100%	100%

Warrant 2	**Hour Ending**								
	7:00- 8:00	8:00-9:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	7:00-8:00	
Vehicles per hour on Major Street (total of both approaches)	1115	1241	1582	1650	1668	1980	1821	1598	
	900	900	900	900	900	900	900	900	
	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicles per hour on higher-volume minor-street approach (one direction only)	1156	1061	649	642	655	760	595	483	
	100	100	100	100	100	100	100	100	
	100%	100%	100%	100%	100%	100%	100%	100%	100%

Exhibit 8-3 - Traffic Signal Warrant - North Shore Drive/Casino Porte Cochere (South Access)

Warrant 1	Hour Ending								
	7:00- 8:00	8:00-9:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	7:00-8:00	
Vehicles per hour on Major Street (total of both approaches)	1495	1465	1199	1211	1233	1448	1256	1061	
	600	600	600	600	600	600	600	600	
	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicles per hour on higher-volume minor-street approach (one direction only)	180	214	292	302	307	365	350	307	
	200	200	200	200	200	200	200	200	
	90%	100%	100%	100%	100%	100%	100%	100%	99%

Warrant 2	Hour Ending								
	7:00- 8:00	8:00-9:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	7:00-8:00	
Vehicles per hour on Major Street (total of both approaches)	1495	1465	1199	1211	1233	1448	1256	1061	
	900	900	900	900	900	900	900	900	
	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicles per hour on higher-volume minor-street approach (one direction only)	180	214	292	302	307	365	350	307	
	100	100	100	100	100	100	100	100	
	100%	100%	100%	100%	100%	100%	100%	100%	100%

Exhibit 8-4 - Traffic Signal Warrant – Reedsdale Street/Casino North Access

Warrant 1	Hour Ending								
	7:00- 8:00	8:00-9:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	8:00 - 9:00	
Vehicles per hour on Major Street (total of both approaches)	615	727	991	1004	1022	1099	1060	898	
	600	600	600	600	600	600	600	600	
	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicles per hour on higher-volume minor-street approach (one direction only)	442	525	716	740	752	895	859	776	
	200	200	200	200	200	200	200	200	
	100%	100%	100%	100%	100%	100%	100%	100%	100%

Warrant 2	Hour Ending								
	7:00- 8:00	8:00-9:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	8:00 - 9:00	
Vehicles per hour on Major Street (total of both approaches)	615	727	991	1004	1022	1099	1060	898	
	900	900	900	900	900	900	900	900	
	68%	81%	100%	100%	100%	100%	100%	100%	94%
Vehicles per hour on higher-volume minor-street approach (one direction only)	442	525	716	740	752	895	859	776	
	100	100	100	100	100	100	100	100	
	100%	100%	100%	100%	100%	100%	100%	100%	100%

Based on the application of the PennDOT guidelines, traffic signal control is warranted at all three proposed intersections. In addition to the warranting process, the following engineering considerations were also considered in this assessment:

- The above signal warrants were based on estimates of existing roadway volumes plus the casino site traffic, i.e., future background and future total traffic estimates will be greater than those that have been use in the above calculations. Thus the volumes assumed in the warrants are conservative;
- The North Shore/Reedsdale Street/West End Bridge/SR 65 and Reedsdale Street/Casino North Access intersections have atypical designs and will likely require traffic signal control to separate and properly accommodate conflicting movements;
- Under traffic signal control, the roadway authorities have greater control over the operation and queuing of critical turning movement and ramps, specifically the ramps from SR 65 and the West End Bridge; and
- Special event timings can be scheduled into the traffic signal controllers to respond to short-term peak flows during these events.

8.3.2 MODE OF CONTROL AND DETECTION

It is recommended that the proposed intersection of Reedsdale Street/West End Bridge/North Shore Drive be operated under semi-actuated control with stop bar detectors provided for eastbound and westbound movements. A set-back detector to detect the presence of six or more left turning vehicles is recommended for the southbound lanes. This detector could be used to extend the green time and clear queues before impacting on mainline traffic on SR 65. The optimum location for the stop bar and setback detection loops would be established during the detailed design phase.

The other intersections would also likely be operated under semi-actuated control to ensure acceptable operations for existing traffic flows on North Shore Drive and Reedsdale Street.

8.3.3 CYCLE LENGTH

The adjacent signalized intersections on Allegheny Avenue currently operate with different peak hour cycle lengths. The intersection of Reedsdale Street and Allegheny Avenue operates with a 70 second cycle, while the intersection of North Shore Drive and Allegheny Avenue operates with a 90 second cycle.

To provide the best potential for co-ordination with the existing traffic signal at the intersection of North Shore Drive and Allegheny Avenue, it has been assumed that a new signals would operate with a 90 second cycle during peak traffic conditions and a 70 second cycle during off-peak periods.

8.3.4 TIME OF DAY PLANS

Provided below are qualitative recommendations for the operations of the casino access traffic signal controls. They are provided to give an indication of the signal operations that should be pursued to provide a good level of service to casino traffic while not adversely affecting through volumes on North Shore Drive during key times of the day.

A.M. Peak Hour

During the a.m. peak hour, the primary traffic movement will be through traffic on North Shore Drive from SR 65 and the West End Bridge to Allegheny Avenue.

While it is expected that demand for traffic entering and exiting the casino site will be low, it is desirable to limit queuing on North Shore Drive and the West End Bridge/SR 65 ramps by providing set-back detectors for southbound queued vehicles to indicate the presence of six or more vehicles queued in the southbound lanes and to call the southbound phase. The need for such an operation will need to be confirmed through field observations of actual operating conditions once the site is occupied.

During the a.m. peak period, outbound traffic will be relatively low and the side street green time could be reduced to a maximum of 25 seconds of the 90 second cycle length. This phase would be “callable” by side street detection and could be “gapped out” after side street traffic is served.

Mid-Day Operations

During the mid-day operations, it is recommended that the signal operate with a side street phase of up to 35 seconds with the provision for the side street to "gap out" and return to main street green, should side street flow be low.

P.M. Peak Hour Operations

During the p.m. peak period, North Shore Drive traffic will be lower than the a.m. peak, but inbound and outbound site traffic will be increased in the evening peak. The intersection analysis included in Section 9 assumes a 35 second side street phase in the 90 second cycle length. Under these conditions, both main street and side street traffic will operate under satisfactory conditions.

Evening and Weekend Operations

During evenings and weekends, North Shore Drive traffic will be lower than on weekdays (except during major events at nearby stadiums), but inbound and outbound site traffic will likely be higher than site traffic during regular commuter peaks. The intersection analysis included in Section 9 assumes a 35 second side street phase in the 90 second cycle length. Under these conditions, both main street and side street traffic will operate under satisfactory conditions.

Special Event Operations

Intersections in the study area are operated under police control during event peak conditions such as Steelers home games at Heinz Field. It is anticipated that during event peak traffic conditions, police will continue to provide manual traffic control and may elect to override normal traffic signal operation, as is currently the case.

9. FUTURE ROADWAY AND ACCESS OPERATIONS

To determine the impacts of casino traffic on the adjacent road network, traffic capacity analysis was carried out for the 2008 horizon year with and without the casino development. Additional analysis was carried out to assess operations in 2018, 10 years after the project build-out.

9.1 Background Traffic Estimates

Background traffic estimates were based on a growth rate of 0.5% per annum for peak hour traffic, as confirmed with transportation planning staff from the SPC. The same growth rate was used in the traffic analysis carried out for the North Shore ITC to determine traffic growth up to 2015. The growth rate of 0.5% per annum has been used to develop background traffic volumes for a 2008 horizon year to represent the potential opening of the casino, and for the 2018 horizon year.

Since the Port Authority has advised that the LRT project to connect the North Shore with the downtown will not be complete before 2010, it is assumed that the North Shore ITC will also not be constructed and operating by the 2008 horizon. The LRT project is likely to be completed before the 2018 horizon year, but to ensure a worst-case traffic assessment; transit mode splits have not been increased to reflect an increased use of transit for staff or patrons. In reality, total automobile trip generation for the casino would be expected to decrease due to the greatly improved accessibility to transit.

From consultation with transportation planning staff at the City of Pittsburgh, it is understood that there are no known projects for which zoning or other planning applications have been made in the immediate vicinity of the site. Therefore, for the analysis of the 2008 horizon, no allowance for specific development projects has been made over and above the general traffic growth rate of 0.5% per annum.

9.2 2008 Background Traffic Operations

Intersection capacity analysis of the 2008 background total traffic volumes was undertaken with the same methodology outlined for the existing (2005) intersection capacity analysis. The analysis reflects 2005 traffic increased by 0.5% per annum to 2008, current signal timings, and existing lane configurations. The a.m. and p.m. peak hour analysis results as analyzed for a peak 15-minute period are included in **Exhibit 9-1**. Full analysis summaries are included in **Appendix B**.

Exhibit 9-1 – Background 2008 Intersection Operations

Intersection	Period	Overall	Critical			Comments
		LOS	LOS	V/C	Queue Length (95^{th} %ile) (ft)	
Allegheny/Reedsdale	A.M. Peak	A	A	0.35	60 WBT	No capacity issues
Allegheny/North Shore		A	B	0.38	65 EBL	No capacity issues
Allegheny/Ridge		A	A	0.30	120 NBT	No capacity issues
Ridge/PA 65		A	A	0.30	0	No capacity issues
Ridge/Fontella		A	A	0.06	5 NBL	No capacity issues
West End Br./PA 65		C	D	0.89	490 WBT	480 ft available
Western/Fulton		A	A	0.43	230 EBT	480 ft available
Allegheny/Reedsdale	P.M. Peak	A	B	0.52	110 NBT	No capacity issues
Allegheny/North Shore		A	B	0.30	45 EBL	No capacity issues
Allegheny/Ridge		A	B	0.31	90 SBL	No capacity issues
Ridge/PA 65		A	A	0.27	0	No capacity issues
Ridge/Fontella		A	B	0.20	20 NBL	No capacity issues
West End Br./PA 65		C	D	0.90	380 NBL	380 ft available
Western/Fulton		C	E	0.82	280 NBL	900 ft available
Allegheny/Reedsdale	Sat. Evening Peak	A	B	0.34	55 SBT	No capacity issues
Allegheny/North Shore		A	B	0.11	15 EBL	No capacity issues
Allegheny/Ridge		B	B	0.39	120 SBL	No capacity issues
Ridge/PA 65		A	A	0.10	0	No capacity issues
Ridge/Fontella		A	A	0.00	0	No capacity issues
West End Br./PA 65		B	D	0.55	115 WBL	No capacity issues
Western/Fulton		B	E	0.30	55 NBL	No capacity issues

Note: Critical movements generally defined as V/C >0.85

The analysis does not indicate any significant difference from the levels of service under existing conditions, and confirms that the adjacent street network has significant spare capacity to accommodate traffic from new development in 2008.

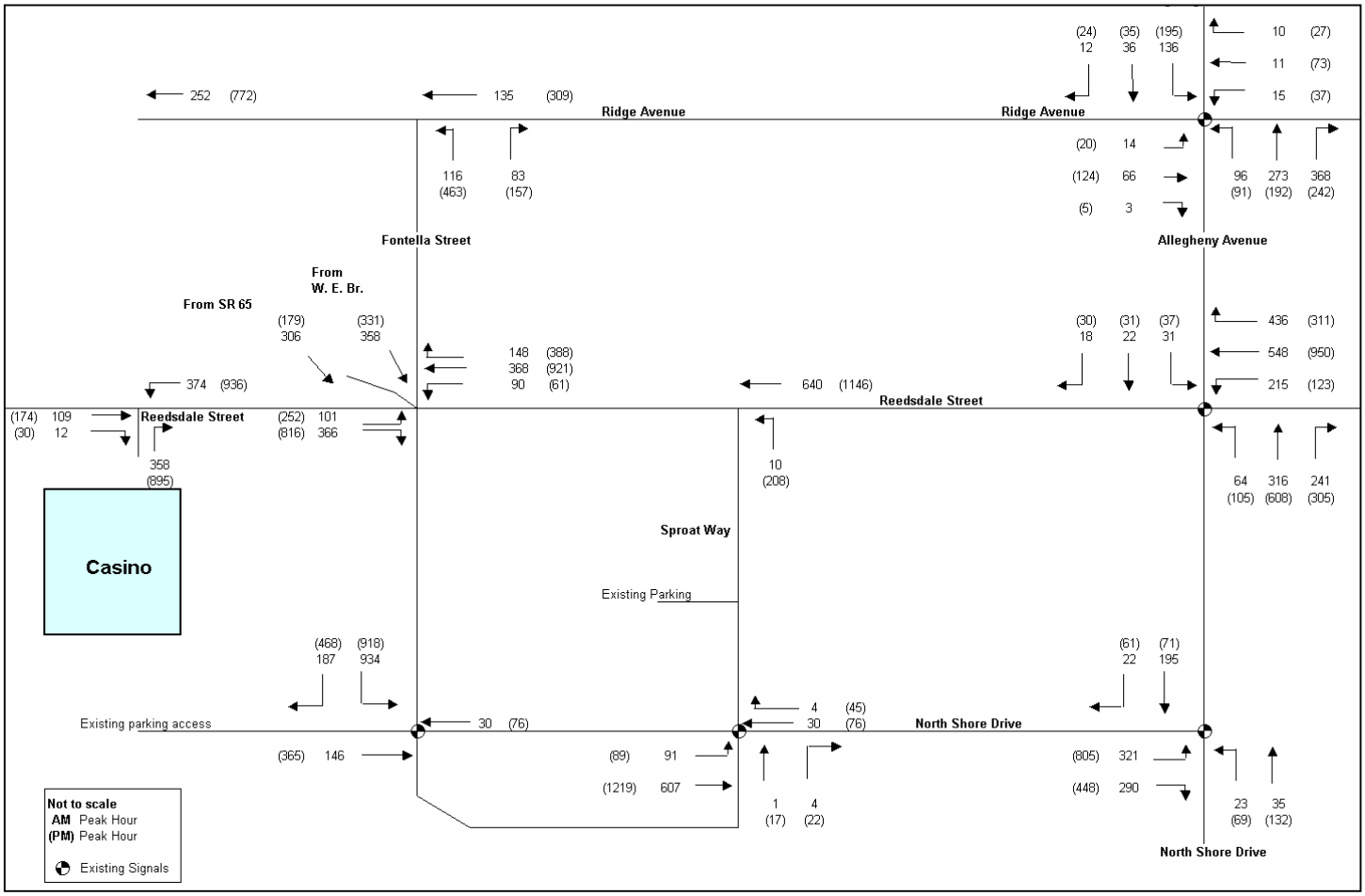
9.3 2008 Total Traffic Estimates

Trip generation for the proposed development was added to future background traffic to analyze traffic conditions during the following time periods:

- Weekday a.m. and p.m. peak hours;
- Saturday p.m. peak hour; and
- Event peak hour (Steelers home game).

The total traffic volumes on the street network within the study area with full build-out of the proposed casino are shown on the following exhibits.

Exhibit 9-2 – 2008 Total Weekday Peak Hour Volumes



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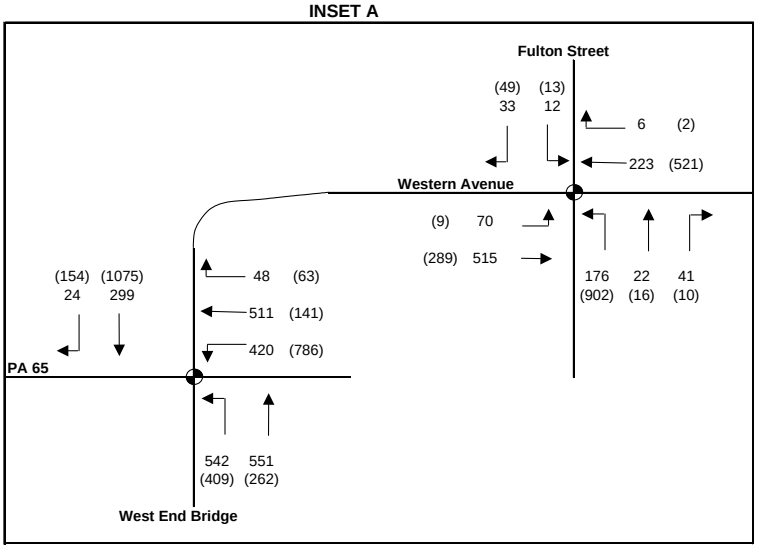

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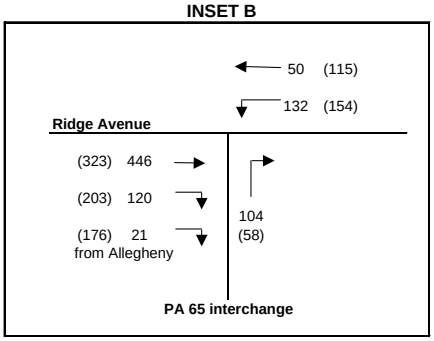
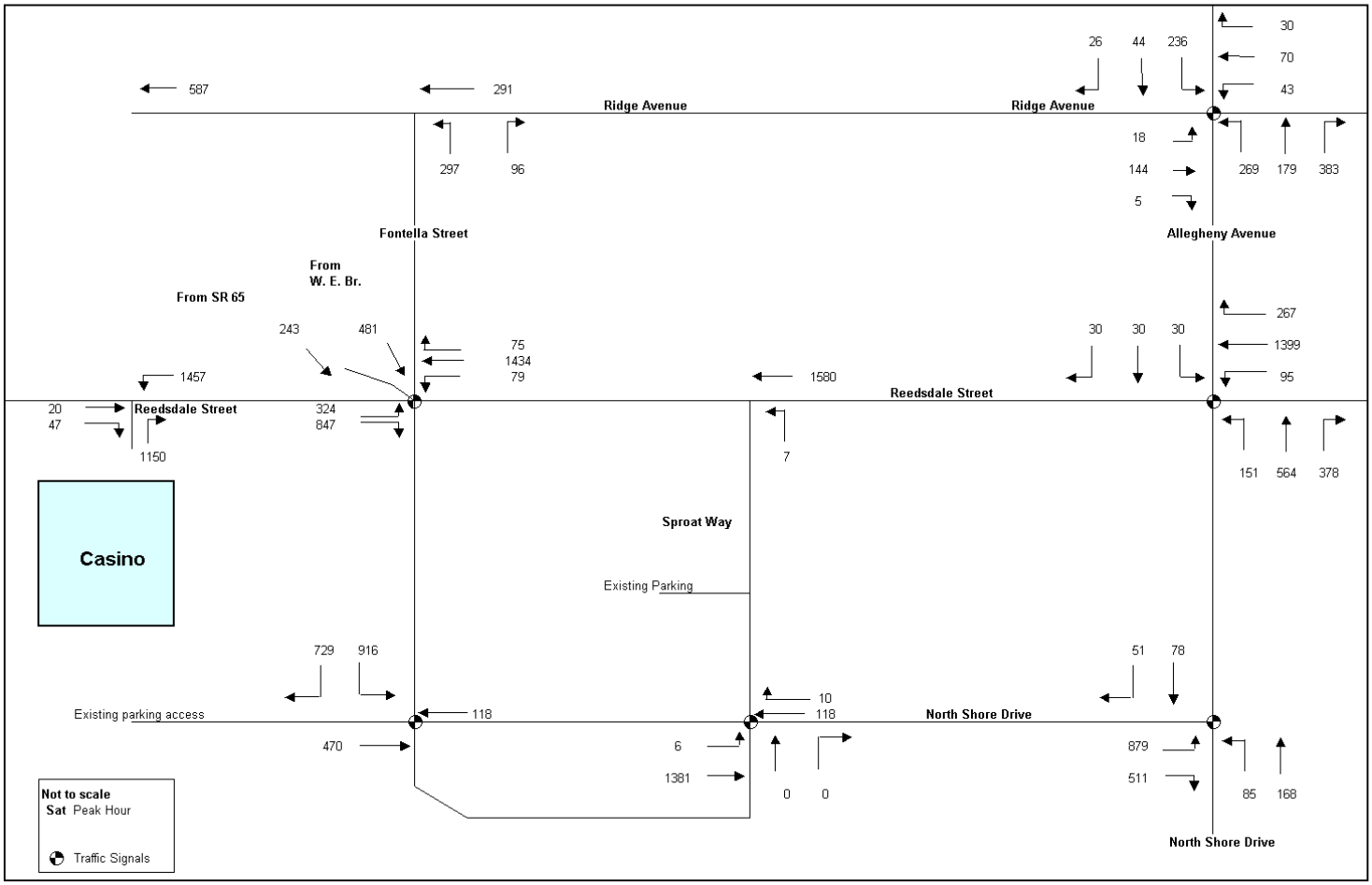


Exhibit 9-3 – 2008 Saturday P.M. Total Peak Hour Volumes



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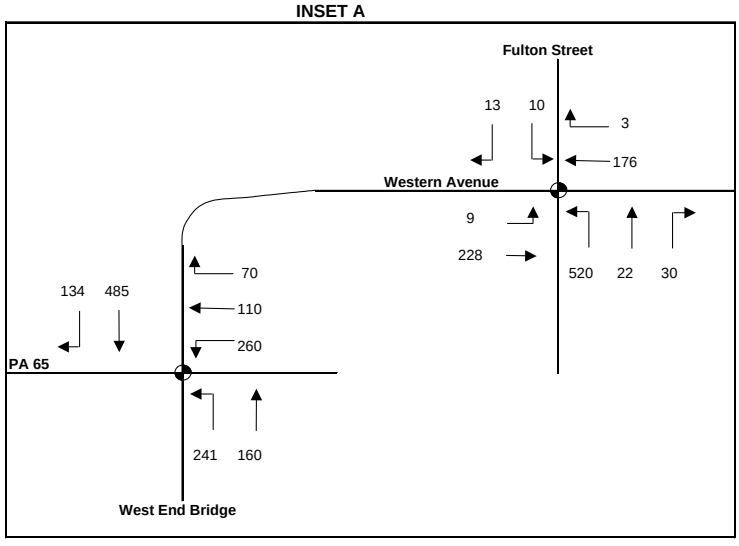

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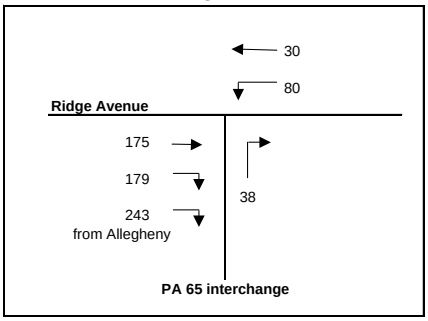
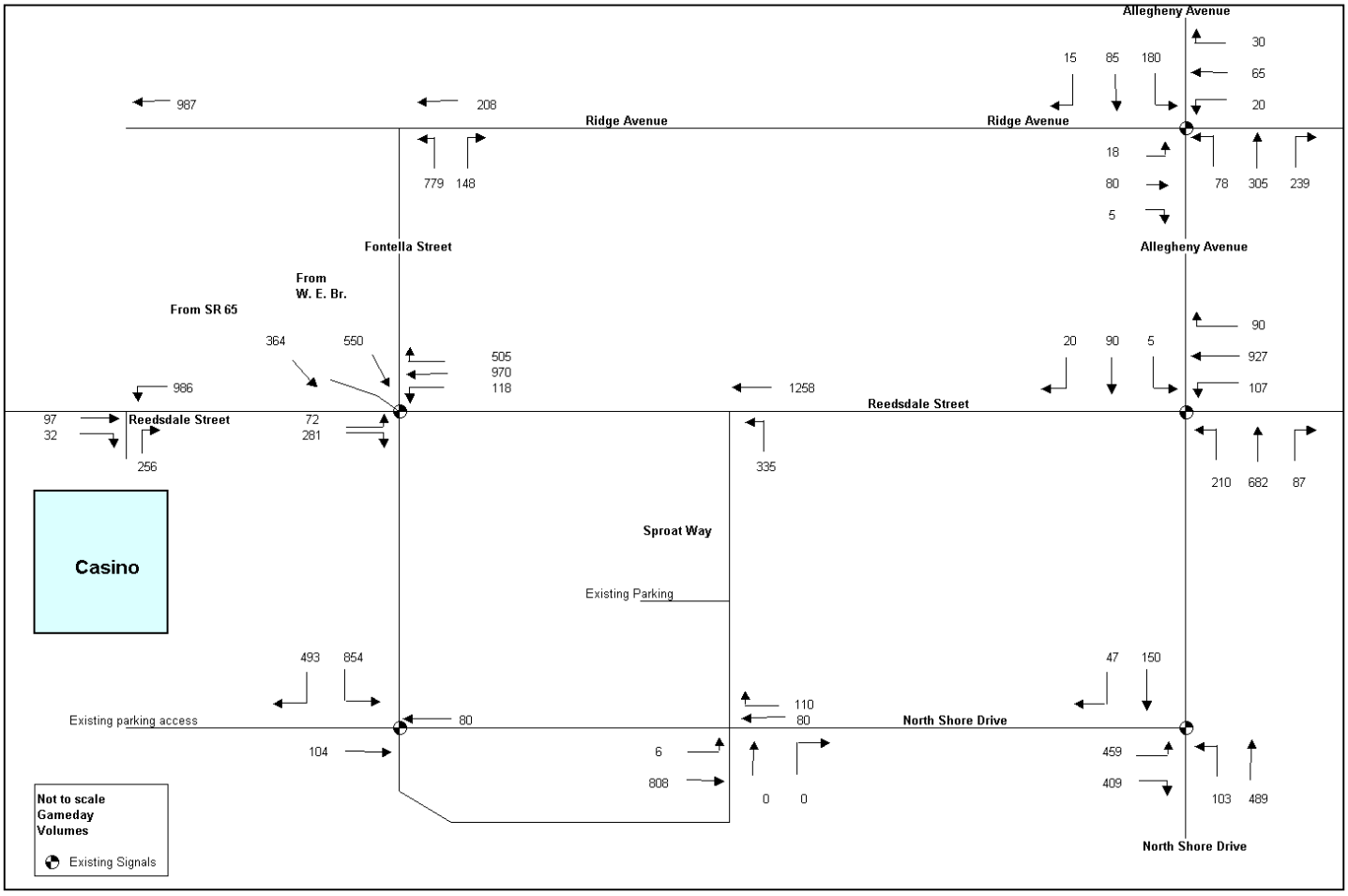


Exhibit 9-4 – 2008 Event Peak Total Peak Hour Volumes



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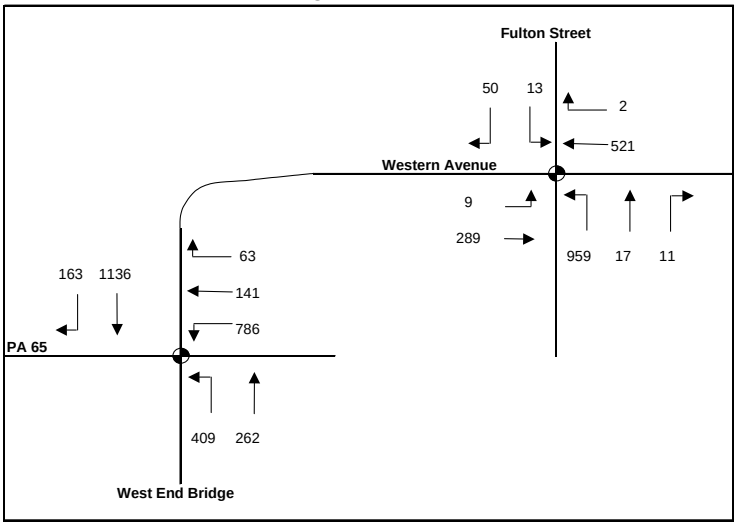

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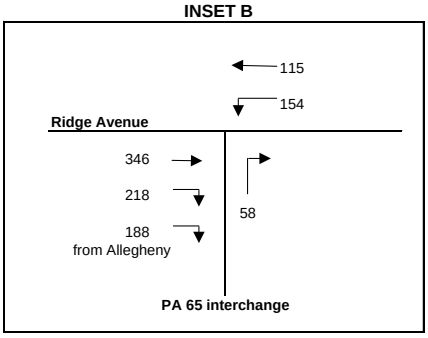


9.4 2008 Total Traffic Operations

Intersection capacity analysis of the 2008 future total traffic volumes as shown above was undertaken with the same methodology outlined for the existing (2005) intersection capacity analysis. The peak hour analysis results are included in **Exhibits 9-5 to 9-7**. Full analysis summaries are included in **Appendix B**.

Exhibit 9-5 – Weekday Total 2008 Intersection Operations

Intersection	Period	Overall	Critical			Comments
		LOS	LOS	V/C	Queue Length (95th %ile) (ft)	
Allegheny/Reedsdale	A.M. Peak	A	C	0.60	170 NBT	No significant delays
Allegheny/North Shore		A	B	0.36	60 EBL	No significant delays
Allegheny/Ridge		A	B	0.41	170 NBT	350 ft available
Ridge/PA 65		A	A	0.36	0	No significant delays
Ridge/Fontella		A	A	0.09	0	No significant delays
West End Br./PA 65		C	D	0.86	490 WBT	Queue leaving PA 65
Western/Fulton		B	B	0.51	290 EBT	480 ft available
Reedsdale/North Shore/Fontella		B	C	0.53	115 WBT	No significant delays
North Shore/Porte Cochere		A	C	0.34	60 EBT	Minor delay for traffic exiting casino
Reedsdale/Casino/ Lighthill		C	D	0.62	150 WBL	630 ft available
Allegheny/Reedsdale	P.M. Peak	C	E	0.85	430 NBT	Northbound through delay
Allegheny/North Shore		A	B	0.59	160 EBL	No significant capacity issues
Allegheny/Ridge		B	B	0.37	100 SBL	No significant delays
Ridge/PA 65		A	A	0.34	15 EBT	No significant delays
Ridge/Fontella		A	B	0.38	40 NBL	No significant delays
West End Br./PA 65		C	D	0.95	380 SBT	520 ft available
Western/Fulton		C	C	0.67	400 NBL	900 ft available
Reedsdale/North Shore/Fontella		B	C	0.82	280 WBT	800 ft available
North Shore/Porte Cochere		B	C	0.58	120 EBT	Minor delay for traffic exiting casino
Reedsdale/Casino/ Lighthill		B	C	0.68	280 WBL	630 ft available

Note: Critical movements generally defined as V/C >0.85

Exhibit 9-6 – Saturday P.M. 2008 Total Peak Hour Intersection Operations

Intersection	Period	Overall	Critical			Comments
		LOS	LOS	V/C	Queue Length (95th %ile) (ft)	
Allegheny/Reedsdale	Sat. Evening Peak	D	E	1.00	590 WBT	Westbound through operating at capacity
Allegheny/North Shore		B	B	0.62	180 EBL	No significant capacity issues
Allegheny/Ridge		B	B	0.61	170 SBL	No significant delays
Ridge/PA 65		A	A	0.23	0	No significant delays
Ridge/Fontella		B	B	0.24	25 NBL	No significant delays
West End Br./PA 65		B	D	0.55	115 WBL	No significant delays
Western/Fulton		C	D	0.81	270 NBL	900 ft available
Reedsdale/North Shore/Fontella		D	E	1.02	500 WBT	800 ft available
North Shore/Porte Cochere		B	D	0.69	190 EBT	No significant capacity issues
Reedsdale/Casino/ Lighthill		C	D	0.83	500 WBL	630 ft available

The above analysis indicates that with Saturday peak hour trip generation assumed at approximately 4,000 two-way automobile trips during the peak hour, capacity problems would begin to become apparent along Reedsdale Street east of the subject site. However, it is noted that the peak capacity conditions represent a turnover of approximately 40% of the parking garage, which is considered to be a worst-case scenario that is unlikely to occur on a regular basis. During weekday peak hour conditions, traffic from the proposed casino can be accommodated without significant capacity issues.

9.5 2008 Event Traffic Operations

The traffic management plan for Steelers home games is understood to include temporary changes to deal with traffic exiting the stadium area. As noted earlier, intersections in the study area are operated under police control during event peak conditions. The event peak analysis below is based on normal traffic signal operation.

Exhibit 9-7 – Sunday Event 2008 Total Peak Hour Intersection Operations

Intersection	Period	Overall	Critical			Comments
		LOS	LOS	V/C	Queue Length (95th %ile) (ft)	
Allegheny/Reedsdale	Sunday Event Peak	D	F	0.87	480 NBT	Northbound through delay and queuing
Allegheny/North Shore		A	B	0.46	90 EBL	Queue spillback from Allegheny/Reedsdale
Allegheny/Ridge		B	B	0.41	180 NBT	250 ft available
Ridge/PA 65		A	A	0.36	0	Queue spillback can occur from downstream merges
Ridge/Fontella		B	C	0.56	90 NBL	No significant capacity issues
West End Br./PA 65		D	D	0.94	380 NBL	Some movements approaching capacity
Western/Fulton		C	D	0.85	430 NBL	No significant capacity issues
Reedsdale/North Shore/Fontella		C	E	0.95	560 SBT	Queuing back up West End Bridge ramp
North Shore/Porte Cochere		A	D	0.51	120 WBT	Eastbound and westbound capacity reduced to accommodate North Shore Drive volumes
Reedsdale/Casino/ Lighthill		B	C	0.73	290 WBL	Westbound left delay

While the above analysis indicates significant queuing and near capacity conditions during the event peak hour, these major events occur approximately 10 times per year, are known about well in advance, and represent a short-lived inconvenience. It is expected that regular patrons of the casino will adjust their trip patterns on Sundays when Steelers home games are scheduled, and that Sunday casino traffic during an event peak would be reduced accordingly.

9.6 2018 Total Traffic Operations

Intersection capacity analysis of the 2018 future total traffic volumes above was undertaken with the same methodology outlined for the 2008 intersection capacity analysis. We have assumed a 0.5% per annum growth rate to project future background volumes to the future year of 2018, resulting in an increase of approximately 5.1% in the future background traffic volumes. Since the casino was assumed to be fully built-out for the 2008 analysis, the number of casino trips estimated for 2008 have been used for 2018. The peak hour analysis results are included in **Exhibits 9-8 to 9-9**. Full analysis summaries are included in **Appendix B**.

Exhibit 9-8 – Weekday Total 2018 Intersection Operations

Intersection	Period	Overall	Critical			Comments
		LOS	LOS	V/C	Queue Length (95th %ile) (ft)	
Allegheny/Reedsdale	A.M. Peak	A	C	0.61	175 NBT	No significant delays
Allegheny/North Shore		A	B	0.37	65 EBL	No significant delays
Allegheny/Ridge		A	B	0.43	180 NBT	350 ft available
Ridge/PA 65		A	A	0.37	0	No significant delays
Ridge/Fontella		A	A	0.09	0	No significant delays
West End Br./PA 65		C	D	0.86	495 WBT	Queue leaving PA 65
Western/Fulton		B	B	0.51	290 EBT	480 ft available
Reedsdale/North Shore/Fontella		B	C	0.52	115 WBT	No significant delays
North Shore/Porte Cochere		A	C	0.34	60 EBT	Minor delay for traffic exiting casino
Reedsdale/Casino/ Lighthill		C	D	0.62	150 WBL	630 ft available
Allegheny/Reedsdale	P.M. Peak	C	F	0.86	450 NBT	Northbound through delay
Allegheny/North Shore		A	B	0.59	160 EBL	No significant capacity issues
Allegheny/Ridge		B	B	0.39	110 SBL	No significant delays
Ridge/PA 65		A	A	0.35	15 EBT	No significant delays
Ridge/Fontella		B	B	0.40	50 NBL	No significant delays
West End Br./PA 65		D	D	0.94	380 SBT	520 ft available
Western/Fulton		C	C	0.69	410 NBL	900 ft available
Reedsdale/North Shore/Fontella		B	C	0.82	280 WBT	800 ft available
North Shore/Porte Cochere		B	C	0.58	120 EBT	Minor delay for traffic exiting casino
Reedsdale/Casino/ Lighthill		B	C	0.68	285 WBL	630 ft available

Note: Critical movements generally defined as V/C >0.85

Exhibit 9-9 – Saturday P.M. 2018 Total Peak Hour Intersection Operations

Intersection	Period	Overall	Critical			Comments
		LOS	LOS	V/C	Queue Length (95th %ile) (ft)	
Allegheny/Reedsdale	Sat. Evening Peak	D	D	1.01	600 WBT	Westbound through operating at capacity
Allegheny/North Shore		B	B	0.62	180 EBL	No significant capacity issues
Allegheny/Ridge		B	C	0.65	190 SBL	No significant delays
Ridge/PA 65		A	A	0.24	0	No significant delays
Ridge/Fontella		B	B	0.24	25 NBL	No significant delays
West End Br./PA 65		B	D	0.55	115 WBL	No significant delays
Western/Fulton		C	D	0.81	270 NBL	900 ft available
Reedsdale/North Shore/Fontella		D	E	1.02	660 WBT	800 ft available
North Shore/Porte Cochere		B	D	0.69	190 EBT	No significant capacity issues
Reedsdale/Casino/ Lighthill		C	D	0.83	500 WBL	630 ft available

The above analysis indicates that increased background traffic growth to 2018 will not have a significant impact on traffic operations in the vicinity of the proposed casino. It is concluded that traffic from the proposed casino can be accommodated without significant capacity issues in 2018.

10. PARKING REQUIREMENTS AND DEMAND

10.1 City of Pittsburgh Parking Requirements

The Pittsburgh Urban Zoning Code amendments regarding Gaming uses do not contain a specific parking requirement for a Gaming Enterprise, but require a parking demand analysis in accordance with Section 914.02.B of the Zoning Code.

10.2 Existing Parking Facilities

At present, the east part of the North Shore Casino site is a surface parking area that services a number of area developments through a shuttle service. The proposed casino concept will preclude this use, as it will not be maintain in the future. The following is a general overview of other parking supply in the area of the site:

- **Science Centre and Sproat Way Parking** – Existing sites to the immediate east of the North Shore Casino site have on-site parking; however, it is not for general public use;

- **Heinz Field** - surface parking areas are located to the east of the Heinz Field complex. These facilities are generally underutilized during the majority of the year; with the exception of game day and special events; and

- **On-Street Parking** – Formal on-street parking is not permitted on the roadways in the general vicinity of the subject site. On-street parking is available on roadways north of SR 65 within the light industrial and residential areas. The walking distance to this parking supply would be in excess of ten minutes and is not conducive to use by casino patrons.

Under existing conditions, there are no readily available parking areas that could be dedicated to full time casino supply in the immediate vicinity of the site. It is the intention to provide the necessary parking on the casino site for regular operations. Opportunities to provide shared parking during certain periods of the weekday or weekend, to reduce overall parking supply in the area, are outlined in a later section.

10.3 Estimated Future Parking Demand

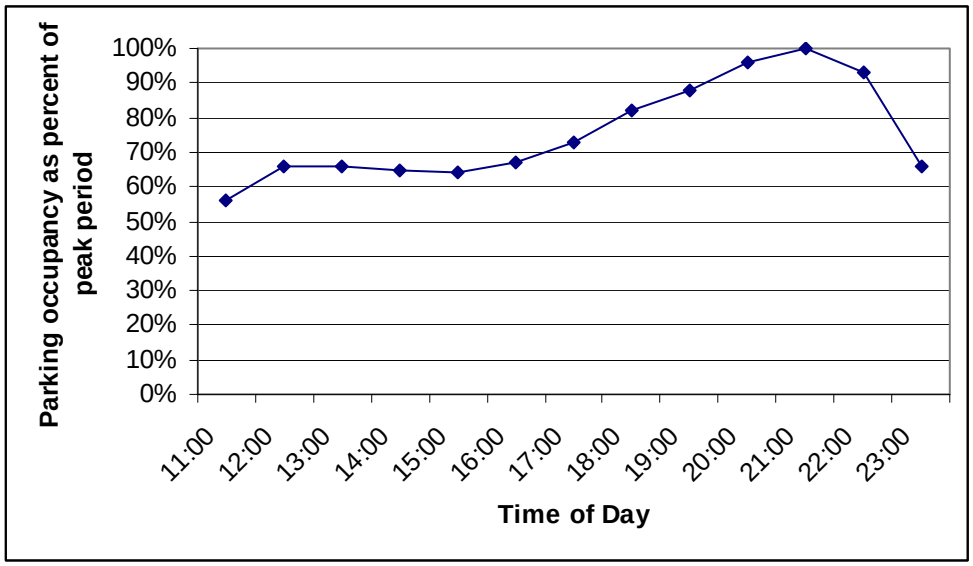
Based on information measured at existing casino sites and published in ITE sources, the parking provision rates are in the range of 1.0 to 1.5 parking spaces per slot machine or per gaming position.

Based on Phase 1 development containing 3,000 slot machines, the parking provision at 1.0 parking spaces per slot machine equates to 3,000 parking spaces. To allow for some additional parking for specialty restaurants or other land uses on the site, a parking garage containing 3,100 parking spaces is proposed for the Phase 1 development. Staff parking for approximately 500 spaces in addition to the on-site parking will be provided at an off-site location.

For the Phase 2 development, expansion onto the site to the west of the subject site is proposed in order to provide an additional 2,000 parking spaces for the additional 2,000 slot machines. Additional off-site staff parking will be provided as necessary to accommodate future staff increases.

The parking demand pattern over the day is shown in **Exhibit 10-1** below for a casino site contained in the ITE Parking Generation document.

Exhibit 10-1 – Estimated Hourly Range of Parking Demand at Casino



The above exhibit indicates that there will likely be a peak in parking demand between the hours of 7 p.m. and 11 p.m. and that, outside this period, the parking demand is expected to be approximately 60-70% of the peak parking demand. During normal business hours, parking demand for the proposed 5,000 slot casino is anticipated to be in the range of 3,000 to 3,500 spaces, which could easily be accommodated by the proposed 5,100 space parking structure on the subject site.

This pattern suggests that there are good opportunities to share parking with the sporting facilities to the east. Subject to agreements with the owners and operators of the existing parking lots, use of these adjacent parking facilities could be considered as a means to accommodate peak parking demands.

10.4 Parking Layout and Control

The parking layout for a casino needs to be logical and understandable to visitors, and must provide sufficient parking stall dimensions to allow ease of use.

The dimensions used in the functional design of the parking structure are an 18 foot long by nine and a half foot wide parking stall. Aisle widths of 24 feet result in an overall parking module width of 60 feet.

Given the expected size of the parking facility, it is considered important to provide a speed ramp or express ramp to connect the higher floors of the parking structure to the entries and exits at the ground floor level. This removes the need for vehicles to circulate through an entire level of parking in order to access a higher or lower level. A vehicle parked at the top floor of the structure would be able to use the speed ramp to descend directly to the exit.

It is proposed that the parking structure would not have any gates or barriers at the entry points, and that entry would be essentially a free flow operation. This will result in minimal queuing at entry points and limit potential spillback effects on adjacent streets.

10.5 Potential for Shared Parking

Shared parking involves the use of one parking facility by more than one land-use activity, typically taking advantage of different parking demand patterns by time of day for each use. As noted earlier in this report, the timing of the casino peak demand is likely to be different than the peak for either commuting parking or parking for the nearby stadium. As such, it is considered that significant opportunities for shared parking exist in the immediately adjacent North Shore area.

10.6 Special Event Parking

The subject site is located close to other facilities on the North Shore such as Heinz Field and PNC Park that generate significant parking demand during home games or other events.

The addition of approximately 5,000 parking spaces in the vicinity of Heinz Field would be a positive resource to accommodate the parking demands from Steelers home games and other events. The proposed casino parking structure could potentially be used to augment the existing parking supply for events at nearby facilities. It is anticipated that a mutual agreement would be pursued to enable Heinz Field patrons to use the casino parking garage as a parking reservoir.

10.7 Off-site Employee Parking

Parking for employees is proposed at an off-site location within a ten minute drive of the casino that will be linked to the site by a shuttle bus. For the initial Phase 1 operation, approximately 500 off-site parking spaces are proposed. The site is able to accommodate significantly more parking spaces if required. The location of the site and more specific details of the proposed shuttle bus service will be provided following award of the casino license.

11. TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) techniques can be used to reduce automobile trip demand and parking demand. In particular, casino management has a significant opportunity to implement TDM programs for employee parking.

To implement TDM programs, the casino management will work with CommuteInfo - a program of the Southwestern Pennsylvania Commission, (SPC) operated in partnership with transportation management associations, transportation providers, businesses and non-profit service organizations throughout Southwestern PA. The program provides a regional ridesharing service for commuters interested in alternatives to driving alone to their workplace. The program serves employers and commuters in Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland counties.

The shift work common for casino employees leads to an ideal opportunity to make effective use of TDM measures and use existing HOV facilities. The I-279 HOV lanes accessed from West General Robinson would be available for use by carpooling employees. However, it is noted that major shift changes will, in general, not coincide with weekday a.m. or p.m. peak periods.

12. PARKING AND TRANSPORTATION MANAGEMENT PLANS

Once the casino license is awarded to this site, a number of detailed operational and management plans will be required to satisfy City officials that the transportation impacts of the proposed development will be addressed to the satisfaction of the City, adjacent residents and other stakeholders. A permanent parking and transportation manager will be hired to implement the plans and oversee traffic management issues related to the casino and its neighbourhood impacts.

These plans include the:

Parking Management Plan: to specifically address the policies for parking use and enforcement, with particular attention to potential for off-site parking spillover. Due to the site's location being physically separated from adjacent residential communities, it is not anticipated that significant parking spillover will occur. However, the parking management plan will be prepared in close consultation with the City and public to serve the specific concerns of adjacent residents and stakeholders. The parking management plan would also contain details of how mutual agreements would allow use of the casino parking structure to supplement the existing supply of event parking in the adjacent area.

Traffic Management Plan: to specifically address the policies for measuring and addressing any undesirable off-site traffic impacts such as traffic short-cutting through adjacent residential neighborhoods. As the site's location is physically separated from adjacent residential communities, it is not anticipated that significant shortcutting traffic will be generated by the proposed development. However, the traffic management plan will be prepared in close consultation with the City and public to address the specific concerns of adjacent residents and stakeholders.

Truck Loading Management Plan: to specifically address the policies for measuring and addressing any undesirable off-site truck impacts such as trucks short-cutting through adjacent residential neighborhoods or the management of the on-site loading facilities. As the site is designed to accommodate the required truck loading demands, and as the connections between main highways and the subject site are by way of arterial roads that do not enter residential areas, it is not anticipated that significant truck related traffic in residential areas would be generated by the proposed development. However, a truck loading management plan will be prepared in close consultation with the City and public to address the specific concerns of adjacent residents and stakeholders, and delivery routes would be specified in service contracts and, subject to the TLMP, would be expected to require trucks to approach the site from the west along Beaver Avenue to Reedsdale Street.

13. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented above the following have been concluded/recommended:

1. The proposed North Shore Casino site is ideally placed to make use of available road capacity, water access, pedestrian trail and proposed LRT connections;

2. With modifications to the road network and new signalized intersections, peak hour automobile traffic generated by the proposed 5,000 slot casino can be accommodated for the design year of 2008, and for ten years after opening in 2018;

3. The recommended road modifications, subject to approvals by the City of Pittsburgh and PennDOT, include:

    a. Reconfiguration and signalization of the intersection of Reedsdale Street and North Shore Drive;

    b. Provision for westbound traffic on Reedsdale Street west of North Shore Drive to North Point Drive and widening Reedsdale Street accordingly; and

    c. Provision for westbound traffic on North Shore Drive to the proposed porte cochere and signalization of the porte cochere/North Shore Drive intersection.

4. Parking for the full site build-out should be provided at a rate of 1 parking space per slot for 5,100 on-site parking spaces, with off-site parking for employees; and

5. Following award of the casino license to the North Shore Casino site, detailed Parking, Traffic and Truck Loading Management Plans will be developed in close consultation with the City of Pittsburgh and neighborhood stakeholders.

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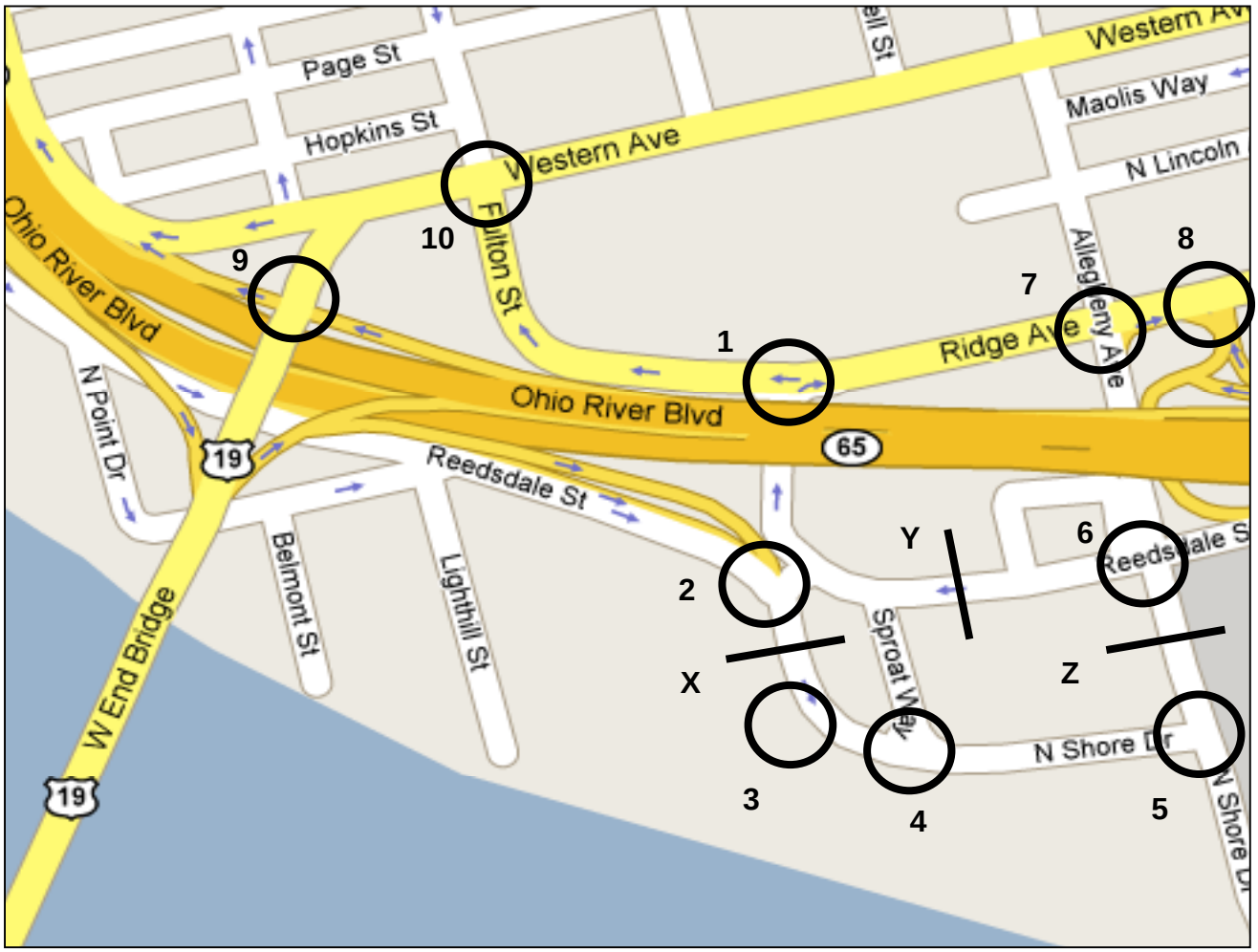
APPENDIX A

TRAFFIC COUNT SUMMARIES



Intersection Legend:

1 – Fontella Street and Ridge Avenue
2 – Fontella Street, Reedsdale Street, and West End Bridge Ramp
3 – Parking Access on North Shore Drive between Reedsdale and Sproat Way
4 – North Shore Drive and Sproat Way
5 – North Shore Drive and Allegheny Avenue
6 – Reedsdale Street and Allegheny Avenue
7 – Ridge Avenue and Allegheny Avenue
8 – Ridge Avenue and PA 65 interchange
9 – West End Bridge and PA 65 interchange
10 – Western Avenue and Fulton Street

X – North Shore Drive south of Reedsdale, north of parking access
Y – Reedsdale Street east of Sproat Way, west of Allegheny and parking access
Z – Allegheny Avenue north of North Shore, south of Reedsdale

Start Date **11/10/2005**
Start Time **6:30**
Site Code **1 - Fontella Street and Ridge Avenue**

Street Name	From North: N/A					From East: Ridge Ave.					From South: Fontella St.					From West: Ridge Ave. (one-way Westbound)					Int. Totals
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	
6:30 AM	0	0	0	0	0	0	8	0	0	8	7	0	7	0	14	0	0	0	0	0	22
6:45 AM	0	0	0	0	0	0	12	0	0	12	9	0	17	0	26	0	0	0	0	0	38
Total	0	0	0	0	0	0	20	0	0	20	16	0	24	0	40	0	0	0	0	0	60
7:00 AM	0	0	0	0	0	0	19	0	0	19	11	0	9	0	20	0	0	0	0	0	39
7:15 AM	0	0	0	0	0	0	10	0	0	10	5	0	17	0	22	0	0	0	0	0	32
7:30 AM	0	0	0	0	0	0	5	0	0	5	20	0	9	0	29	0	0	0	0	0	34
7:45 AM	0	0	0	0	0	0	20	0	0	20	21	0	5	0	26	0	0	0	0	0	46
Total	0	0	0	0	0	0	54	0	0	54	57	0	40	0	97	0	0	0	0	0	151
8:00 AM	0	0	0	0	0	0	5	0	0	5	18	0	10	0	28	0	0	0	0	0	33
8:15 AM	0	0	0	0	0	0	8	0	0	8	11	0	9	0	20	0	0	0	0	0	28
8:30 AM	0	0	0	0	0	0	15	0	0	15	11	0	10	0	21	0	0	0	0	0	36
8:45 AM	0	0	0	0	0	0	16	0	0	16	15	0	14	0	29	0	0	0	0	0	45
Total	0	0	0	0	0	0	44	0	0	44	55	0	43	0	98	0	0	0	0	0	142
9:00 AM	0	0	0	0	0	0	22	0	0	22	20	0	9	0	29	0	0	0	0	0	51
9:15 AM	0	0	0	0	0	0	19	0	0	19	12	0	9	0	21	0	0	0	0	0	40
Total	0	0	0	0	0	0	41	0	0	41	32	0	18	0	50	0	0	0	0	0	91
Grand Total	0	0	0	0	0	0	159	0	0	159	160	0	125	0	285	0	0	0	0	0	444
Approach %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			56.1%	0.0%	43.9%			0.0%	0.0%	0.0%			
Total %	0	0	0		0	0.0%	35.8%	0.0%		35.8%	36.0%	0.0%	28.2%		64.2%	0.0%	0.0%	0.0%		0.0%	

Start Date **11/03/2005**
Start Time **6:30**
Site Code **2 - Fontella Street, Reesdale Street and West End Bridge Ramp**

Street Name	From North: SR 65					From East: West End Bridge					From South: Reesdale St. (heading N)					From West: Reesdale St. (heading S)					Int. Totals
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	
6:30 AM	0	54	0	0	54	0	74	0	0	74	0	77	0	0	77	0	28	0	0	28	233
6:45 AM	0	56	0	0	56	0	56	0	0	56	0	40	0	0	40	0	24	0	0	24	176
Total	0	110	0	0	110	0	130	0	0	130	0	117	0	0	117	0	52	0	0	52	409
7:00 AM	0	66	0	0	66	0	89	0	0	89	0	43	0	0	43	0	25	0	0	25	223
7:15 AM	0	79	0	0	79	0	73	0	0	73	0	35	0	0	35	0	28	0	0	28	215
7:30 AM	0	86	0	0	86	0	94	0	0	94	0	36	0	0	36	0	41	0	0	41	257
7:45 AM	0	88	0	0	88	0	104	0	0	104	0	32	0	0	32	0	44	0	0	44	268
Total	0	319	0	0	319	0	360	0	0	360	0	146	0	0	146	0	138	0	0	138	963
8:00 AM	0	88	0	0	88	0	71	0	0	71	0	18	0	0	18	0	40	0	0	40	217
8:15 AM	0	80	0	0	80	0	70	0	0	70	0	25	0	0	25	0	36	0	0	36	211
8:30 AM	0	61	0	0	61	0	64	0	0	64	0	12	0	0	12	0	47	0	0	47	184
8:45 AM	0	45	0	0	45	0	63	0	0	63	0	10	0	0	10	0	37	0	0	37	155
Total	0	274	0	0	274	0	268	0	0	268	0	65	0	0	65	0	160	0	0	160	767
9:00 AM	0	31	0	0	31	0	56	0	0	56	0	9	0	0	9	0	43	0	0	43	139
9:15 AM	0	29	0	0	29	0	43	0	0	43	0	5	0	0	5	0	25	0	0	25	102
Total	0	60	0	0	60	0	99	0	0	99	0	14	0	0	14	0	68	0	0	68	241
Grand Total	0	763	0	0	763	0	857	0	0	857	0	342	0	0	342	0	418	0	0	418	2380
Approach %	0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			
Total %	0.0%	32.1%	0.0%		32.1%	0.0%	36.0%	0.0%		36.0%	0.0%	14.4%	0.0%		14.4%	0.0%	17.6%	0.0%		17.6%	

Start Date **11/01/2005**
Start Time **6:30**
Site Code **3 - Parking Access on North Shore Drive between Reesdale Street and Sproat Way**

Street Name	From North: N/A					From East: North Shore Dr. (one-way EB/SB)					From South: Parking Lot Exit					From West: North Shore Dr. (one-wayEB/ SB)					Int. Totals
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	
6:30 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	127	118	0	0	245	252
6:45 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	53	124	0	0	177	181
Total	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	180	242	0	0	422	433
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	66	145	0	0	211	215
7:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	61	168	0	0	229	233
7:30 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	49	224	0	0	273	278
7:45 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	37	200	0	0	237	241
Total	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	213	737	0	0	950	967
8:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	41	157	0	0	198	202
8:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	27	148	0	0	175	179
8:30 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	19	170	0	0	189	192
8:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	10	126	0	0	136	139
Total	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	97	601	0	0	698	712
9:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	18	96	0	0	114	117
9:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	8	84	0	0	92	93
Total	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	26	180	0	0	206	210
Grand Total	0	0	0	0	0	0	0	0	0	0	46	0	0	0	46	516	1760	0	0	2276	2322
Approach %	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			100.0%	0.0%	0.0%			22.7%	77.3%	0.0%			
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	2.0%	0.0%	0.0%		2.0%	22.2%	75.8%	0.0%		98.0%	

Start Date **10/27/2005**
Start Time **6:30**
Site Code **4 - North Shore Drive and Sproat Way**

Street Name	From North: N/A					From East: North Shore Dr. (one-way EB)					From South: Parking Lot Exit					From West: North Shore Dr. (two-way)					Int. Totals
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	
6:30 AM	0	0	0	0	0	0	0	0	0	0	6	1	0	0	7	0	70	9	0	79	86
6:45 AM	0	0	0	0	0	1	0	0	0	1	5	0	0	0	5	0	109	10	0	119	125
Total	0	0	0	0	0	1	0	0	0	1	11	1	0	0	12	0	179	19	0	198	211
7:00 AM	0	0	0	0	0	3	0	0	0	3	2	1	0	0	3	0	108	12	0	120	126
7:15 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	155	22	0	177	183
7:30 AM	0	0	0	0	0	1	0	0	0	1	3	1	0	0	4	0	196	16	0	212	217
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	139	41	0	180	182
Total	0	0	0	0	0	4	0	0	0	4	13	2	0	0	15	0	598	91	0	689	708
8:00 AM	0	0	0	0	0	0	0	0	0	0	4	1	0	0	5	0	146	15	0	161	166
8:15 AM	0	0	0	0	0	1	0	0	0	1	5	0	0	0	5	0	142	21	0	163	169
8:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	109	29	0	138	142
8:45 AM	0	0	0	0	0	2	0	0	0	2	5	0	0	0	5	0	110	22	0	132	139
Total	0	0	0	0	0	3	0	0	0	3	18	1	0	0	19	0	507	87	0	594	616
9:00 AM	0	0	0	0	0	4	0	0	0	4	3	0	0	0	3	0	97	18	0	115	122
9:15 AM	0	0	0	0	0	1	0	1	0	2	2	0	0	0	2	0	65	20	0	85	89
Total	0	0	0	0	0	5	0	1	0	6	5	0	0	0	5	0	162	38	0	200	211
Grand Total	0	0	0	0	0	13	0	1	0	14	47	4	0	0	51	0	1446	235	0	1681	1746
Approach %	0.0%	0.0%	0.0%			92.9%	0.0%	7.1%			92.2%	7.8%	0.0%			0.0%	86.0%	14.0%			
Total %	0.0%	0.0%	0.0%		0.0%	0.7%	0.0%	0.1%		0.8%	2.7%	0.2%	0.0%		2.9%	0.0%	82.8%	13.5%		96.3%	

Start Date 10/27/2005
Start Time 6:30
Site Code 5 - North Shore Drive and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: N/A					From South: Norht Shore Dr.					From West: North Shore Dr.					Int. Totals
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	
6:30 AM	1	35	0	0	36	0	0	0	0	0	0	2	0	0	2	32	0	52	1	85	123
6:45 AM	0	32	0	0	32	0	0	0	0	0	0	8	0	0	8	55	0	51	1	107	147
Total	1	67	0	0	68	0	0	0	0	0	0	10	0	0	10	87	0	103	2	190	268
7:00 AM	4	45	0	0	49	0	0	0	0	0	0	1	1	0	2	55	0	70	0	125	176
7:15 AM	1	39	0	0	40	0	0	0	0	0	0	2	0	0	2	76	0	76	0	152	194
7:30 AM	3	53	0	0	56	0	0	0	0	0	0	5	1	0	6	122	0	76	0	198	260
7:45 AM	1	37	0	0	38	0	0	0	0	0	0	2	0	0	2	82	0	64	0	146	186
Total	9	174	0	0	183	0	0	0	0	0	0	10	2	0	12	335	0	286	0	621	816
8:00 AM	2	47	0	0	49	0	0	0	0	0	0	1	0	0	1	69	0	82	0	151	201
8:15 AM	2	51	0	0	53	0	0	0	0	0	0	3	0	0	3	80	0	73	0	153	209
8:30 AM	3	47	0	0	50	0	0	0	0	0	0	5	1	0	6	45	0	70	0	115	171
8:45 AM	1	40	0	0	41	0	0	0	0	0	0	2	4	0	6	39	0	77	0	116	163
Total	8	185	0	0	193	0	0	0	0	0	0	11	5	0	16	233	0	302	0	535	744
9:00 AM	5	23	0	0	28	0	0	0	0	0	0	6	1	0	7	33	0	57	0	90	125
9:15 AM	1	28	0	0	29	0	0	0	0	0	0	3	0	0	3	24	0	37	0	61	93
Total	6	51	0	0	57	0	0	0	0	0	0	9	1	0	10	57	0	94	0	151	218
Grand Total	24	477	0	0	501	0	0	0	0	0	0	40	8	0	48	712	0	785	2	1499	2048
Approach %	4.8%	95.2%	0.0%			0.0%	0.0%	0.0%			0.0%	83.3%	16.7%			47.5%	0.0%	52.4%			
Total %	1.2%	23.3%	0.0%		24.5%	0.0%	0.0%	0.0%		0.0%	0.0%	2.0%	0.4%		2.3%	34.8%	0.0%	38.3%		73.2%	

Start Date 11/10/2005
Start Time 6:30
Site Code 6 - Reesdale Street and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: Reesdale St. (two-way)					From South: Allegheny Ave.					From West: Reesdale St. (one-way WB)					Int. Totals
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	
6:30 AM	9	3	4	0	16	61	84	22	0	167	9	20	4	0	33	0	0	0	0	0	216
6:45 AM	16	63	13	0	92	46	22	25	0	93	28	43	9	0	80	0	0	1	0	1	266
Total	25	66	17	0	108	107	106	47	0	260	37	63	13	0	113	0	0	1	0	1	482
7:00 AM	11	5	5	0	21	104	52	51	0	207	32	29	7	0	68	0	0	0	0	0	296
7:15 AM	9	6	5	0	20	83	68	38	0	189	35	48	9	0	92	0	0	0	0	0	301
7:30 AM	5	7	11	0	23	125	53	57	0	235	41	38	10	0	89	0	0	0	0	0	347
7:45 AM	10	4	10	0	24	117	41	55	0	213	28	43	2	0	73	0	0	0	0	0	310
Total	35	22	31	0	88	429	214	201	0	844	136	158	28	0	322	0	0	0	0	0	1254
8:00 AM	7	5	8	0	20	90	32	42	0	164	38	44	6	0	88	0	0	0	0	0	272
8:15 AM	6	4	6	0	16	101	31	53	0	185	31	38	4	0	73	0	0	0	0	0	274
8:30 AM	10	9	7	0	26	99	59	44	0	202	48	35	12	0	95	0	0	0	0	0	323
8:45 AM	8	5	5	0	18	99	45	39	0	183	32	27	10	0	69	0	0	0	0	0	270
Total	31	23	26	0	80	389	167	178	0	734	149	144	32	0	325	0	0	0	0	0	1139
9:00 AM	3	5	5	0	13	69	24	24	0	117	12	42	5	0	59	0	0	0	0	0	189
9:15 AM	7	10	7	0	24	87	33	21	0	141	16	29	3	0	48	0	0	0	0	0	213
Total	10	15	12	0	37	156	57	45	0	258	28	71	8	0	107	0	0	0	0	0	402
Grand Total	101	126	86	0	313	1081	544	471	0	2096	350	436	81	0	867	0	0	1	0	1	3277
Approach %	32.3%	40.3%	27.5%			51.6%	26.0%	22.5%			40.4%	50.3%	9.3%			0.0%	0.0%	100.0%			
Total %	3.1%	3.8%	2.6%		9.6%	33.0%	16.6%	14.4%		64.0%	10.7%	13.3%	2.5%		26.5%	0.0%	0.0%	0.0%		0.0%	

Start Date 10/27/2005
Start Time 6:30
Site Code 7 - Redge Avenue and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: Ridge Ave.					From South: Allegheny Ave.					From West: Ridge Ave.					Int. Totals
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	
6:30 AM	1	7	16	0	24	1	0	6	0	7	43	51	4	0	98	0	6	1	0	7	136
6:45 AM	3	10	16	0	29	1	2	6	0	9	48	54	2	0	104	0	6	0	0	6	148
Total	4	17	32	0	53	2	2	12	0	16	91	105	6	0	202	0	12	1	0	13	284
7:00 AM	1	8	26	0	35	1	1	6	0	8	58	62	7	0	127	0	6	3	0	9	179
7:15 AM	2	2	30	0	34	4	1	5	0	10	57	58	3	0	118	0	7	1	0	8	170
7:30 AM	7	10	34	0	51	0	1	2	0	3	91	72	3	0	166	1	12	2	0	15	235
7:45 AM	2	10	23	0	35	5	10	5	0	20	82	75	2	0	159	1	15	3	0	19	233
Total	12	30	113	0	155	10	13	18	0	41	288	267	15	0	570	2	40	9	0	51	817
8:00 AM	5	11	37	0	53	3	2	4	0	9	68	56	1	0	125	1	11	2	0	14	201
8:15 AM	4	15	40	0	59	5	2	5	0	12	44	71	1	0	116	0	10	3	0	13	200
8:30 AM	3	9	31	0	43	2	2	1	0	5	69	48	2	0	119	1	11	4	0	16	183
8:45 AM	4	8	46	0	58	2	3	2	0	7	58	48	2	0	108	2	8	5	0	15	188
Total	16	43	154	0	213	12	9	12	0	33	239	223	6	0	468	4	40	14	0	58	772
9:00 AM	9	9	41	0	59	4	4	0	0	8	67	34	1	0	102	1	8	2	0	11	180
9:15 AM	4	9	20	0	33	4	8	0	0	12	50	36	6	0	92	2	12	1	0	15	152
Total	13	18	61	0	92	8	12	0	0	20	117	70	7	0	194	3	20	3	0	26	332
Grand Total	45	108	360	0	513	32	36	42	0	110	735	665	34	0	1434	9	112	27	0	148	2205
Approach %	8.8%	21.1%	70.2%			29.1%	32.7%	38.2%			51.3%	46.4%	2.4%			6.1%	75.7%	18.2%			
Total %	2.0%	4.9%	16.3%		23.3%	1.5%	1.6%	1.9%		5.0%	33.3%	30.2%	1.5%		65.0%	0.4%	5.1%	1.2%		6.7%	

Start Date 10/05/2006
Start Time 6:30
Site Code 8 - Ridge Avenue at 65 interchange

Street Name	From North					From East: Ridge Ave.					From South					Right from Allegheny	From West: Ridge Ave.					Int. Totals
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Right	Thru	Left	Peds	App. Total	
6:30 AM	0	0	0	0	0	0	11	15	2	26	11	0	1	7	12	3	16	51	0	0	70	108
6:45 AM	0	0	0	0	0	0	7	22	2	29	9	0	0	3	9	0	16	51	0	0	67	105
Total	0	0	0	0	0	0	18	37	4	55	20	0	1	10	21	3	32	102	0	0	137	213
																					0	
7:00 AM	0	0	0	0	0	0	10	27	1	37	20	0	1	1	21	6	20	76	0	0	102	160
7:15 AM	0	0	0	0	0	0	14	43	3	57	31	0	0	0	31	4	32	91	0	0	127	215
7:30 AM	0	0	0	0	0	0	10	34	1	44	26	0	1	0	27	1	25	103	0	0	129	200
7:45 AM	0	0	0	0	0	0	15	25	0	40	25	0	1	0	26	6	20	91	0	0	117	183
Total	0	0	0	0	0	0	49	129	5	178	102	0	3	1	105	17	97	361	0	0	475	758
																					0	
8:00 AM	0	0	0	0	0	0	11	19	2	30	26	0	1	1	27	10	28	92	0	0	130	187
8:15 AM	0	0	0	0	0	0	8	28	0	36	23	0	1	1	24	2	27	71	0	0	100	160
8:30 AM	0	0	0	0	0	0	13	27	0	40	18	0	1	2	19	3	33	75	1	1	112	171
8:45 AM	0	0	0	0	0	0	17	31	2	48	18	0	1	2	19	14	34	99	0	0	147	214
Total	0	0	0	0	0	0	49	105	4	154	85	0	4	6	89	29	122	337	1	1	489	732
																					0	
9:00 AM	0	0	0	0	0	0	11	27	1	38	20	0	0	11	20	10	17	94	0	0	121	179
9:15 AM	0	0	0	0	0	0	16	31	1	47	18	0	2	9	20	17	26	70	0	1	113	180
Total	0	0	0	0	0	0	27	58	2	85	38	0	2	20	40	27	43	164	0	1	234	359
Grand Total	0	0	0	0	0	0	143	329	15	472	245	0	10	37	255	76	294	964	1	2	1335	2062
Approach %	0.0%	0.0%	0.0%			0.0%	30.3%	69.7%			96.1%	0.0%	3.9%			5.7%	22.0%	72.2%	0.1%			
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	6.9%	16.0%		22.9%	11.9%	0.0%	0.5%		12.4%	3.7%	14.3%	46.8%	0.0%		64.7%	

Start Date 10/05/2006
Start Time 6:30
Site Code 9 - West End Bridge at PA 65

Street Name	From North						From East: Western					From South					From West: West End Bridge					Int. Totals
Start Time	Right	Thru	Left	Peds	App. Total	Right	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
6:30 AM	0	0	1	0	1	7	5	30	0	0	42	15	141	55	1	211	0	66	123	0	189	443
6:45 AM	0	0	0	0	0	11	2	35	0	0	48	13	150	69	0	232	0	98	157	0	255	535
Total	0	0	1	0	1	18	7	65	0	0	90	28	291	124	1	443	0	164	280	0	444	978
											0										0	
7:00 AM	0	0	0	0	0	12	3	41	0	0	56	11	133	95	1	239	0	118	140	0	258	553
7:15 AM	0	0	0	0	0	15	0	37	0	0	52	14	107	83	0	204	0	126	137	1	263	519
7:30 AM	0	0	0	0	0	21	9	48	0	0	78	4	110	103	2	217	0	145	112	0	257	552
7:45 AM	0	0	4	0	4	15	5	35	0	0	55	18	151	131	0	300	0	151	142	2	293	652
Total	0	0	4	0	4	63	17	161	0	0	241	47	501	412	3	960	0	540	531	3	1071	2276
											0										0	
8:00 AM	0	0	0	0	0	26	4	45	0	0	75	21	116	78	1	215	0	103	117	0	220	510
8:15 AM	0	0	0	0	0	15	12	54	0	0	81	8	114	100	0	222	0	98	107	0	205	508
8:30 AM	0	0	0	0	0	24	6	39	0	0	69	12	59	75	0	146	0	114	97	2	211	426
8:45 AM	0	0	0	0	0	20	12	47	0	2	79	22	95	66	0	183	0	108	96	0	204	466
Total	0	0	0	0	0	85	34	185	0	2	304	63	384	319	1	766	0	423	417	2	840	1910
											0										0	
9:00 AM	0	0	0	0	0	13	10	42	0	0	65	23	83	57	0	163	0	99	111	1	210	438
9:15 AM	0	0	0	0	0	20	12	41	0	0	73	16	59	54	0	129	0	105	81	1	186	388
Total	0	0	0	0	0	33	22	83	0	0	138	39	142	111	0	292	0	204	192	2	396	826
Grand Total	0	0	5	0	5	199	80	494	0	2	773	177	1318	966	5	2461	0	1331	1420	7	2751	5990
Approach %	0.0%	0.0%	100.0%			25.7%	10.3%	63.9%	0.0%			7.2%	53.6%	39.3%			0.0%	48.4%	51.6%			
Total %	0.0%	0.0%	0.1%		0.1%	7.2%	1.3%	8.2%	0.0%		12.9%	3.0%	22.0%	16.1%		41.1%	0.0%	22.2%	23.7%		45.9%	

Start Date 10/05/2006
Start Time 6:30
Site Code 10 - Western Ave at Fulton Ave

Street Name	From North: Fulton					From East: Western					From South: Fulton					From West: Western					Int. Totals
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	
6:30 AM	5	0	1	0	6	0	34	0	0	34	0	1	11	0	12	93	5	0	0	98	150
6:45 AM	10	0	2	0	12	1	27	3	0	31	1	1	21	0	23	82	8	0	0	90	156
Total	15	0	3	0	18	1	61	3	0	65	1	2	32	0	35	175	13	0	0	188	306
																				0	
7:00 AM	9	0	0	0	9	1	43	0	0	44	5	1	14	0	20	109	15	0	0	124	197
7:15 AM	6	0	3	0	9	2	50	0	0	52	7	3	16	0	26	114	24	0	0	138	225
7:30 AM	14	0	4	0	18	1	62	0	0	63	2	5	22	0	29	127	15	0	0	142	252
7:45 AM	3	1	5	0	9	2	64	0	0	66	7	3	25	0	35	155	15	0	0	170	280
Total	32	1	12	0	45	6	219	0	0	225	21	12	77	0	110	505	69	0	0	574	954
																				0	
8:00 AM	10	0	3	1	13	0	51	0	0	51	7	3	23	0	33	121	10	0	0	131	228
8:15 AM	10	1	4	0	15	3	44	0	0	47	2	3	20	0	25	121	7	0	0	128	215
8:30 AM	4	2	8	0	14	2	52	0	0	54	3	1	22	0	26	100	4	0	0	104	198
8:45 AM	9	0	8	0	17	2	58	0	0	60	3	4	33	0	40	133	10	2	0	145	262
Total	33	3	23	1	59	7	205	0	0	212	15	11	98	0	124	475	31	2	0	508	903
																				0	
9:00 AM	4	0	2	0	6	0	45	0	0	45	0	0	17	0	17	125	6	2	0	133	201
9:15 AM	5	0	3	0	8	1	68	0	0	69	2	4	14	0	20	121	5	6	0	132	229
Total	9	0	5	0	14	1	113	0	0	114	2	4	31	0	37	246	11	8	0	265	430
Grand Total	89	4	43	1	136	15	598	3	0	616	39	29	238	0	306	1401	124	10	0	1535	2593
Approach %	65.4%	2.9%	31.6%			2.4%	97.1%	0.5%			12.7%	9.5%	77.8%			91.3%	8.1%	0.7%			
Total %	3.4%	0.2%	1.7%		5.2%	0.6%	23.1%	0.1%		23.8%	1.5%	1.1%	9.2%		11.8%	54.0%	4.8%	0.4%		59.2%	

Start Date 10/26/2005
Start Time 15:30
Site Code 1 - Fontella Street and Ridge Avenue

Street Name	From North: N/A					From East: Ridge Ave.					From South: Fontella St.					From West: Ridge Ave. (one-way Westbound)					Int. Total
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	
3:30 PM	0	0	0	0	0	0	40	0	0	40	17	0	53	0	70	0	0	0	0	0	110
3:45 PM	0	0	0	0	0	1	30	0	0	31	9	0	41	0	50	0	0	0	0	0	81
Total	0	0	0	0	0	1	70	0	0	71	26	0	94	0	120	0	0	0	0	0	191
4:00 PM	0	0	0	0	0	0	26	0	0	26	27	0	61	0	88	0	0	0	0	0	114
4:15 PM	0	0	0	0	0	0	28	0	0	28	18	0	77	0	95	0	0	0	0	0	123
4:30 PM	0	0	0	0	0	0	45	1	0	46	26	0	69	0	95	0	0	0	0	0	141
4:45 PM	0	0	0	0	0	0	17	0	0	17	22	0	62	0	84	0	0	0	0	0	101
Total	0	0	0	0	0	0	116	1	0	117	93	0	269	0	362	0	0	0	0	0	479
5:00 PM	0	0	0	0	0	0	21	0	0	21	33	0	77	0	110	0	0	0	0	0	131
5:15 PM	0	0	0	0	0	0	24	0	0	24	24	0	112	0	136	0	0	0	0	0	160
5:30 PM	0	0	0	0	0	0	20	0	0	20	16	0	63	0	79	0	0	0	0	0	99
5:45 PM	0	0	0	0	0	0	13	0	0	13	12	0	40	0	52	0	0	0	0	0	65
Total	0	0	0	0	0	0	78	0	0	78	85	0	292	0	377	0	0	0	0	0	455
6:00 PM	0	0	0	0	0	0	15	0	0	15	3	0	31	0	34	0	0	0	0	0	49
6:15 PM	0	0	0	0	0	0	19	0	0	19	4	0	32	0	36	0	0	0	0	0	55
Total	0	0	0	0	0	0	34	0	0	34	7	0	63	0	70	0	0	0	0	0	104
Grand Total	0	0	0	0	0	1	298	1	0	300	211	0	718	0	929	0	0	0	0	0	1229
Approach %	0.0%	0.0%	0.0%			0.3%	99.3%	0.3%			22.7%	0.0%	77.3%			0.0%	0.0%	0.0%			
Total %	0.0%	0.0%	0.0%		0.0%	0.1%	24.2%	0.1%		24.4%	17.2%	0.0%	58.4%		75.6%	0.0%	0.0%	0.0%		0.0%	

Start Date 11/10/2005
Start Time 15:30
Site Code 2 - Fontella Street, Reesdale Street and West End Bridge Ramp

Street Name	From North: SR 65					From East: West End Bridge					From South: Reesdale St. (heading N)					From West: Reesdale St. (heading S)					Int. Totals
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	
3:30 PM	1	10	0	0	11	0	0	0	0	0	0	52	7	0	59	28	14	0	0	42	112
3:45 PM	0	10	0	0	10	0	0	0	0	0	0	80	14	0	94	47	19	0	0	66	170
Total	1	20	0	0	21	0	0	0	0	0	0	132	21	0	153	75	33	0	0	108	282
4:00 PM	0	17	0	0	17	0	0	0	0	0	0	87	9	0	96	48	11	0	0	59	172
4:15 PM	0	11	0	0	11	0	0	0	0	0	0	94	10	0	104	45	20	0	0	65	180
4:30 PM	0	9	0	0	9	0	0	0	0	0	0	115	9	0	124	29	11	0	0	40	173
4:45 PM	0	14	0	0	14	0	0	0	0	0	0	134	9	0	143	89	9	0	0	98	255
Total	0	51	0	0	51	0	0	0	0	0	0	430	37	0	467	211	51	0	0	262	780
5:00 PM	1	10	0	0	11	0	0	0	0	0	0	147	6	0	153	42	9	0	0	51	215
5:15 PM	0	14	0	0	14	0	0	0	0	0	0	84	7	0	91	26	17	0	0	43	148
5:30 PM	0	15	0	0	15	0	0	0	0	0	0	58	3	0	61	33	17	0	0	50	126
5:45 PM	0	9	0	0	9	0	0	0	0	0	0	51	4	0	55	32	18	0	0	50	114
Total	1	48	0	0	49	0	0	0	0	0	0	340	20	0	360	133	61	0	0	194	603
6:00 PM	0	10	0	0	10	0	0	0	0	0	0	25	4	0	29	33	27	0	0	60	99
6:15 PM	0	14	0	0	14	0	0	0	0	0	0	23	6	0	29	20	14	0	0	34	77
Total	0	24	0	0	24	0	0	0	0	0	0	48	10	0	58	53	41	0	0	94	176
Grand Total	2	143	0	0	145	0	0	0	0	0	0	950	88	0	1038	472	186	0	0	658	1841
Approach %	1.4%	98.6%	0.0%			0.0%	0.0%	0.0%			0.0%	91.5%	8.5%			71.7%	28.3%	0.0%			
Total %	0.1%	7.8%	0.0%		7.9%	0.0%	0.0%	0.0%		0.0%	0.0%	51.6%	4.8%		56.4%	25.6%	10.1%	0.0%		35.7%	

Start Date **10/27/2005**
Start Time **15:30**
Site Code **3 - Parking Access on North Shore Drive between Reesdale Street and Sproat Way**

Street Name	From North: N/A					From East: North Shore Dr. (one-way EB/SB)					From South: Parking Lot Exit					From West: North Shore Dr. (one-wayEB/ SB)					Int. Totals
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	
3:30 PM	11	55	0	0	66	0	0	0	0	0	0	0	0	0	0	62	0	0	0	62	128
3:45 PM	7	70	0	0	77	0	0	0	0	0	0	0	1	0	1	76	0	0	0	76	154
Total	18	125	0	0	143	0	0	0	0	0	0	0	1	0	1	138	0	0	0	138	282
4:00 PM	6	76	0	0	82	0	0	0	0	0	0	0	0	0	0	104	0	0	0	104	186
4:15 PM	8	78	0	0	86	0	0	0	0	0	0	0	0	0	0	86	0	0	0	86	172
4:30 PM	5	44	0	0	49	0	0	0	0	0	0	0	0	0	0	61	0	0	0	61	110
4:45 PM	4	108	0	0	112	0	0	0	0	0	0	0	0	0	0	86	0	0	0	86	198
Total	23	306	0	0	329	0	0	0	0	0	0	0	0	0	0	337	0	0	0	337	666
5:00 PM	11	56	0	0	67	0	0	0	0	0	0	0	0	0	0	85	0	0	0	85	152
5:15 PM	7	57	0	0	64	0	0	0	0	0	0	0	0	0	0	54	0	0	0	54	118
5:30 PM	3	62	0	0	65	0	0	0	0	0	0	0	0	0	0	18	0	0	0	18	83
5:45 PM	4	52	0	0	56	0	0	0	0	0	0	0	0	0	0	38	0	0	0	38	94
Total	25	227	0	0	252	0	0	0	0	0	0	0	0	0	0	195	0	0	0	195	447
6:00 PM	3	63	0	0	66	0	0	0	0	0	0	0	0	0	0	13	0	0	0	13	79
6:15 PM	2	40	0	0	42	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	46
Total	5	103	0	0	108	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	125
Grand Total	71	761	0	0	832	0	0	0	0	0	0	0	1	0	1	687	0	0	0	687	1520
Approach %	8.5%	91.5%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	100.0%			100.0%	0.0%	0.0%			
Total %	4.7%	50.1%	0.0%		54.7%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.1%		0.1%	45.2%	0.0%	0.0%		45.2%	

Start Date 10/26/2005
Start Time 15:30
Site Code 4 - North Shore Drive and Sproat Way

Street Name	From North: N/A					From East: North Shore Dr. (one-way EB)					From South: Parking Lot Exit					From West: North Shore Dr. (two-way)					Int. Totals
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	
3:30 PM	0	0	0	0	0	4	0	0	0	4	25	32	0	0	57	0	43	15	0	58	119
3:45 PM	0	0	0	0	0	1	0	0	0	1	24	26	0	0	50	0	38	15	0	53	104
Total	0	0	0	0	0	5	0	0	0	5	49	58	0	0	107	0	81	30	0	111	223
4:00 PM	0	0	0	0	0	6	0	0	0	6	33	31	0	0	64	0	37	18	0	55	125
4:15 PM	0	0	0	0	0	1	0	0	0	1	40	27	0	0	67	0	51	18	0	69	137
4:30 PM	0	0	0	0	0	1	0	0	0	1	39	30	0	0	69	0	41	24	0	65	135
4:45 PM	0	0	0	0	0	6	0	0	0	6	28	24	0	0	52	0	51	19	0	70	128
Total	0	0	0	0	0	14	0	0	0	14	140	112	0	0	252	0	180	79	0	259	525
5:00 PM	0	0	0	0	0	14	0	1	0	15	31	39	0	0	70	0	62	35	0	97	182
5:15 PM	0	0	0	0	0	11	0	0	0	11	24	24	0	0	48	0	75	24	0	99	158
5:30 PM	0	0	0	0	0	11	0	0	0	11	28	10	0	0	38	0	59	19	0	78	127
5:45 PM	0	0	0	0	0	8	0	0	0	8	17	13	0	0	30	0	60	10	0	70	108
Total	0	0	0	0	0	44	0	1	0	45	100	86	0	0	186	0	256	88	0	344	575
6:00 PM	0	0	0	0	0	4	0	0	0	4	16	10	0	0	26	0	23	13	0	36	66
6:15 PM	0	0	0	0	0	1	0	1	0	2	9	7	0	0	16	0	30	10	0	40	58
Total	0	0	0	0	0	5	0	1	0	6	25	17	0	0	42	0	53	23	0	76	124
Grand Total	0	0	0	0	0	68	0	2	0	70	314	273	0	0	587	0	570	220	0	790	1447
Approach %	0.0%	0.0%	0.0%			97.1%	0.0%	2.9%			53.5%	46.5%	0.0%			0.0%	72.2%	27.8%			
Total %	0.0%	0.0%	0.0%		0.0%	4.7%	0.0%	0.1%		4.8%	21.7%	18.9%	0.0%		40.6%	0.0%	39.4%	15.2%		54.6%	

Start Date 11/03/2005
Start Time 6:30
Site Code 5 - North Shore Drive and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: N/A					From South: Norht Shore Dr.					From West: North Shore Dr.					Int. Totals
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	
3:30 PM	2	12	0	0	14	0	0	0	0	0	0	9	3	0	12	19	0	42	0	61	87
3:45 PM	2	11	0	0	13	0	0	0	0	0	0	6	1	0	7	22	0	47	0	69	89
Total	4	23	0	0	27	0	0	0	0	0	0	15	4	0	19	41	0	89	0	130	176
4:00 PM	0	17	0	0	17	0	0	0	0	0	0	17	4	0	21	25	0	45	0	70	108
4:15 PM	3	13	0	0	16	0	0	0	0	0	0	10	1	0	11	26	0	67	0	93	120
4:30 PM	1	10	0	0	11	0	0	0	0	0	0	10	2	0	12	22	0	45	0	67	90
4:45 PM	5	12	0	0	17	0	0	0	0	0	0	13	3	0	16	26	0	65	0	91	124
Total	9	52	0	0	61	0	0	0	0	0	0	50	10	0	60	99	0	222	0	321	442
5:00 PM	5	17	0	0	22	0	0	0	0	0	0	29	8	0	37	28	0	70	0	98	157
5:15 PM	7	27	0	0	34	0	0	0	0	0	0	19	10	0	29	34	0	53	0	87	150
5:30 PM	8	35	0	0	43	0	0	0	0	0	0	16	6	0	22	40	0	50	0	90	155
5:45 PM	11	44	0	0	55	0	0	0	0	0	0	10	1	0	11	20	0	64	0	84	150
Total	31	123	0	0	154	0	0	0	0	0	0	74	25	0	99	122	0	237	0	359	612
6:00 PM	2	16	0	0	18	0	0	0	0	0	0	12	4	0	16	16	0	38	0	54	88
6:15 PM	6	16	0	0	22	0	0	0	0	0	0	5	1	0	6	16	0	25	0	41	69
Total	8	32	0	0	40	0	0	0	0	0	0	17	5	0	22	32	0	63	0	95	157
Grand Total	52	230	0	0	282	0	0	0	0	0	0	156	44	0	200	294	0	611	0	905	1387
Approach %	18.4%	81.6%	0.0%			0.0%	0.0%	0.0%			0.0%	78.0%	22.0%			32.5%	0.0%	67.5%			
Total %	3.7%	16.6%	0.0%		20.3%	0.0%	0.0%	0.0%		0.0%	0.0%	11.2%	3.2%		14.4%	21.2%	0.0%	44.1%		65.2%	

Start Date 10/26/2005
Start Time 15:30
Site Code 6 - Reesdale Street and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: Reesdale St. (two-way)					From South: Allegheny Ave.					From West: Reesdale St. (one-way WB)					Int. Totals
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	
3:30 PM	5	4	7	0	16	69	10	10	0	89	9	48	2	0	59	0	0	0	0	0	164
3:45 PM	7	9	4	0	20	52	11	10	0	73	10	45	5	0	60	0	0	0	0	0	153
Total	12	13	11	0	36	121	21	20	0	162	19	93	7	0	119	0	0	0	0	0	317
4:00 PM	9	7	6	0	22	65	6	12	0	83	12	49	11	0	72	0	0	0	0	0	177
4:15 PM	5	12	10	0	27	69	14	5	0	88	16	51	6	0	73	0	0	0	0	0	188
4:30 PM	10	9	10	0	29	54	15	14	0	83	13	55	0	0	68	0	0	0	0	0	180
4:45 PM	5	4	8	0	17	81	19	19	0	119	24	67	6	0	97	0	0	0	0	0	233
Total	29	32	34	0	95	269	54	50	0	373	65	222	23	0	310	0	0	0	0	0	778
5:00 PM	10	10	10	0	30	87	22	20	0	129	19	75	5	0	99	0	0	0	0	0	258
5:15 PM	6	7	8	0	21	84	17	38	0	139	12	70	5	0	87	0	0	0	0	0	247
5:30 PM	10	14	6	0	30	75	14	36	0	125	10	61	4	0	75	0	0	0	0	0	230
5:45 PM	4	12	6	0	22	69	17	40	0	126	12	50	9	0	71	0	0	0	0	0	219
Total	30	43	30	0	103	315	70	134	0	519	53	256	23	0	332	0	0	0	0	0	954
6:00 PM	4	5	6	0	15	66	7	15	0	88	11	32	3	0	46	0	0	0	0	0	149
6:15 PM	5	5	6	0	16	85	12	12	0	109	11	31	5	0	47	0	0	0	0	0	172
Total	9	10	12	0	31	151	19	27	0	197	22	63	8	0	93	0	0	0	0	0	321
Grand Total	80	98	87	0	265	856	164	231	0	1251	159	634	61	0	854	0	0	0	0	0	2370
Approach %	30.2%	37.0%	32.8%			68.4%	13.1%	18.5%			18.6%	74.2%	7.1%			0.0%	0.0%	0.0%			
Total %	3.4%	4.1%	3.7%		11.2%	36.1%	6.9%	9.7%		52.8%	6.7%	26.8%	2.6%		36.0%	0.0%	0.0%	0.0%		0.0%	

Start Date 11/03/2005
Start Time 15:30
Site Code 7 - Redge Avenue and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: Ridge Ave.					From South: Allegheny Ave.					From West: Ridge Ave.					Int. Totals
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	
3:30 PM	7	10	64	0	81	6	19	5	0	30	36	45	5	0	86	0	8	5	0	13	210
3:45 PM	3	17	54	0	74	12	12	12	0	36	32	41	5	0	78	0	19	5	0	24	212
Total	10	27	118	0	155	18	31	17	0	66	68	86	10	0	164	0	27	10	0	37	422
4:00 PM	7	10	72	0	89	4	16	14	0	34	25	41	2	0	68	1	17	6	0	24	215
4:15 PM	3	12	58	0	73	4	12	8	0	24	37	50	4	0	91	2	16	2	0	20	208
4:30 PM	9	13	57	0	79	8	19	11	0	38	35	42	3	0	80	1	16	5	0	22	219
4:45 PM	7	8	46	0	61	14	22	9	0	45	39	43	1	0	83	1	13	5	0	19	208
Total	26	43	233	0	302	30	69	42	0	141	136	176	10	0	322	5	62	18	0	85	850
5:00 PM	2	8	39	0	49	3	20	7	0	30	36	49	2	0	87	0	15	3	0	18	184
5:15 PM	5	6	42	0	53	2	11	9	0	22	51	55	4	0	110	3	8	0	0	11	196
5:30 PM	2	4	38	0	44	7	13	7	0	27	44	61	3	0	108	1	8	2	0	11	190
5:45 PM	2	9	38	0	49	6	6	4	0	16	35	40	2	0	77	1	8	0	0	9	151
Total	11	27	157	0	195	18	50	27	0	95	166	205	11	0	382	5	39	5	0	49	721
6:00 PM	8	6	38	0	52	2	8	3	0	13	33	43	1	0	77	1	8	1	0	10	152
6:15 PM	3	2	24	0	29	4	3	5	0	12	20	40	1	0	61	0	4	1	0	5	107
Total	11	8	62	0	81	6	11	8	0	25	53	83	2	0	138	1	12	2	0	15	259
Grand Total	58	105	570	0	733	72	161	94	0	327	423	550	33	0	1006	11	140	35	0	186	2252
Approach %	7.9%	14.3%	77.8%			22.0%	49.2%	28.7%			42.0%	54.7%	3.3%			5.9%	75.3%	18.8%			
Total %	2.6%	4.7%	25.3%		32.5%	3.2%	7.1%	4.2%		14.5%	18.8%	24.4%	1.5%		44.7%	0.5%	6.2%	1.6%		8.3%	

Start Date 10/05/2006
Start Time 15:30
Site Code 8 - Ridge Avenue at 65 interchange

Street Name	From North					From East: Ridge Ave.					From South					Right from Alleghe ny	From West: Ridge Ave.					Int. Totals
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. To	Right	Thru	Left	Peds	App. T	Right	Right	Thru	Left	Peds	App. Total	
3:30 PM	0	0	0	0	0	0	28	55	0	83	14	0	1	2	15	22	56	44	0	0	122	220
3:45 PM	0	0	0	0	0	0	22	35	3	57	9	0	1	1	10	12	46	50	0	0	108	175
Total	0	0	0	0	0	0	50	90	3	140	23	0	2	3	25	34	102	94	0	0	230 0	395
4:00 PM	0	0	0	0	0	0	27	46	0	73	11	0	1	0	12	30	46	58	0	0	134	219
4:15 PM	0	0	0	0	0	0	29	37	0	66	12	0	3	0	15	27	34	58	0	0	119	200
4:30 PM	0	0	0	0	0	0	39	43	6	82	18	0	2	2	20	27	50	60	0	0	137	239
4:45 PM	0	0	0	0	0	0	27	35	1	62	13	0	2	0	15	29	33	66	0	0	128	205
Total	0	0	0	0	0	0	122	161	7	283	54	0	8	2	62	113	163	242	0	0	518 0	863
5:00 PM	0	0	0	0	0	0	26	45	0	71	14	0	3	1	17	43	46	65	0	1	154	242
5:15 PM	0	0	0	0	0	0	21	28	0	49	12	0	6	2	18	39	31	63	0	0	133	200
5:30 PM	0	0	0	0	0	0	10	25	0	35	22	0	0	0	22	26	25	62	0	0	113	170
5:45 PM	0	0	0	0	0	0	20	36	1	56	11	0	1	0	12	20	29	53	0	0	102	170
Total	0	0	0	0	0	0	77	134	1	211	59	0	10	3	69	128	131	243	0	1	502 0	782
6:00 PM	0	0	0	0	0	0	14	27	1	41	8	0	1	0	9	20	26	57	0	0	103	153
6:15 PM	0	0	0	0	0	0	9	31	0	40	9	0	1	0	10	14	29	30	0	0	73	123
Total	0	0	0	0	0	0	23	58	1	81	17	0	2	0	19	34	55	87	0	0	176	276
Grand Total	0	0	0	0	0	0	272	443	12	715	153	0	22	8	175	309	451	666	0	1	1117	2007
Approach %	0.0%	0.0%	0.0%			0.0%	38.0%	62.0%			87.4%	0.0%	12.6%			27.7%	40.4%	59.6%	0.0%			
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	13.6%	22.1%		35.6%	7.6%	0.0%	1.1%		8.7%	15.4%	22.5%	33.2%	0.0%		55.7%	

Start Date 10/05/2006
Start Time 15:30
Site Code 9 - West End Bridge at PA 65

Street Name	From North						From East: Western					From South					From West: West End Bridge					Int. Totals
Start Time	Right	Thru	Left	Peds	App. Total	Right	Right	Thru	Left	Peds	App. To	Right	Thru	Left	Peds	App. To	Right	Thru	Left	Peds	App. Total	
6:30 AM	0	0	0	0	0	45	28	161	0	0	234	23	52	171	0	246	0	47	91	0	138	618
6:45 AM	0	0	0	0	0	45	39	170	0	0	254	21	41	193	0	255	0	55	86	0	141	650
Total	0	0	0	0	0	90	67	331	0	0	488	44	93	364	0	501	0	102	177	0	279	1268
											0										0	
7:00 AM	0	0	0	0	0	47	27	158	0	0	232	15	62	196	0	273	0	41	111	0	152	657
7:15 AM	0	0	0	0	0	35	23	164	0	1	222	12	36	182	2	230	0	62	100	0	162	614
7:30 AM	0	0	0	0	0	70	25	189	0	0	284	17	35	211	0	263	0	69	87	0	156	703
7:45 AM	0	0	0	0	0	47	27	190	0	0	264	11	37	202	0	250	0	49	89	2	138	652
Total	0	0	0	0	0	199	102	701	0	1	1002	55	170	791	2	1016	0	221	387	2	608	2626
											0										0	
8:00 AM	0	0	0	0	0	59	36	229	0	0	324	19	30	158	2	207	0	78	94	0	172	703
8:15 AM	0	0	0	0	0	44	29	204	0	1	277	15	36	200	0	251	0	61	131	2	192	720
8:30 AM	0	0	0	0	0	37	13	102	0	0	152	20	38	262	0	320	0	73	122	0	195	667
8:45 AM	0	0	0	0	0	23	12	129	0	1	164	9	55	203	1	267	0	62	99	1	161	592
Total	0	0	0	0	0	163	90	664	0	2	917	63	159	823	3	1045	0	274	446	3	720	2682
											0										0	
9:00 AM	0	0	0	0	0	31	11	111	0	0	153	10	61	199	0	270	0	59	105	0	164	587
9:15 AM	0	0	0	0	0	15	18	76	0	0	109	15	52	151	0	218	0	45	77	0	122	449
Total	0	0	0	0	0	46	29	187	0	0	262	25	113	350	0	488	0	104	182	0	286	1036
Grand Total	0	0	0	0	0	498	288	1883	0	3	2171	187	535	2328	5	3050	0	701	1192	5	1893	7114
Approach %	0.0%	0.0%	0.0%			22.9%	13.3%	86.7%	0.0%			6.1%	17.5%	76.3%			0.0%	37.0%	63.0%			
Total %	0.0%	0.0%	0.0%		0.0%	26.3%	4.0%	26.5%	0.0%		30.5%	2.6%	7.5%	32.7%		42.9%	0.0%	9.9%	16.8%		26.6%	

Start Date 10/05/2006
Start Time 15:30
Site Code 10 - Western Ave at Fulton Ave

Street Name	From North: Fulton					From East: Western					From South: Fulton					From West: Western					Int. Totals
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. To	Right	Thru	Left	Peds	App. T	Right	Thru	Left	Peds	App. Total	
6:30 AM	17	0	5	0	22	1	133	0	0	134	7	2	82	0	91	0	73	4	0	77	324
6:45 AM	16	0	6	0	22	1	99	2	2	102	4	6	65	0	75	0	82	6	0	88	287
Total	33	0	11	0	44	2	232	2	2	236	11	8	147	0	166	0	155	10	0	165	611
																				0	
7:00 AM	9	0	1	0	10	1	154	0	2	155	4	2	97	0	103	0	80	4	0	84	352
7:15 AM	6	0	3	0	9	2	128	0	0	130	2	1	82	1	85	0	70	2	0	72	296
7:30 AM	13	0	2	0	15	0	139	0	3	139	1	2	119	0	122	0	67	2	0	69	345
7:45 AM	14	0	4	0	18	1	119	0	1	120	2	3	121	0	126	0	72	2	0	74	338
Total	42	0	10	0	52	4	540	0	6	544	9	8	419	1	436	0	289	10	0	299	1331
																				0	
8:00 AM	13	0	6	0	19	0	134	0	1	134	3	2	156	0	161	0	76	3	0	79	393
8:15 AM	9	0	1	3	10	1	119	0	0	120	0	2	117	0	119	0	68	2	0	70	319
8:30 AM	7	0	1	2	8	1	101	0	0	102	3	3	63	0	69	0	94	3	0	97	276
8:45 AM	7	0	3	0	10	1	81	0	0	82	4	0	60	0	64	0	65	3	0	68	224
Total	36	0	11	5	47	3	435	0	1	438	10	7	396	0	413	0	303	11	0	314	1212
																				0	
9:00 AM	8	0	2	1	10	0	78	0	0	78	1	0	48	2	49	0	57	2	0	59	196
9:15 AM	5	0	5	1	10	4	65	0	2	69	0	0	31	0	31	0	60	3	0	63	173
Total	13	0	7	2	20	4	143	0	2	147	1	0	79	2	80	0	117	5	0	122	369
Grand Total	124	0	39	7	163	13	1350	2	11	1365	31	23	1041	3	1095	0	864	36	0	900	3523
Approach %	76.1%	0.0%	23.9%			1.0%	98.9%	0.1%			2.8%	2.1%	95.1%			0.0%	96.0%	4.0%			
Total %	3.5%	0.0%	1.1%		4.6%	0.4%	38.3%	0.1%		38.7%	0.9%	0.7%	29.5%		31.1%	0.0%	24.5%	1.0%		25.5%	

Start Date 10/29/2005
Start Time 15:30
Site Code 1 - Fontella Street and Ridge Avenue

Street Name	From North: N/A					From East: Ridge Ave.					From South: Fontella St.					From West: Ridge Ave. (one-way Westbound)					Int. Totals
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	
3:30 PM	0	0	0	0	0	0	9	0	0	9	3	0	6	0	9	0	0	0	0	0	18
3:45 PM	0	0	0	0	0	0	14	0	0	14	4	0	10	0	14	0	0	0	0	0	28
Total	0	0	0	0	0	0	23	0	0	23	7	0	16	0	23	0	0	0	0	0	46
4:00 PM	0	0	0	0	0	0	12	0	0	12	6	0	19	0	25	0	0	0	0	0	37
4:15 PM	0	0	0	0	0	0	6	0	0	6	3	0	15	0	18	0	0	0	0	0	24
4:30 PM	0	0	0	0	0	0	7	0	0	7	5	0	7	0	12	0	0	0	0	0	19
4:45 PM	0	0	0	0	0	0	6	0	0	6	1	0	12	0	13	0	0	0	0	0	19
Total	0	0	0	0	0	0	31	0	0	31	15	0	53	0	68	0	0	0	0	0	99
5:00 PM	0	0	0	0	0	0	10	0	0	10	3	0	9	0	12	0	0	0	0	0	22
5:15 PM	0	0	0	0	0	0	9	0	0	9	5	0	3	0	8	0	0	0	0	0	17
5:30 PM	0	0	0	0	0	0	12	0	0	12	4	0	10	0	14	0	0	0	0	0	26
5:45 PM	0	0	0	0	0	0	11	0	0	11	4	0	6	0	10	0	0	0	0	0	21
Total	0	0	0	0	0	0	42	0	0	42	16	0	28	0	44	0	0	0	0	0	86
6:00 PM	0	0	0	0	0	0	6	0	0	6	5	0	2	0	7	0	0	0	0	0	13
6:15 PM	0	0	0	0	0	0	6	0	0	6	7	0	5	0	12	0	0	0	0	0	18
Total	0	0	0	0	0	0	12	0	0	12	12	0	7	0	19	0	0	0	0	0	31
Grand Total	0	0	0	0	0	0	108	0	0	108	50	0	104	0	154	0	0	0	0	0	262
Approach %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			32.5%	0.0%	67.5%			0.0%	0.0%	0.0%			
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	41.2%	0.0%		41.2%	19.1%	0.0%	39.7%		58.8%	0.0%	0.0%	0.0%		0.0%	

Start Date 10/29/2005
Start Time 15:30
Site Code 2 - Fontella Street, Reesdale Street and West End Bridge Ramp

Street Name	From North: SR 65					From East: West End Bridge					From South: Reesdale St. (heading N)					From West: Reesdale St. (heading S)					Int. Totals
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	
3:30 PM	1	12	0	0	13	0	0	0	0	0	0	12	5	0	17	8	10	0	0	18	48
3:45 PM	0	9	0	0	9	0	0	0	0	0	0	11	2	0	13	7	6	0	0	13	35
Total	1	21	0	0	22	0	0	0	0	0	0	23	7	0	30	15	16	0	0	31	83
4:00 PM	0	8	0	0	8	0	0	0	0	0	0	26	2	0	28	4	6	0	0	10	46
4:15 PM	0	10	0	0	10	0	0	0	0	0	0	15	1	0	16	7	8	0	0	15	41
4:30 PM	0	9	0	0	9	0	0	0	0	0	0	15	2	0	17	3	8	0	0	11	37
4:45 PM	0	7	0	0	7	0	0	0	0	0	0	18	3	0	21	6	9	0	0	15	43
Total	0	34	0	0	34	0	0	0	0	0	0	74	8	0	82	20	31	0	0	51	167
5:00 PM	0	8	0	0	8	0	0	0	0	0	0	14	2	0	16	4	8	0	0	12	36
5:15 PM	0	9	0	0	9	0	0	0	0	0	0	13	2	0	15	5	8	0	0	13	37
5:30 PM	0	12	0	0	12	0	0	0	0	0	0	24	3	0	27	9	8	0	0	17	56
5:45 PM	0	9	0	0	9	0	0	0	0	0	0	10	2	0	12	3	10	0	0	13	34
Total	0	38	0	0	38	0	0	0	0	0	0	61	9	0	70	21	34	0	0	55	163
6:00 PM	0	5	0	0	5	0	0	0	0	0	0	11	9	0	20	8	6	0	0	14	39
6:15 PM	0	7	0	0	7	0	0	0	0	0	0	8	3	0	11	10	12	0	0	22	40
Total	0	12	0	0	12	0	0	0	0	0	0	19	12	0	31	18	18	0	0	36	79
Grand Total	1	105	0	0	106	0	0	0	0	0	0	177	36	0	213	74	99	0	0	173	492
Approach %	0.9%	99.1%	0.0%			0.0%	0.0%	0.0%			0.0%	83.1%	16.9%			42.8%	57.2%	0.0%			
Total %	0.2%	21.3%	0.0%		21.5%	0.0%	0.0%	0.0%		0.0%	0.0%	36.0%	7.3%		43.3%	15.0%	20.1%	0.0%		35.2%	

Start Date 10/29/2005
Start Time 15:30
Site Code 3 - Parking Access on North Shore Drive between Reesdale Street and Sproat Way

Street Name	From North: N/A					From East: North Shore Dr. (one-way EB/SB)					From South: Parking Lot Exit					From West: North Shore Dr. (one-wayEB/ SB)					Int. Totals
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	
3:30 PM	0	21	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
3:45 PM	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Total	0	45	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
4:00 PM	0	18	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
4:15 PM	0	20	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
4:30 PM	0	22	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
4:45 PM	0	28	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Total	0	88	0	0	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88
5:00 PM	0	19	0	0	19	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	20
5:15 PM	0	19	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
5:30 PM	0	30	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
5:45 PM	0	23	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Total	0	91	0	0	91	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	92
6:00 PM	0	29	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
6:15 PM	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	25
Total	0	53	0	0	53	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	54
Grand Total	0	277	0	0	277	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	279
Approach %	0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
Total %	0.0%	99.3%	0.0%		99.3%	0.0%	0.4%	0.0%		0.4%	0.0%	0.0%	0.0%		0.0%	0.0%	0.4%	0.0%		0.4%	

Start Date 12/03/2005
Start Time 15:30
Site Code 4 - North Shore Drive and Sproat Way

Street Name	From North: N/A					From East: North Shore Dr. (one-way EB)					From South: Parking Lot Exit					From West: North Shore Dr. (two-way)					Int. Totals
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	
3:30 PM	0	0	0	0	0	4	0	0	0	4	4	2	0	0	6	0	41	4	0	45	55
3:45 PM	0	0	0	0	0	6	0	0	0	6	0	0	0	0	0	0	36	4	0	40	46
Total	0	0	0	0	0	10	0	0	0	10	4	2	0	0	6	0	77	8	0	85	101
4:00 PM	0	0	0	0	0	4	0	0	0	4	6	4	0	0	10	0	22	1	0	23	37
4:15 PM	0	0	0	0	0	9	0	0	0	9	2	0	0	0	2	0	20	2	0	22	33
4:30 PM	0	0	0	0	0	9	0	0	0	9	4	1	0	0	5	0	26	4	0	30	44
4:45 PM	0	0	0	0	0	3	0	0	0	3	2	3	0	0	5	0	39	3	0	42	50
Total	0	0	0	0	0	25	0	0	0	25	14	8	0	0	22	0	107	10	0	117	164
5:00 PM	0	0	0	0	0	8	1	0	0	9	2	0	0	0	2	0	43	1	0	44	55
5:15 PM	0	0	0	0	0	7	1	0	0	8	3	3	0	0	6	0	30	3	0	33	47
5:30 PM	0	0	0	0	0	3	0	0	0	3	7	2	0	0	9	0	59	2	0	61	73
5:45 PM	0	0	0	0	0	7	2	0	0	9	5	1	0	0	6	0	43	4	0	47	62
Total	0	0	0	0	0	25	4	0	0	29	17	6	0	0	23	0	175	10	0	185	237
6:00 PM	0	0	0	0	0	10	5	0	0	15	8	1	0	0	9	0	42	1	0	43	67
6:15 PM	0	0	0	0	0	4	0	0	0	4	2	0	0	0	2	0	35	8	0	43	49
Total	0	0	0	0	0	14	5	0	0	19	10	1	0	0	11	0	77	9	0	86	116
Grand Total	0	0	0	0	0	74	9	0	0	83	45	17	0	0	62	0	436	37	0	473	618
Approach %	0.0%	0.0%	0.0%			89.2%	10.8%	0.0%			72.6%	27.4%	0.0%			0.0%	92.2%	7.8%			
Total %	0.0%	0.0%	0.0%		0.0%	12.0%	1.5%	0.0%		13.4%	7.3%	2.8%	0.0%		10.0%	0.0%	70.6%	6.0%		76.5%	

Start Date 10/29/2005
Start Time 15:30
Site Code 5 - North Shore Drive and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: N/A					From South: Norht Shore Dr.					From West: North Shore Dr.					Int. Totals
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	
3:30 PM	0	19	0	0	19	0	1	0	0	1	0	23	2	0	25	12	0	13	0	25	70
3:45 PM	3	11	0	0	14	0	0	0	0	0	0	22	3	0	25	14	0	14	0	28	67
Total	3	30	0	0	33	0	1	0	0	1	0	45	5	0	50	26	0	27	0	53	137
4:00 PM	2	19	0	0	21	0	0	0	0	0	0	21	7	0	28	7	0	10	0	17	66
4:15 PM	3	13	0	0	16	0	0	0	0	0	0	18	1	0	19	10	0	12	0	22	57
4:30 PM	1	18	0	0	19	0	0	0	0	0	0	18	4	0	22	11	0	14	0	25	66
4:45 PM	1	27	0	0	28	0	0	0	0	0	0	16	2	0	18	13	0	16	0	29	75
Total	7	77	0	0	84	0	0	0	0	0	0	73	14	0	87	41	0	52	0	93	264
5:00 PM	1	17	0	0	18	0	0	0	0	0	0	26	4	0	30	18	0	10	0	28	76
5:15 PM	0	24	0	0	24	0	0	0	0	0	0	12	2	0	14	7	0	8	0	15	53
5:30 PM	2	38	0	0	40	0	0	0	0	0	1	18	1	0	20	10	0	16	1	27	87
5:45 PM	1	23	0	0	24	0	0	0	0	0	0	11	4	0	15	11	0	13	0	24	63
Total	4	102	0	0	106	0	0	0	0	0	1	67	11	0	79	46	0	47	1	94	279
6:00 PM	1	21	0	0	22	0	0	0	0	0	0	12	0	0	12	14	0	13	0	27	61
6:15 PM	4	14	0	0	18	0	0	0	0	0	0	13	1	0	14	11	0	15	0	26	58
Total	5	35	0	0	40	0	0	0	0	0	0	25	1	0	26	25	0	28	0	53	119
Grand Total	19	244	0	0	263	0	1	0	0	1	1	210	31	0	242	138	0	154	1	293	799
Approach %	7.2%	92.8%	0.0%			0.0%	100.0%	0.0%			0.4%	86.8%	12.8%			47.1%	0.0%	52.6%			
Total %	2.4%	30.5%	0.0%		32.9%	0.0%	0.1%	0.0%		0.1%	0.1%	26.3%	3.9%		30.3%	17.3%	0.0%	19.3%		36.7%	

Start Date 12/03/2005
Start Time 15:30
Site Code 6 - Reesdale Street and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: Reesdale St. (two-way)					From South: Allegheny Ave.					From West: Reesdale St. (one-way WB)					Int. Totals
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	
3:30 PM	0	29	0	0	29	72	31	8	0	111	5	22	2	0	29	0	0	0	0	0	169
3:45 PM	1	27	1	0	29	46	24	16	0	86	7	42	3	0	52	0	0	0	0	0	167
Total	1	56	1	0	58	118	55	24	0	197	12	64	5	0	81	0	0	0	0	0	336
4:00 PM	1	46	2	0	49	76	14	12	1	102	7	53	5	0	65	0	0	0	0	0	216
4:15 PM	0	39	6	0	45	62	11	9	0	82	7	34	4	0	45	0	0	0	0	0	172
4:30 PM	0	15	6	0	21	51	6	16	0	73	1	48	0	0	49	0	0	0	0	0	143
4:45 PM	0	22	2	0	24	61	4	6	0	71	1	28	0	0	29	0	0	0	0	0	124
Total	1	122	16	0	139	250	35	43	1	328	16	163	9	0	188	0	0	0	0	0	655
5:00 PM	0	27	23	0	50	48	10	4	0	62	16	16	0	0	32	0	0	0	0	0	144
5:15 PM	0	23	10	0	33	35	12	9	0	56	3	22	0	0	25	0	0	0	0	0	114
5:30 PM	0	7	3	0	10	33	13	10	0	56	5	29	1	0	35	0	0	0	0	0	101
5:45 PM	0	6	11	0	17	48	9	10	0	67	10	22	0	0	32	0	0	0	0	0	116
Total	0	63	47	0	110	164	44	33	0	241	34	89	1	0	124	0	0	0	0	0	475
6:00 PM	0	10	8	0	18	38	8	12	0	58	4	18	1	0	23	0	0	0	0	0	99
6:15 PM	0	13	3	0	16	26	5	3	0	34	2	24	2	0	28	0	0	0	0	0	78
Total	0	23	11	0	34	64	13	15	0	92	6	42	3	0	51	0	0	0	0	0	177
Grand Total	2	264	75	0	341	596	147	115	1	858	68	358	18	0	444	0	0	0	0	0	1643
Approach %	0.6%	77.4%	22.0%			69.5%	17.1%	13.4%			15.3%	80.6%	4.1%			0.0%	0.0%	0.0%			
Total %	0.1%	16.1%	4.6%		20.8%	36.3%	8.9%	7.0%		52.2%	4.1%	21.8%	1.1%		27.0%	0.0%	0.0%	0.0%		0.0%	

Start Date 11/03/2005
Start Time 15:30
Site Code 7 - Redge Avenue and Allegheny Avenue

Street Name	From North: Allegheny Ave.					From East: Ridge Ave.					From South: Allegheny Ave.					From West: Ridge Ave.					Int. Totals
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	
3:30 PM	7	10	64	0	81	6	19	5	0	30	36	45	5	0	86	0	8	5	0	13	210
3:45 PM	3	17	54	0	74	12	12	12	0	36	32	41	5	0	78	0	19	5	0	24	212
Total	10	27	118	0	155	18	31	17	0	66	68	86	10	0	164	0	27	10	0	37	422
4:00 PM	7	10	72	0	89	4	16	14	0	34	25	41	2	0	68	1	17	6	0	24	215
4:15 PM	3	12	58	0	73	4	12	8	0	24	37	50	4	0	91	2	16	2	0	20	208
4:30 PM	9	13	57	0	79	8	19	11	0	38	35	42	3	0	80	1	16	5	0	22	219
4:45 PM	7	8	46	0	61	14	22	9	0	45	39	43	1	0	83	1	13	5	0	19	208
Total	26	43	233	0	302	30	69	42	0	141	136	176	10	0	322	5	62	18	0	85	850
5:00 PM	2	8	39	0	49	3	20	7	0	30	36	49	2	0	87	0	15	3	0	18	184
5:15 PM	5	6	42	0	53	2	11	9	0	22	51	55	4	0	110	3	8	0	0	11	196
5:30 PM	2	4	38	0	44	7	13	7	0	27	44	61	3	0	108	1	8	2	0	11	190
5:45 PM	2	9	38	0	49	6	6	4	0	16	35	40	2	0	77	1	8	0	0	9	151
Total	11	27	157	0	195	18	50	27	0	95	166	205	11	0	382	5	39	5	0	49	721
6:00 PM	8	6	38	0	52	2	8	3	0	13	33	43	1	0	77	1	8	1	0	10	152
6:15 PM	3	2	24	0	29	4	3	5	0	12	20	40	1	0	61	0	4	1	0	5	107
Total	11	8	62	0	81	6	11	8	0	25	53	83	2	0	138	1	12	2	0	15	259
Grand Total	58	105	570	0	733	72	161	94	0	327	423	550	33	0	1006	11	140	35	0	186	2252
Approach %	7.9%	14.3%	77.8%			22.0%	49.2%	28.7%			42.0%	54.7%	3.3%			5.9%	75.3%	18.8%			
Total %	2.6%	4.7%	25.3%		32.5%	3.2%	7.1%	4.2%		14.5%	18.8%	24.4%	1.5%		44.7%	0.5%	6.2%	1.6%		8.3%	

Start Date 10/07/2006
Start Time 15:30
Site Code 8 - Ridge Avenue at 65 interchange

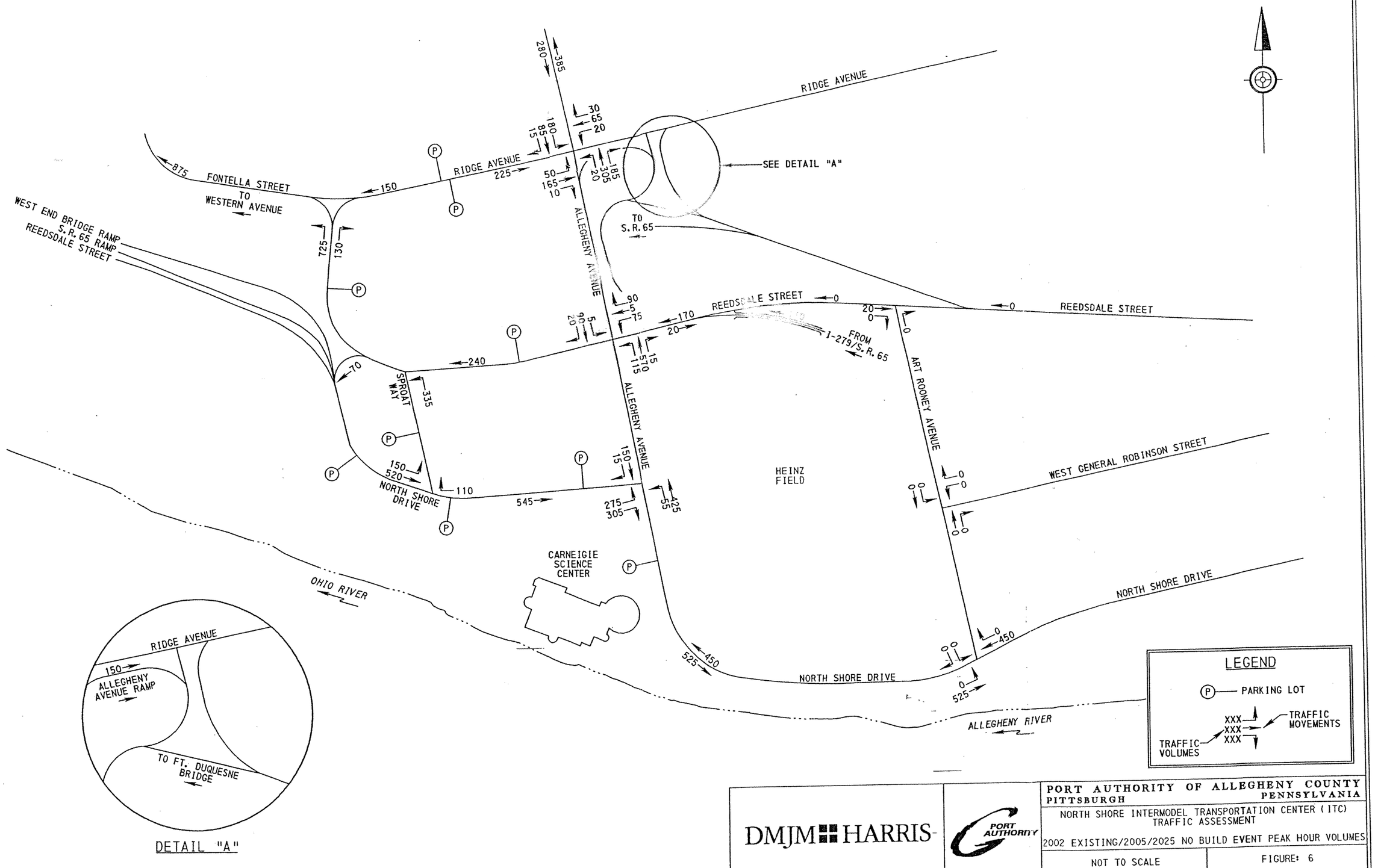
Street Name	From North					From East: Ridge Ave.					From South					Right from Allegheny	From West: Ridge Ave.					Int. Totals
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Right	Thru	Left	Peds	App. Total	
3:30 PM	0	0	0	1	0	0	7	19	0	26	2	0	0	0	2	18	27	23	0	0	68	96
3:45 PM	0	0	0	3	0	0	7	16	0	23	11	0	0	0	11	31	24	17	0	0	72	106
Total	0	0	0	4	0	0	14	35	0	49	13	0	0	0	13	49	51	40	0	0	140	202
																					0	
4:00 PM	1	0	0	1	1	0	6	26	0	32	7	0	0	0	7	26	25	21	0	0	72	112
4:15 PM	0	0	0	2	0	0	12	19	0	31	13	0	0	0	13	34	16	22	0	0	72	116
4:30 PM	0	0	0	3	0	0	7	12	0	19	9	0	0	0	9	28	20	21	0	0	69	97
4:45 PM	0	0	0	0	0	0	4	21	0	25	8	0	0	0	8	21	19	14	0	0	54	87
Total	1	0	0	6	1	0	29	78	0	107	37	0	0	0	37	109	80	78	0	0	267	412
																					0	
5:00 PM	0	0	0	0	0	0	5	22	0	27	8	0	0	0	8	27	28	13	0	0	68	103
5:15 PM	0	0	0	1	0	0	7	25	0	32	5	0	0	0	5	31	17	10	0	0	58	95
5:30 PM	0	0	0	0	0	0	4	19	0	23	5	0	0	0	5	25	12	13	0	0	50	78
5:45 PM	0	0	0	0	0	0	7	18	0	25	4	0	0	0	4	14	18	9	0	0	41	70
Total	0	0	0	1	0	0	23	84	0	107	22	0	0	0	22	97	75	45	0	0	217	346
																					0	
6:00 PM	0	0	0	0	0	0	7	19	0	26	5	0	0	0	5	10	13	14	0	0	37	68
6:15 PM	0	0	0	2	0	0	4	12	0	16	5	0	0	0	5	20	12	14	0	0	46	67
Total	0	0	0	2	0	0	11	31	0	42	10	0	0	0	10	30	25	28	0	0	83	135
Grand Total	1	0	0	13	1	0	77	228	0	305	82	0	0	0	82	285	231	191	0	0	422	810
Approach %	100.0%	0.0%	0.0%			0.0%	25.2%	74.8%			100.0%	0.0%	0.0%			67.5%	54.7%	45.3%	0.0%			
Total %	0.1%	0.0%	0.0%		0.1%	0.0%	9.5%	28.1%		37.7%	10.1%	0.0%	0.0%		10.1%	35.2%	28.5%	23.6%	0.0%		52.1%	

Start Date 10/07/2006
Start Time 15:30
Site Code 9 - West End Bridge at PA 65

Street Name	From North						From East: Western					From South					From West: West End Bridge					Int. Totals
Start Time	Right	Thru	Left	Peds	App. Total	Right	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
6:30 AM	0	5	0	0	5	14	8	41	0	0	63	8	24	75	2	107	0	34	55	0	89	264
6:45 AM	0	0	0	0	0	10	15	46	0	0	71	19	28	69	0	116	0	26	65	0	91	278
Total	0	5	0	0	5	24	23	87	0	0	134	27	52	144	2	223	0	60	120	0	180	542
											0										0	
7:00 AM	0	0	0	0	0	10	15	49	0	2	74	18	32	61	0	111	0	31	65	0	96	281
7:15 AM	0	0	0	0	0	14	12	52	0	2	78	17	18	62	0	97	0	40	57	0	97	272
7:30 AM	0	0	0	0	0	6	11	48	0	0	65	17	32	80	0	129	0	52	65	0	117	311
7:45 AM	0	0	0	0	0	11	12	32	0	0	55	17	26	52	0	95	0	34	49	0	83	233
Total	0	0	0	0	0	41	50	181	0	4	272	69	108	255	0	432	0	157	236	0	393	1097
											0										0	
8:00 AM	0	0	0	0	0	6	8	40	0	0	54	10	27	68	0	105	0	27	52	0	79	238
8:15 AM	0	0	0	0	0	10	6	53	0	0	69	15	27	49	0	91	0	39	59	0	98	258
8:30 AM	0	0	0	0	0	12	4	37	0	0	53	8	21	60	0	89	0	28	56	0	84	226
8:45 AM	0	0	0	0	0	5	5	38	0	0	48	12	21	51	0	84	0	28	60	1	88	220
Total	0	0	0	0	0	33	23	168	0	0	224	45	96	228	0	369	0	122	227	1	349	942
											0										0	
9:00 AM	0	0	0	0	0	8	6	47	0	0	61	7	11	51	1	69	0	30	60	0	90	220
9:15 AM	0	0	0	0	0	5	5	41	0	0	51	15	10	62	0	87	0	43	54	2	97	235
Total	0	0	0	0	0	13	11	88	0	0	112	22	21	113	1	156	0	73	114	2	187	455
Grand Total	0	5	0	0	5	111	107	524	0	4	631	163	277	740	3	1180	0	412	697	3	1109	2925
Approach %	0.0%	100.0%	0.0%			17.6%	17.0%	83.0%	0.0%			13.8%	23.5%	62.7%			0.0%	37.2%	62.8%			
Total %	0.0%	0.2%	0.0%		0.2%	10.0%	3.7%	17.9%	0.0%		21.6%	5.6%	9.5%	25.3%		40.3%	0.0%	14.1%	23.8%		37.9%	

Start Date 10/07/2006
Start Time 15:30
Site Code 10 - Western Ave at Fulton Ave

Street Name	From North: Fulton					From East: Western					From South: Fulton					From West: Western					Int. Totals
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	
6:30 AM	4	0	1	0	5	0	53	0	0	53	1	0	23	0	24	54	0	0	0	54	136
6:45 AM	2	0	2	0	4	1	68	0	0	69	1	2	10	0	13	47	0	0	0	47	133
Total	6	0	3	0	9	1	121	0	0	122	2	2	33	0	37	101	0	0	0	101	269
																				0	
7:00 AM	7	0	6	0	13	1	47	0	0	48	1	0	13	0	14	44	2	1	0	47	122
7:15 AM	1	0	1	0	2	1	49	0	0	50	0	1	21	0	22	58	4	2	0	64	138
7:30 AM	2	0	2	0	4	0	47	0	0	47	2	2	14	0	18	66	3	0	0	69	138
7:45 AM	3	0	1	0	4	1	30	0	0	31	1	0	19	0	20	56	0	0	0	56	111
Total	13	0	10	0	23	3	173	0	0	176	4	3	67	0	74	224	9	3	0	236	509
																				0	
8:00 AM	2	0	4	0	6	0	38	0	0	38	1	1	11	0	13	32	2	0	0	34	91
8:15 AM	7	0	5	0	12	0	49	0	0	49	1	1	19	0	21	46	5	0	0	51	133
8:30 AM	4	0	0	0	4	0	36	0	0	36	2	1	8	0	11	35	2	0	0	37	88
8:45 AM	4	0	1	0	5	0	33	0	0	33	0	1	11	0	12	39	3	0	0	42	92
Total	17	0	10	0	27	0	156	0	0	156	4	4	49	0	57	152	12	0	0	164	404
																				0	
9:00 AM	5	0	3	0	8	1	42	0	0	43	1	1	11	0	13	35	1	0	0	36	100
9:15 AM	3	0	0	0	3	0	42	0	0	42	0	0	13	0	13	50	1	0	0	51	109
Total	8	0	3	0	11	1	84	0	0	85	1	1	24	0	26	85	2	0	0	87	209
Grand Total	44	0	26	0	70	5	534	0	0	539	11	10	173	0	194	562	23	3	0	588	1391
Approach %	62.9%	0.0%	37.1%			0.9%	99.1%	0.0%			5.7%	5.2%	89.2%			95.6%	3.9%	0.5%			
Total %	3.2%	0.0%	1.9%		5.0%	0.4%	38.4%	0.0%		38.7%	0.8%	0.7%	12.4%		13.9%	40.4%	1.7%	0.2%		42.3%	



DMJM HARRIS

PORT AUTHORITY

PORT AUTHORITY OF ALLEGHENY COUNTY
PITTSBURGH PENNSYLVANIA

NORTH SHORE INTERMODEL TRANSPORTATION CENTER (ITC)
TRAFFIC ASSESSMENT

2002 EXISTING/2005/2025 NO BUILD EVENT PEAK HOUR VOLUMES

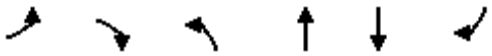
NOT TO SCALE

FIGURE: 6

04/01/2003

APPENDIX B

TRAFFIC ANALYSIS SUMMARIES

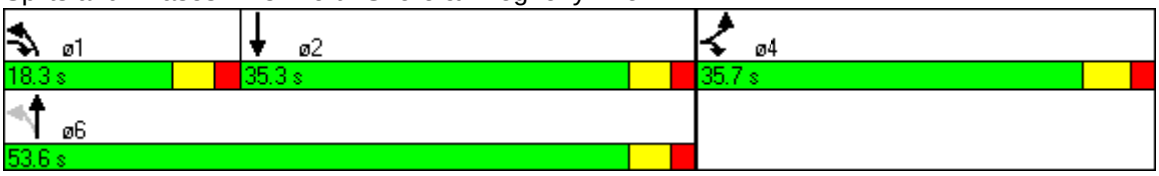


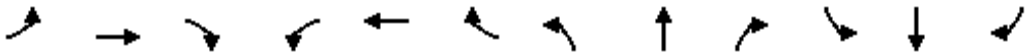
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor	1.00				1.00	
Frt	0.998	0.850			0.993	
Flt Protected	0.953			0.992		
Satd. Flow (prot)	3435	1441	0	3511	3510	0
Flt Permitted	0.953			0.955		
Satd. Flow (perm)	3435	1441	0	3380	3510	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	2	283			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	335	266	2	10	185	9
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	364	289	2	11	201	10
Lane Group Flow (vph)	370	283	0	13	211	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	35.7	54.0	18.3	53.6	35.3	0.0
Total Split (%)	40.0%	60.5%	20.5%	60.0%	39.5%	0.0%
Maximum Green (s)	30.0		13.0	48.3	30.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	12.2	23.2		22.5	11.4	
Actuated g/C Ratio	0.29	0.54		0.53	0.27	
v/c Ratio	0.38	0.31		0.01	0.22	
Control Delay	13.1	1.8		6.0	13.6	
Queue Delay	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.1	1.8		6.0	13.6	
LOS	B	A		A	B	
Approach Delay	8.2			6.0	13.6	
Approach LOS	A			A	B	
Queue Length 50th (ft)	37	0		1	20	
Queue Length 95th (ft)	64	23		4	48	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1757	1118		2414	1762	
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	0.21	0.25		0.01	0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 89.3			
Actuated Cycle Length: 42.7			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 27.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave



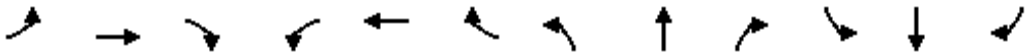


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.934			0.928				0.850		0.958	
Flt Protected	0.950			0.950				0.997		0.950		
Satd. Flow (prot)	1770	1740	0	1770	1729	0	0	1857	1583	1770	1785	0
Flt Permitted	0.742			0.741				0.989		0.537		
Satd. Flow (perm)	1382	1740	0	1380	1729	0	0	1842	1583	1000	1785	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			11				313		13	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	18	13	10	15	11	10	15	267	288	113	30	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	14	11	16	12	11	16	290	313	123	33	13
Lane Group Flow (vph)	20	25	0	16	23	0	0	306	313	123	46	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.04	0.04		0.04	0.04			0.29	0.30	0.21	0.04	
Control Delay	19.0	13.6		18.9	13.3			9.6	1.8	9.4	6.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	19.0	13.6		18.9	13.3			9.6	1.8	9.4	6.0	
LOS	B	B		B	B			A	A	A	A	
Approach Delay		16.0			15.6			5.7			8.5	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	7	5		6	4			74	0	28	7	
Queue Length 95th (ft)	23	22		19	21			120	32	57	21	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	449	573		449	569			1059	1043	575	1032	
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	0.04	0.04		0.04	0.04			0.29	0.30	0.21	0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 38.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave

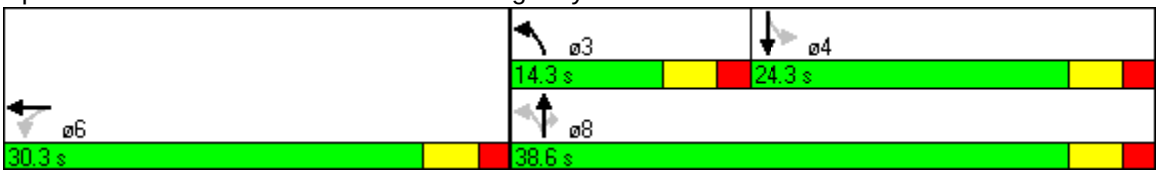


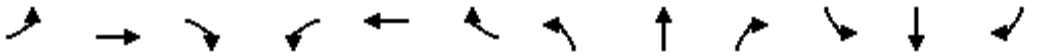
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.900				0.850		0.947	
Flt Protected				0.950			0.950				0.983	
Satd. Flow (prot)	0	0	0	1770	3185	0	1770	1863	1583	0	1734	0
Flt Permitted				0.950			0.654				0.867	
Satd. Flow (perm)	0	0	0	1770	3185	0	1218	1863	1583	0	1529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					466				148		38	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	201	214	429	28	158	136	31	22	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	218	233	466	30	172	148	34	24	38
Lane Group Flow (vph)	0	0	0	218	699	0	30	172	148	0	96	0
Turn Type				Perm			pm+pt		Perm	Perm		
Protected Phases					6		3	8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		3	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.0	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		9.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	30.3	30.3	0.0	14.3	38.6	38.6	24.3	24.3	0.0
Total Split (%)	0.0%	0.0%	0.0%	44.0%	44.0%	0.0%	20.8%	56.0%	56.0%	35.3%	35.3%	0.0%
Maximum Green (s)				25.0	25.0		9.0	33.3	33.3	19.0	19.0	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes					
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			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)				31.3	31.3		15.6	15.0	15.0		10.4	
Actuated g/C Ratio				0.57	0.57		0.25	0.27	0.27		0.19	
v/c Ratio				0.21	0.34		0.08	0.34	0.27		0.30	
Control Delay				8.3	3.4		12.7	14.6	3.7		15.1	
Queue Delay				0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay				8.3	3.4		12.7	14.6	3.7		15.1	
LOS				A	A		B	B	A		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					4.5			9.8			15.1	
Approach LOS					A			A			B	
Queue Length 50th (ft)				23	12		6	39	0		12	
Queue Length 95th (ft)				91	56		19	75	28		53	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				1016	2027		399	884	829		515	
Starvation Cap Reductn				0	0		0	0	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.21	0.34		0.08	0.19	0.18		0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 68.9			
Actuated Cycle Length: 54.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.6		Intersection LOS: A	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



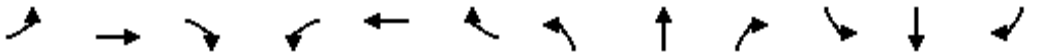


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.996			0.904				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3525	0	3433	1684	0	1770	0	1583
Flt Permitted	0.569						0.950			0.950		
Satd. Flow (perm)	1060	1863	0	0	3525	0	3433	1684	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			23				35
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			664			133	
Travel Time (s)		7.3			6.6			14.6			2.9	
Volume (vph)	69	505	0	0	219	6	77	12	21	12	0	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	549	0	0	238	7	84	13	23	13	0	35
Lane Group Flow (vph)	75	549	0	0	245	0	84	36	0	13	0	35
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		8
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		20.0		20.0
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	Min	Min			Min		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	47.6	47.6			47.6		9.1	9.1		8.0		8.0
Actuated g/C Ratio	0.69	0.69			0.69		0.13	0.13		0.11		0.11
v/c Ratio	0.10	0.43			0.10		0.19	0.15		0.07		0.18
Control Delay	6.3	7.8			5.1		20.8	15.0		24.3		12.1
Queue Delay	0.0	0.3			0.0		0.0	0.0		0.0		0.0
Total Delay	6.3	8.1			5.1		20.8	15.0		24.3		12.1
LOS	A	A			A		C	B		C		B
Approach Delay		7.8			5.1			19.1				
Approach LOS		A			A			B				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	53			9		8	3		3		0
Queue Length 95th (ft)	34	220			40		35	29		20		24
Internal Link Dist (ft)		253			222			584			53	
Turn Bay Length (ft)												
Base Capacity (vph)	773	1358			2570		1622	808		366		355
Starvation Cap Reductn	0	283			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	0.10	0.51			0.10		0.05	0.04		0.04		0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 69.2			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 8.8		Intersection LOS: A	
Intersection Capacity Utilization 42.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 19: Western & Fulton



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost 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
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.553					
Satd. Flow (perm)	0	0	0	3433	1863	1583	1030	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						51						18
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		141			147			141			211	
Travel Time (s)		3.1			3.2			3.1			4.6	
Volume (vph)	0	0	0	412	501	47	531	540	0	0	161	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	448	545	51	577	587	0	0	175	18
Lane Group Flow (vph)	0	0	0	448	545	51	577	587	0	0	175	18
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				12.0	12.0	12.0	2.0	6.0			6.0	6.0
Minimum Split (s)				21.5	21.5	21.5	10.0	21.3			23.0	23.0
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	20.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	4.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
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	C-Max			C-Max	C-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)				30.2	30.2	30.2	52.3	52.3			27.4	27.4
Actuated g/C Ratio				0.33	0.33	0.33	0.58	0.58			0.30	0.30
v/c Ratio				0.39	0.88	0.09	0.75	0.55			0.16	0.04
Control Delay				24.0	45.2	6.5	20.0	14.6			24.9	11.1
Queue Delay				0.0	0.0	0.0	0.0	0.2			0.0	0.0
Total Delay				24.0	45.2	6.5	20.0	14.8			24.9	11.1
LOS				C	D	A	C	B			C	B
Approach Delay					34.2			17.4			23.6	
Approach LOS					C			B			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)				101	295	0	207	208			41	0
Queue Length 95th (ft)				143	#480	25	310	307			68	17
Internal Link Dist (ft)		61			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	584	775	1077			1070	491
Starvation Cap Reductn				0	0	0	0	0			0	0
Spillback Cap Reductn				0	0	2	0	99			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.37	0.84	0.09	0.74	0.60			0.16	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 25.2		Intersection LOS: C	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

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

Splits and Phases: 22: Route 65 & Western

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	54	40	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	59	43	62
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	664			876		
pX, platoon unblocked						
vC, conflicting volume			0		59	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		59	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	94
cM capacity (veh/h)			1623		948	1085

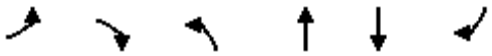
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	59	22	22	62
Volume Left	0	22	22	0
Volume Right	0	0	0	62
cSH	1700	948	948	1085
Volume to Capacity	0.03	0.02	0.02	0.06
Queue Length 95th (ft)	0	2	2	5
Control Delay (s)	0.0	8.9	8.9	8.5
Lane LOS		A	A	A
Approach Delay (s)	0.0	8.7		
Approach LOS		A		

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	361	97	129	49	0	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	392	105	140	53	0	111
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked						
vC, conflicting volume			498		752	445
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			498		752	445
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			87		100	80
cM capacity (veh/h)			1062		300	561

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	498	158	36	111
Volume Left	0	140	0	0
Volume Right	105	0	0	111
cSH	1700	1062	1700	561
Volume to Capacity	0.29	0.13	0.02	0.20
Queue Length 95th (ft)	0	12	0	19
Control Delay (s)	0.0	8.0	0.0	13.0
Lane LOS		A		B
Approach Delay (s)	0.0	6.6		13.0
Approach LOS				B

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		

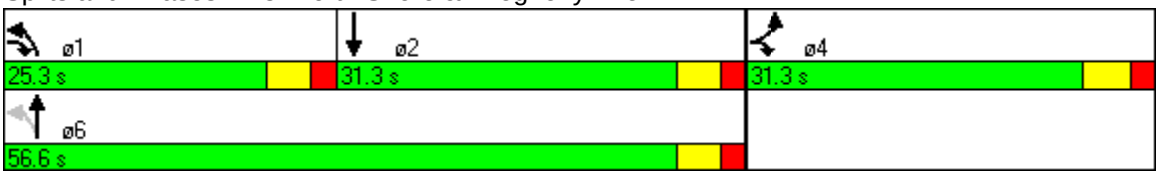


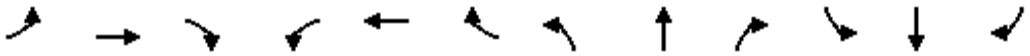
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99	
Frt		0.850			0.963	
Flt Protected	0.950			0.988		
Satd. Flow (prot)	3433	1441	0	3497	3387	0
Flt Permitted	0.950			0.930		
Satd. Flow (perm)	3433	1441	0	3291	3387	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		120			25	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	233	110	23	71	70	23
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	253	120	25	77	76	25
Lane Group Flow (vph)	253	120	0	102	101	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	31.3	56.6	25.3	56.6	31.3	0.0
Total Split (%)	35.6%	64.4%	28.8%	64.4%	35.6%	0.0%
Maximum Green (s)	25.6		20.0	51.3	26.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	10.5	24.0		23.9	17.6	
Actuated g/C Ratio	0.25	0.50		0.60	0.44	
v/c Ratio	0.29	0.16		0.05	0.07	
Control Delay	12.0	1.8		4.9	9.3	
Queue Delay	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	12.0	1.8		4.9	9.3	
LOS	B	A		A	A	
Approach Delay	8.7			4.9	9.3	
Approach LOS	A			A	A	
Queue Length 50th (ft)	24	0		4	6	
Queue Length 95th (ft)	45	15		14	21	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1623	1054		2617	2075	
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	0.16	0.11		0.04	0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 87.9			
Actuated Cycle Length: 39.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 23.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost 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
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.959				0.850		0.940	
Flt Protected	0.950			0.950				0.997		0.950		
Satd. Flow (prot)	1770	1842	0	1770	1786	0	0	1857	1583	1770	1751	0
Flt Permitted	0.688			0.711				0.991		0.614		
Satd. Flow (perm)	1282	1842	0	1324	1786	0	0	1846	1583	1144	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			25				175		25	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	15	60	5	36	72	27	10	189	161	184	35	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	65	5	39	78	29	11	205	175	200	38	25
Lane Group Flow (vph)	16	70	0	39	107	0	0	216	175	200	63	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.04	0.12		0.09	0.18			0.20	0.18	0.30	0.06	
Control Delay	18.9	18.6		19.6	15.9			8.8	1.8	10.3	5.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	18.9	18.6		19.6	15.9			8.8	1.8	10.3	5.3	
LOS	B	B		B	B			A	A	B	A	
Approach Delay		18.6			16.9			5.7			9.1	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	6	23		14	30			50	0	49	8	
Queue Length 95th (ft)	20	53		36	67			84	25	90	24	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	417	602		430	597			1061	985	658	1017	
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	0.04	0.12		0.09	0.18			0.20	0.18	0.30	0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 39.4%		ICU Level of Service A	
Analysis Period (min) 15			

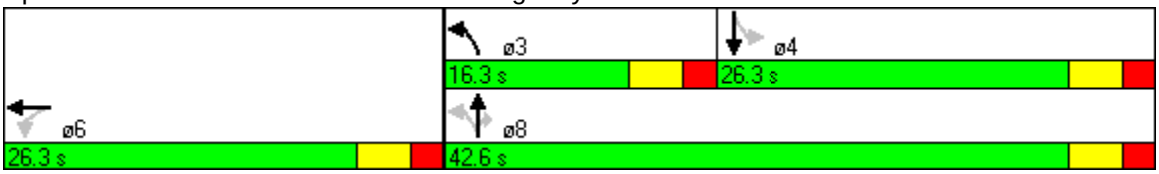
Splits and Phases: 12: Ridge Street & Allegheny Ave

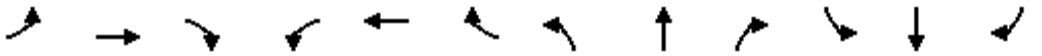
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.879				0.850		0.957	
Flt Protected				0.950			0.950				0.982	
Satd. Flow (prot)	0	0	0	1770	3111	0	1770	1863	1583	0	1751	0
Flt Permitted				0.950			0.649				0.828	
Satd. Flow (perm)	0	0	0	1770	3111	0	1209	1863	1583	0	1476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					333				74		34	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	91	73	306	16	267	68	36	31	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	99	79	333	17	290	74	39	34	34
Lane Group Flow (vph)	0	0	0	99	412	0	17	290	74	0	107	0
Turn Type				Perm			pm+pt		Perm	Perm		
Protected Phases					6		3	8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		3	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.0	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		9.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	26.3	26.3	0.0	16.3	42.6	42.6	26.3	26.3	0.0
Total Split (%)	0.0%	0.0%	0.0%	38.2%	38.2%	0.0%	23.7%	61.8%	61.8%	38.2%	38.2%	0.0%
Maximum Green (s)				21.0	21.0		11.0	37.3	37.3	21.0	21.0	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes					
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			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)				25.2	25.2		14.8	14.5	14.5		12.5	
Actuated g/C Ratio				0.53	0.53		0.26	0.30	0.30		0.26	
v/c Ratio				0.11	0.23		0.04	0.51	0.14		0.26	
Control Delay				8.2	2.6		12.1	15.3	3.7		12.2	
Queue Delay				0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay				8.2	2.6		12.1	15.4	3.7		12.2	
LOS				A	A		B	B	A		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					3.7			13.0			12.2	
Approach LOS					A			B			B	
Queue Length 50th (ft)				11	4		3	60	0		14	
Queue Length 95th (ft)				46	31		12	108	18		56	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				932	1796		420	1008	890		596	
Starvation Cap Reductn				0	0		0	64	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.11	0.23		0.04	0.31	0.08		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 68.9			
Actuated Cycle Length: 47.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 8.1		Intersection LOS: A	
Intersection Capacity Utilization 41.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



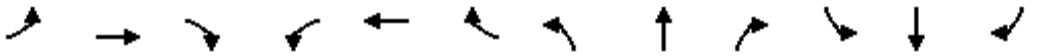


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.938				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3536	0	3433	1747	0	1770	0	1583
Flt Permitted	0.318						0.950			0.950		
Satd. Flow (perm)	592	1863	0	0	3536	0	3433	1747	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								7				53
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			658			207	
Travel Time (s)		7.3			6.6			14.5			4.6	
Volume (vph)	9	283	0	0	511	2	513	9	6	13	0	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	308	0	0	555	2	558	10	7	14	0	53
Lane Group Flow (vph)	10	308	0	0	557	0	558	17	0	14	0	53
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Minimum Split (s)	22.0	22.0			22.0		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	21.3	0.0	21.3
Total Split (%)	37.1%	37.1%	0.0%	0.0%	37.1%	0.0%	45.3%	45.3%	0.0%	17.6%	0.0%	17.6%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		16.3		16.3
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	41.0	41.0			41.0		51.0	51.0		17.3		17.3
Actuated g/C Ratio	0.34	0.34			0.34		0.42	0.42		0.14		0.14
v/c Ratio	0.05	0.49			0.47		0.39	0.02		0.06		0.20
Control Delay	28.1	35.1			33.1		25.3	15.2		45.8		14.1
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	28.1	35.1			33.1		25.3	15.2		45.8		14.1
LOS	C	D			C		C	B		D		B
Approach Delay		34.9			33.1			25.0				
Approach LOS		C			C			C				
Queue Length 50th (ft)	5	198			186		159	5		10		0
Queue Length 95th (ft)	19	290			243		207	20		31		39
Internal Link Dist (ft)		253			222			578			127	
Turn Bay Length (ft)												
Base Capacity (vph)	200	630			1195		1443	739		252		271
Starvation Cap Reductn	0	0			0		0	0		0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0		0	0		0		0
Storage Cap Reductn	0	0			0		0	0		0		0
Reduced v/c Ratio	0.05	0.49			0.47		0.39	0.02		0.06		0.20

Intersection Summary			
Area Type:	Other		
Cycle Length: 121.3			
Actuated Cycle Length: 121.3			
Offset: 21.3 (18%), Referenced to phase 2:EBWB and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 29.9		Intersection LOS: C	
Intersection Capacity Utilization 42.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Western & Fulton



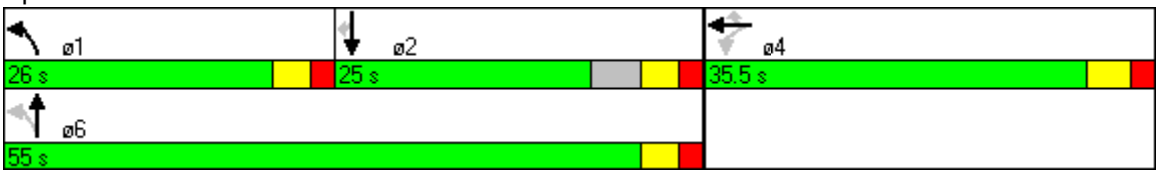
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.138					
Satd. Flow (perm)	0	0	0	3433	1863	1583	257	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						67						127
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		212			147			187			211	
Travel Time (s)		4.7			3.2			4.1			4.6	
Volume (vph)	0	0	0	771	138	62	401	257	0	0	812	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	838	150	67	436	279	0	0	883	127
Lane Group Flow (vph)	0	0	0	838	150	67	436	279	0	0	883	127
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Minimum Split (s)				21.5	21.5	21.5	9.3	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	21.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	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
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
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)				31.5	31.5	31.5	51.0	51.0			25.0	25.0
Actuated g/C Ratio				0.35	0.35	0.35	0.56	0.56			0.28	0.28
v/c Ratio				0.70	0.23	0.11	0.85	0.27			0.90	0.24
Control Delay				29.3	22.1	5.9	38.0	11.0			45.6	6.1
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				29.3	22.1	5.9	38.0	11.0			45.6	6.1
LOS				C	C	A	D	B			D	A
Approach Delay					26.8			27.4			40.6	
Approach LOS					C			C			D	
Queue Length 50th (ft)				219	63	0	190	80			265	0
Queue Length 95th (ft)				288	110	28	#363	126			#383	43
Internal Link Dist (ft)		132			67			107			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	595	513	1050			978	529
Starvation Cap Reductn				0	0	0	0	0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.70	0.23	0.11	0.85	0.27			0.90	0.24

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 32.0		Intersection LOS: C	
Intersection Capacity Utilization 76.7%		ICU Level of Service D	
Analysis Period (min) 15			

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

Splits and Phases: 23: Route 65 & Western



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	108	274	94
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	117	298	102
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	658			876		
pX, platoon unblocked						
vC, conflicting volume			0		117	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		117	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		66	91
cM capacity (veh/h)			1623		879	1085

Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	117	149	149	102
Volume Left	0	149	149	0
Volume Right	0	0	0	102
cSH	1700	879	879	1085
Volume to Capacity	0.07	0.17	0.17	0.09
Queue Length 95th (ft)	0	16	16	8
Control Delay (s)	0.0	9.9	9.9	8.7
Lane LOS		A	A	A
Approach Delay (s)	0.0	9.6		
Approach LOS		A		

Intersection Summary			
Average Delay	7.4		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	254	160	151	113	0	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	276	174	164	123	0	62
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			450		753	363
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			430		744	339
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			85		100	90
cM capacity (veh/h)			1086		287	633

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	450	205	82	62
Volume Left	0	164	0	0
Volume Right	174	0	0	62
cSH	1700	1086	1700	633
Volume to Capacity	0.26	0.15	0.05	0.10
Queue Length 95th (ft)	0	14	0	8
Control Delay (s)	0.0	7.4	0.0	11.3
Lane LOS		A		B
Approach Delay (s)	0.0	5.3		11.3
Approach LOS				B

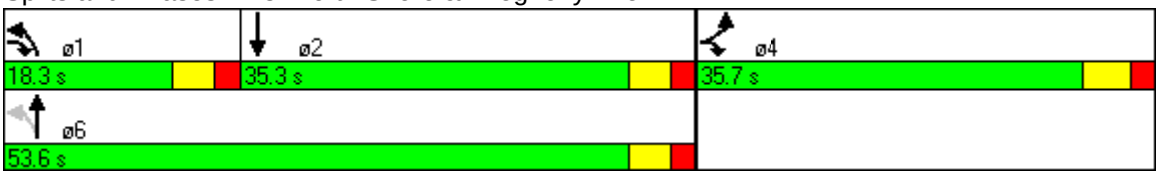
Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		

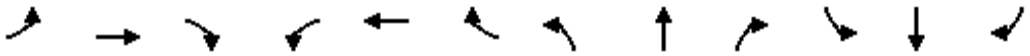
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					1.00	
Frt		0.850			0.993	
Flt Protected	0.950			0.992		
Satd. Flow (prot)	3433	1441	0	3511	3510	0
Flt Permitted	0.950			0.939		
Satd. Flow (perm)	3433	1441	0	3323	3510	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		46			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	53	42	14	74	78	4
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	46	15	80	85	4
Lane Group Flow (vph)	58	46	0	95	89	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	35.7	54.0	18.3	53.6	35.3	0.0
Total Split (%)	40.0%	60.5%	20.5%	60.0%	39.5%	0.0%
Maximum Green (s)	30.0		13.0	48.3	30.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	10.2	28.1		43.8	37.2	
Actuated g/C Ratio	0.16	0.38		0.74	0.63	
v/c Ratio	0.10	0.08		0.04	0.04	
Control Delay	11.2	2.4		3.1	7.3	
Queue Delay	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	11.2	2.4		3.1	7.3	
LOS	B	A		A	A	
Approach Delay	7.3			3.1	7.3	
Approach LOS	A			A	A	
Queue Length 50th (ft)	5	0		3	3	
Queue Length 95th (ft)	14	9		9	18	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1428	868		2841	2623	
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	0.04	0.05		0.03	0.03	

Intersection Summary			
Area Type:	Other		
Cycle Length: 89.3			
Actuated Cycle Length: 58.9			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.10			
Intersection Signal Delay: 5.9		Intersection LOS: A	
Intersection Capacity Utilization 20.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave



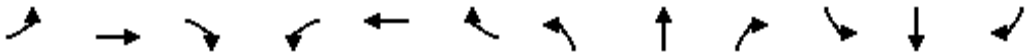


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.955				0.850		0.944	
Flt Protected	0.950			0.950				0.997		0.950		
Satd. Flow (prot)	1770	1844	0	1770	1779	0	0	1857	1583	1770	1758	0
Flt Permitted	0.687			0.710				0.990		0.627		
Satd. Flow (perm)	1280	1844	0	1323	1779	0	0	1844	1583	1168	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			29				150		28	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	18	62	5	43	70	30	10	176	138	233	43	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	67	5	47	76	33	11	191	150	253	47	28
Lane Group Flow (vph)	20	72	0	47	109	0	0	202	150	253	75	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.05	0.12		0.11	0.18			0.19	0.15	0.38	0.07	
Control Delay	19.1	18.6		19.9	15.4			8.7	1.9	11.3	5.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	19.1	18.6		19.9	15.4			8.7	1.9	11.3	5.4	
LOS	B	B		B	B			A	A	B	A	
Approach Delay		18.7			16.8			5.8			9.9	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	7	24		17	29			46	0	66	10	
Queue Length 95th (ft)	23	54		42	67			79	23	117	27	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	416	603		430	598			1060	974	672	1023	
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	0.05	0.12		0.11	0.18			0.19	0.15	0.38	0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave

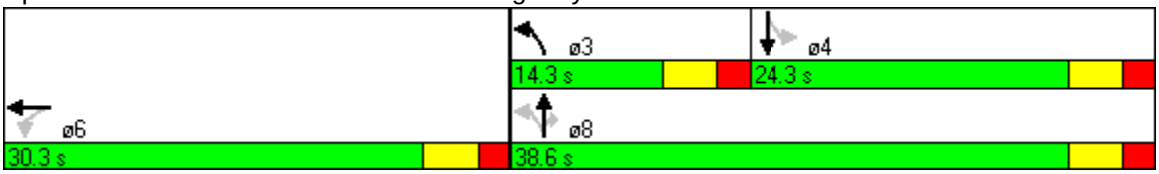


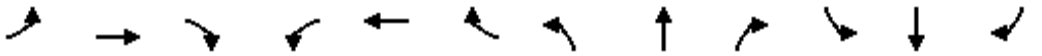
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.868				0.850		0.955	
Flt Protected				0.950			0.950				0.984	
Satd. Flow (prot)	0	0	0	1770	3072	0	1770	1863	1583	0	1750	0
Flt Permitted				0.950			0.647				0.903	
Satd. Flow (perm)	0	0	0	1770	3072	0	1205	1863	1583	0	1606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					290				59		33	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	48	36	267	10	62	54	30	30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	52	39	290	11	67	59	33	33	33
Lane Group Flow (vph)	0	0	0	52	329	0	11	67	59	0	99	0
Turn Type				Perm			pm+pt		Perm	Perm		
Protected Phases					6		3	8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		3	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.0	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		9.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	30.3	30.3	0.0	14.3	38.6	38.6	24.3	24.3	0.0
Total Split (%)	0.0%	0.0%	0.0%	44.0%	44.0%	0.0%	20.8%	56.0%	56.0%	35.3%	35.3%	0.0%
Maximum Green (s)				25.0	25.0		9.0	33.3	33.3	19.0	19.0	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes					
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			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)				42.9	42.9		13.3	13.5	13.5		10.9	
Actuated g/C Ratio				0.67	0.67		0.18	0.21	0.21		0.17	
v/c Ratio				0.04	0.15		0.04	0.18	0.16		0.34	
Control Delay				6.1	1.7		14.5	13.9	5.0		14.8	
Queue Delay				0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay				6.1	1.7		14.5	13.9	5.0		14.8	
LOS				A	A		B	B	A		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					2.3			10.1			14.8	
Approach LOS					A			B			B	
Queue Length 50th (ft)				4	1		2	14	0		14	
Queue Length 95th (ft)				27	23		10	35	18		55	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				1193	2165		323	804	717		505	
Starvation Cap Reductn				0	0		0	0	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.04	0.15		0.03	0.08	0.08		0.20	

Intersection Summary			
Area Type:	Other		
Cycle Length: 68.9			
Actuated Cycle Length: 63.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 28.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



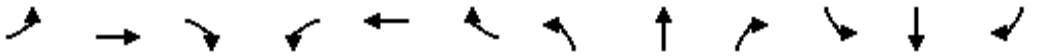


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.914				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3532	0	3433	1703	0	1770	0	1583
Flt Permitted	0.621						0.950			0.950		
Satd. Flow (perm)	1157	1863	0	0	3532	0	3433	1703	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			4				14
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			630			207	
Travel Time (s)		7.3			6.6			13.9			4.6	
Volume (vph)	9	224	0	0	173	3	67	3	4	10	0	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	243	0	0	188	3	73	3	4	11	0	14
Lane Group Flow (vph)	10	243	0	0	191	0	73	7	0	11	0	14
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Minimum Split (s)	22.0	22.0			22.0		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	41.0	41.0			41.0		51.0	51.0		16.0		16.0
Actuated g/C Ratio	0.34	0.34			0.34		0.42	0.42		0.13		0.13
v/c Ratio	0.03	0.38			0.16		0.05	0.01		0.05		0.06
Control Delay	26.7	32.1			27.8		20.5	15.0		46.1		21.2
Queue Delay	0.0	4.1			0.0		0.0	0.0		0.0		0.0
Total Delay	26.7	36.2			27.8		20.5	15.0		46.1		21.2
LOS	C	D			C		C	B		D		C
Approach Delay		35.9			27.8			20.0				
Approach LOS		D			C			B				
Queue Length 50th (ft)	5	147			55		17	1		8		0
Queue Length 95th (ft)	19	223			85		32	11		27		21
Internal Link Dist (ft)		253			222			550			127	
Turn Bay Length (ft)												
Base Capacity (vph)	395	637			1207		1459	726		236		223
Starvation Cap Reductn	0	311			0		0	0		0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0		0	0		0		0
Storage Cap Reductn	0	0			0		0	0		0		0
Reduced v/c Ratio	0.03	0.75			0.16		0.05	0.01		0.05		0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 30.6		Intersection LOS: C	
Intersection Capacity Utilization 27.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Western & Fulton

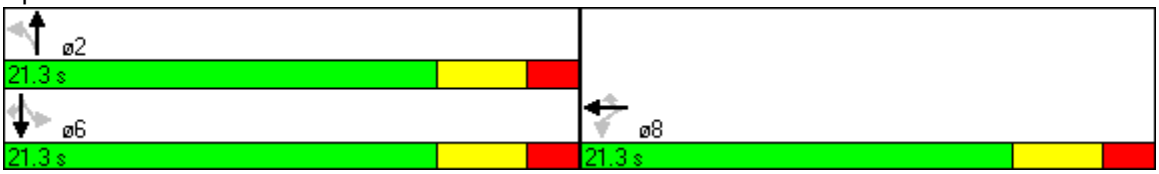


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	1863	3539	1583
Flt Permitted				0.950			0.628					
Satd. Flow (perm)	0	0	0	3433	1863	1583	1170	1863	0	1863	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						75						54
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		241			147			141			211	
Travel Time (s)		5.3			3.2			3.1			4.6	
Volume (vph)	0	0	0	255	108	69	236	157	0	0	181	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	277	117	75	257	171	0	0	197	54
Lane Group Flow (vph)	0	0	0	277	117	75	257	171	0	0	197	54
Turn Type				Perm		Perm	Perm			Perm		Perm
Protected Phases					8			2			6	
Permitted Phases				8		8	2			6		6
Minimum Split (s)				21.3	21.3	21.3	21.3	21.3		21.3	21.3	21.3
Total Split (s)	0.0	0.0	0.0	21.3	21.3	21.3	21.3	21.3	0.0	21.3	21.3	21.3
Total Split (%)	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%	50.0%	50.0%	50.0%
Maximum Green (s)				16.0	16.0	16.0	16.0	16.0		16.0	16.0	16.0
Yellow Time (s)				3.3	3.3	3.3	3.3	3.3		3.3	3.3	3.3
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lead/Lag												
Lead-Lag Optimize?												
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)				17.3	17.3	17.3	17.3	17.3			17.3	17.3
Actuated g/C Ratio				0.41	0.41	0.41	0.41	0.41			0.41	0.41
v/c Ratio				0.20	0.15	0.11	0.54	0.23			0.14	0.08
Control Delay				8.7	8.7	3.2	14.9	9.3			8.3	3.4
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				8.7	8.7	3.2	14.9	9.3			8.3	3.4
LOS				A	A	A	B	A			A	A
Approach Delay					7.8			12.7			7.2	
Approach LOS					A			B			A	
Queue Length 50th (ft)				21	17	0	46	26			15	0
Queue Length 95th (ft)				39	41	16	102	56			30	14
Internal Link Dist (ft)		161			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1394	757	687	475	757			1437	675
Starvation Cap Reductn				0	0	0	0	0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.20	0.15	0.11	0.54	0.23			0.14	0.08

Intersection Summary			
Area Type:	Other		
Cycle Length: 42.6			
Actuated Cycle Length: 42.6			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 35.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 23: Route 65 & Western



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	31	53	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	34	58	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	630			876		
pX, platoon unblocked						
vC, conflicting volume			0		34	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		34	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		94	98
cM capacity (veh/h)			1623		980	1085

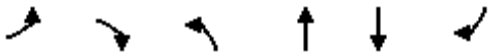
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	34	29	29	16
Volume Left	0	29	29	0
Volume Right	0	0	0	16
cSH	1700	980	980	1085
Volume to Capacity	0.02	0.03	0.03	0.02
Queue Length 95th (ft)	0	2	2	1
Control Delay (s)	0.0	8.8	8.8	8.4
Lane LOS		A	A	A
Approach Delay (s)	0.0	8.7		
Approach LOS		A		

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

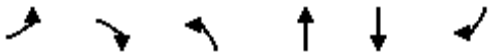
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	78	80	78	29	0	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	85	87	85	32	0	40
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked						
vC, conflicting volume			172		314	128
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			172		314	128
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		100	96
cM capacity (veh/h)			1403		615	898

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	172	95	21	40
Volume Left	0	85	0	0
Volume Right	87	0	0	40
cSH	1700	1403	1700	898
Volume to Capacity	0.10	0.06	0.01	0.04
Queue Length 95th (ft)	0	5	0	4
Control Delay (s)	0.0	6.9	0.0	9.2
Lane LOS		A		A
Approach Delay (s)	0.0	5.7		9.2
Approach LOS				A

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		



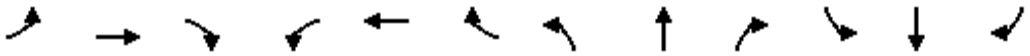
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor	1.00				1.00	
Frt	0.998	0.850			0.993	
Flt Protected	0.953			0.992		
Satd. Flow (prot)	3435	1441	0	3511	3510	0
Flt Permitted	0.953			0.955		
Satd. Flow (perm)	3435	1441	0	3380	3510	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	2	289			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	335	266	2	10	185	9
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	371	295	2	11	205	10
Lane Group Flow (vph)	377	289	0	13	215	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	35.7	54.0	18.3	53.6	35.3	0.0
Total Split (%)	40.0%	60.5%	20.5%	60.0%	39.5%	0.0%
Maximum Green (s)	30.0		13.0	48.3	30.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	12.5	23.5		22.5	11.4	
Actuated g/C Ratio	0.29	0.55		0.52	0.27	
v/c Ratio	0.38	0.31		0.01	0.23	
Control Delay	13.0	1.8		6.2	13.8	



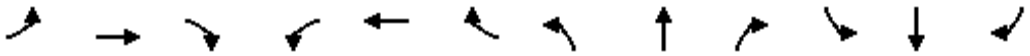
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	13.0	1.8		6.2	13.8	
LOS	B	A		A	B	
Approach Delay	8.1			6.2	13.8	
Approach LOS	A			A	B	
Queue Length 50th (ft)	37	0		1	21	
Queue Length 95th (ft)	65	23		4	49	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1756	1119		2404	1754	
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	0.21	0.26		0.01	0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 89.3			
Actuated Cycle Length: 43			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 28.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost 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
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.934			0.928				0.850		0.958	
Flt Protected	0.950			0.950				0.997		0.950		
Satd. Flow (prot)	1770	1740	0	1770	1729	0	0	1857	1583	1770	1785	0
Flt Permitted	0.742			0.741				0.989		0.531		
Satd. Flow (perm)	1382	1740	0	1380	1729	0	0	1842	1583	989	1785	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			11				319		13	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	18	13	10	15	11	10	15	267	288	113	30	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	20	14	11	17	12	11	17	296	319	125	33	13
Lane Group Flow (vph)	20	25	0	17	23	0	0	313	319	125	46	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.04	0.04		0.04	0.04			0.30	0.30	0.22	0.04	
Control Delay	19.0	13.6		18.9	13.3			9.6	1.8	9.5	6.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	19.0	13.6		18.9	13.3			9.6	1.8	9.5	6.0	
LOS	B	B		B	B			A	A	A	A	
Approach Delay		16.0			15.7			5.7			8.6	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	7	5		6	4			76	0	29	7	
Queue Length 95th (ft)	23	22		20	21			123	32	58	21	
Internal Link Dist (ft)		796			276			349			154	

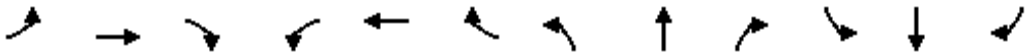


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	300											
Base Capacity (vph)	449	573		449	569			1059	1046	569	1032	
Starvation Cap Reductn	0	0		0	0			0	0	0	0	
Spillback Cap Reductn	0	0		0	0			0	0	0	0	
Storage Cap Reductn	0	0		0	0			0	0	0	0	
Reduced v/c Ratio	0.04	0.04		0.04	0.04			0.30	0.30	0.22	0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave

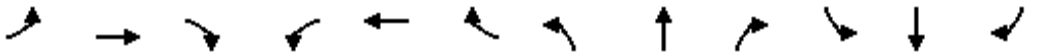
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.900				0.850		0.946	
Flt Protected				0.950			0.950				0.983	
Satd. Flow (prot)	0	0	0	1770	3185	0	1770	1863	1583	0	1732	0
Flt Permitted				0.950			0.652				0.867	
Satd. Flow (perm)	0	0	0	1770	3185	0	1215	1863	1583	0	1528	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					476				151		39	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	201	214	429	28	158	136	31	22	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	0	0	0	223	237	476	31	175	151	34	24	39
Lane Group Flow (vph)	0	0	0	223	713	0	31	175	151	0	97	0
Turn Type				Perm			pm+pt		Perm	Perm		
Protected Phases					6		3	8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		3	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.0	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		9.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	30.3	30.3	0.0	14.3	38.6	38.6	24.3	24.3	0.0
Total Split (%)	0.0%	0.0%	0.0%	44.0%	44.0%	0.0%	20.8%	56.0%	56.0%	35.3%	35.3%	0.0%
Maximum Green (s)				25.0	25.0		9.0	33.3	33.3	19.0	19.0	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes					
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			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)				31.3	31.3		15.6	15.1	15.1		10.5	
Actuated g/C Ratio				0.57	0.57		0.25	0.28	0.28		0.19	
v/c Ratio				0.22	0.35		0.08	0.34	0.28		0.30	
Control Delay				8.4	3.4		12.7	14.6	3.8		15.0	
Queue Delay				0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay				8.4	3.4		12.7	14.6	3.8		15.0	



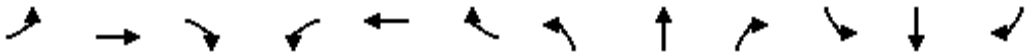
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				A	A		B	B	A		B	
Approach Delay					4.6			9.9			15.0	
Approach LOS					A			A			B	
Queue Length 50th (ft)				23	12		7	40	0		12	
Queue Length 95th (ft)				93	57		20	76	28		53	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				1014	2028		399	884	830		516	
Starvation Cap Reductn				0	0		0	0	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.22	0.35		0.08	0.20	0.18		0.19	

Intersection Summary			
Area Type:	Other		
Cycle Length: 68.9			
Actuated Cycle Length: 54.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 6.7		Intersection LOS: A	
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



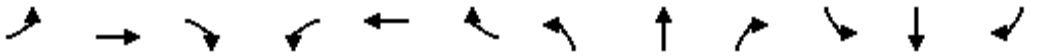
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.996			0.904				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3525	0	3433	1684	0	1770	0	1583
Flt Permitted	0.564						0.950			0.950		
Satd. Flow (perm)	1051	1863	0	0	3525	0	3433	1684	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			23				35
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			664			302	
Travel Time (s)		7.3			6.6			14.6			6.6	
Volume (vph)	69	505	0	0	219	6	77	12	21	12	0	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	76	560	0	0	243	7	85	13	23	13	0	35
Lane Group Flow (vph)	76	560	0	0	250	0	85	36	0	13	0	35
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		8
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	Min	Min			Min		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	48.2	48.2			48.2		9.1	9.1		8.0		8.0
Actuated g/C Ratio	0.69	0.69			0.69		0.13	0.13		0.11		0.11
v/c Ratio	0.10	0.43			0.10		0.19	0.15		0.07		0.18
Control Delay	6.3	7.8			5.1		21.2	15.2		24.7		12.2
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	6.3	7.8			5.1		21.2	15.2		24.7		12.2
LOS	A	A			A		C	B		C		B
Approach Delay		7.6			5.1			19.4				



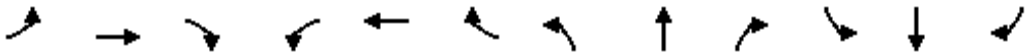
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			A			B				
Queue Length 50th (ft)	6	55			9		9	3		3		0
Queue Length 95th (ft)	34	227			41		36	29		20		24
Internal Link Dist (ft)		253			222			584			222	
Turn Bay Length (ft)												
Base Capacity (vph)	766	1358			2570		1613	804		362		352
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	0.10	0.41			0.10		0.05	0.04		0.04		0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 69.7			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 42.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 19: Western & Fulton



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost 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
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.551					
Satd. Flow (perm)	0	0	0	3433	1863	1583	1026	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						52						19
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		328			147			141			211	
Travel Time (s)		7.2			3.2			3.1			4.6	
Volume (vph)	0	0	0	412	501	47	531	540	0	0	161	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	0	0	0	457	555	52	589	599	0	0	178	19
Lane Group Flow (vph)	0	0	0	457	555	52	589	599	0	0	178	19
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				12.0	12.0	12.0	2.0	6.0			6.0	6.0
Minimum Split (s)				21.5	21.5	21.5	10.0	21.3			23.0	23.0
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	20.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	4.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
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	C-Max			C-Max	C-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)				30.4	30.4	30.4	52.1	52.1			27.0	27.0
Actuated g/C Ratio				0.34	0.34	0.34	0.58	0.58			0.30	0.30
v/c Ratio				0.40	0.89	0.09	0.77	0.56			0.17	0.04
Control Delay				24.0	46.4	6.4	21.0	14.9			25.0	10.8
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				24.0	46.4	6.4	21.0	14.9			25.0	10.8
LOS				C	D	A	C	B			C	B
Approach Delay					34.8			17.9			23.6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS					C			B			C	
Queue Length 50th (ft)				104	303	0	213	214			42	0
Queue Length 95th (ft)				146	#494	25	321	316			70	17
Internal Link Dist (ft)		248			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	585	772	1073			1058	486
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				0.38	0.86	0.09	0.76	0.56			0.17	0.04

Intersection Summary

Area Type: Other
Cycle Length: 90.5
Actuated Cycle Length: 90.5
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 25.7 Intersection LOS: C
Intersection Capacity Utilization 71.9% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 23: Route 65 & Western

Movement	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Sign Control	Free		Yield		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	0	54	40	57	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	60	44	63	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage veh)						
Upstream signal (ft)	876					
pX, platoon unblocked						
vC, conflicting volume	0		60	0	85	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		60	0	85	0
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	100		95	94	100	100
cM capacity (veh/h)	1623		831	1085	814	896

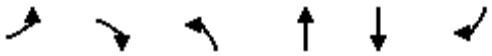
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	60	22	22	63
Volume Left	0	0	0	0
Volume Right	60	0	0	63
cSH	1700	831	831	1085
Volume to Capacity	0.04	0.03	0.03	0.06
Queue Length 95th (ft)	0	2	2	5
Control Delay (s)	0.0	9.5	9.5	8.5
Lane LOS		A	A	A
Approach Delay (s)	0.0	8.9		
Approach LOS		A		

Intersection Summary			
Average Delay	5.7		
Intersection Capacity Utilization	6.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	361	97	129	49	0	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	400	108	143	54	0	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			1.00		1.00	1.00
vC, conflicting volume			508		767	454
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			507		767	454
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			86		100	80
cM capacity (veh/h)			1053		292	553

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	508	161	36	113
Volume Left	0	143	0	0
Volume Right	108	0	0	113
cSH	1700	1053	1700	553
Volume to Capacity	0.30	0.14	0.02	0.20
Queue Length 95th (ft)	0	12	0	20
Control Delay (s)	0.0	8.1	0.0	13.2
Lane LOS		A		B
Approach Delay (s)	0.0	6.6		13.2
Approach LOS				B

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		

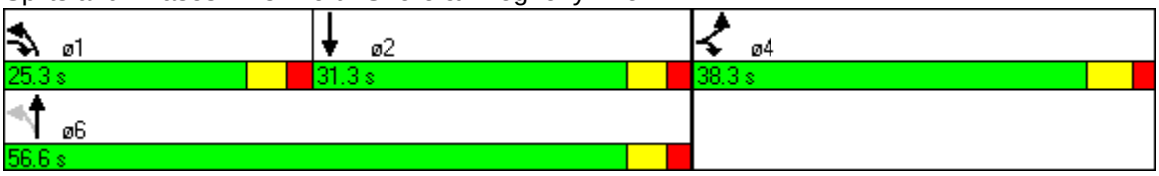


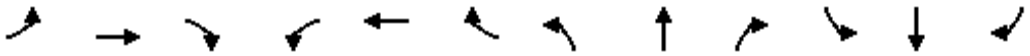
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99	
Frt		0.850			0.962	
Flt Protected	0.950			0.988		
Satd. Flow (prot)	3433	1441	0	3497	3383	0
Flt Permitted	0.950			0.924		
Satd. Flow (perm)	3433	1441	0	3270	3383	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		122			26	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	233	110	23	71	70	23
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	258	122	26	79	78	26
Lane Group Flow (vph)	258	122	0	105	104	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	38.3	63.6	25.3	56.6	31.3	0.0
Total Split (%)	40.4%	67.0%	26.7%	59.6%	33.0%	0.0%
Maximum Green (s)	32.6		20.0	51.3	26.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	10.5	23.9		23.6	17.4	
Actuated g/C Ratio	0.25	0.50		0.60	0.44	
v/c Ratio	0.30	0.16		0.05	0.07	
Control Delay	12.0	1.8		4.9	9.3	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	12.0	1.8		4.9	9.3	
LOS	B	A		A	A	
Approach Delay	8.7			4.9	9.3	
Approach LOS	A			A	A	
Queue Length 50th (ft)	25	0		4	6	
Queue Length 95th (ft)	46	16		14	22	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1821	1088		2601	2072	
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	0.14	0.11		0.04	0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 94.9			
Actuated Cycle Length: 39.2			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 24.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost 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
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.959				0.850		0.940	
Flt Protected	0.950			0.950				0.998		0.950		
Satd. Flow (prot)	1770	1840	0	1770	1786	0	0	1859	1583	1770	1751	0
Flt Permitted	0.686			0.709				0.991		0.610		
Satd. Flow (perm)	1278	1840	0	1321	1786	0	0	1846	1583	1136	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			25				178		26	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	15	60	5	36	72	27	10	189	161	184	35	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	17	67	6	40	80	30	11	210	178	204	39	26
Lane Group Flow (vph)	17	73	0	40	110	0	0	221	178	204	65	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.04	0.12		0.09	0.18			0.21	0.18	0.31	0.06	
Control Delay	18.9	18.4		19.6	16.0			8.8	1.8	10.4	5.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	18.9	18.4		19.6	16.0			8.8	1.8	10.4	5.3	
LOS	B	B		B	B			A	A	B	A	
Approach Delay		18.5			17.0			5.7			9.2	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	6	24		14	31			51	0	50	8	
Queue Length 95th (ft)	20	54		37	69			86	25	92	24	
Internal Link Dist (ft)		796			276			349			154	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	300											
Base Capacity (vph)	415	602		429	597			1061	986	653	1018	
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	0.04	0.12		0.09	0.18			0.21	0.18	0.31	0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 39.8%		ICU Level of Service A	
Analysis Period (min) 15			

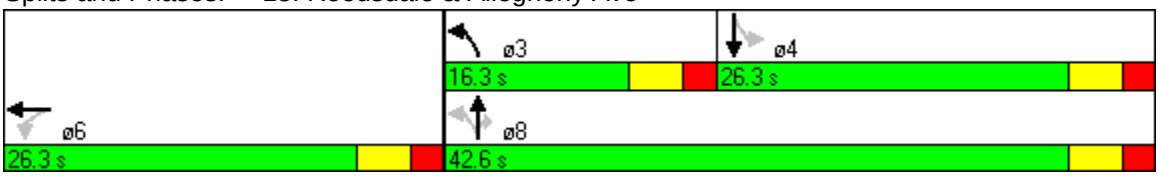
Splits and Phases: 12: Ridge Street & Allegheny Ave

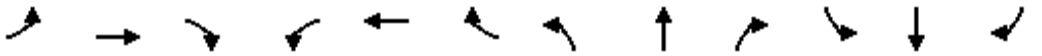
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.879				0.850		0.958	
Flt Protected				0.950			0.950				0.982	
Satd. Flow (prot)	0	0	0	1770	3111	0	1770	1863	1583	0	1752	0
Flt Permitted				0.950			0.648				0.823	
Satd. Flow (perm)	0	0	0	1770	3111	0	1207	1863	1583	0	1469	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					339				75		34	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	91	73	306	16	267	68	36	31	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	0	0	0	101	81	339	18	296	75	40	34	34
Lane Group Flow (vph)	0	0	0	101	420	0	18	296	75	0	108	0
Turn Type				Perm			pm+pt		Perm	Perm		
Protected Phases					6		3	8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		3	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.0	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		9.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	26.3	26.3	0.0	16.3	42.6	42.6	26.3	26.3	0.0
Total Split (%)	0.0%	0.0%	0.0%	38.2%	38.2%	0.0%	23.7%	61.8%	61.8%	38.2%	38.2%	0.0%
Maximum Green (s)				21.0	21.0		11.0	37.3	37.3	21.0	21.0	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes					
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			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)				25.0	25.0		14.9	14.7	14.7		12.6	
Actuated g/C Ratio				0.52	0.52		0.26	0.31	0.31		0.26	
v/c Ratio				0.11	0.23		0.05	0.52	0.14		0.26	
Control Delay				8.2	2.6		12.1	15.4	3.6		12.2	
Queue Delay				0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay				8.2	2.6		12.1	15.4	3.6		12.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				A	A		B	B	A		B	
Approach Delay					3.7			13.0			12.2	
Approach LOS					A			B			B	
Queue Length 50th (ft)				12	4		3	62	0		14	
Queue Length 95th (ft)				47	32		12	111	18		56	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				927	1791		421	1010	892		595	
Starvation Cap Reductn				0	0		0	65	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.11	0.23		0.04	0.31	0.08		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 68.9			
Actuated Cycle Length: 47.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 42.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



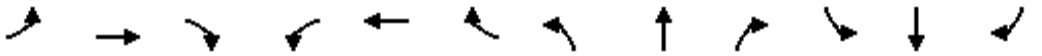


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.938				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3536	0	3433	1747	0	1770	0	1583
Flt Permitted	0.310						0.950			0.950		
Satd. Flow (perm)	577	1863	0	0	3536	0	3433	1747	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								7				54
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			658			306	
Travel Time (s)		7.3			6.6			14.5			6.7	
Volume (vph)	9	283	0	0	511	2	513	9	6	13	0	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	10	314	0	0	567	2	569	10	7	14	0	54
Lane Group Flow (vph)	10	314	0	0	569	0	569	17	0	14	0	54
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	21.3	0.0	21.3
Total Split (%)	37.1%	37.1%	0.0%	0.0%	37.1%	0.0%	45.3%	45.3%	0.0%	17.6%	0.0%	17.6%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		16.3		16.3
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	C-Max	C-Max			C-Max		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	79.1	79.1			79.1		24.5	24.5		7.8		7.8
Actuated g/C Ratio	0.65	0.65			0.65		0.20	0.20		0.06		0.06
v/c Ratio	0.03	0.26			0.25		0.82	0.05		0.12		0.36
Control Delay	10.8	11.0			10.3		56.3	26.5		55.1		20.5
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	10.8	11.0			10.3		56.3	26.5		55.1		20.5
LOS	B	B			B		E	C		E		C
Approach Delay		11.0			10.3			55.5				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			B			E				
Queue Length 50th (ft)	3	102			96		231	7		11		0
Queue Length 95th (ft)	12	188			157		279	26		33		42
Internal Link Dist (ft)		253			222			578			226	
Turn Bay Length (ft)												
Base Capacity (vph)	377	1215			2307		1443	739		252		272
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	0.03	0.26			0.25		0.39	0.02		0.06		0.20

Intersection Summary			
Area Type:	Other		
Cycle Length: 121.3			
Actuated Cycle Length: 121.3			
Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 28.3		Intersection LOS: C	
Intersection Capacity Utilization 42.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: Western & Fulton



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost 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
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.138					
Satd. Flow (perm)	0	0	0	3433	1863	1583	257	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						69						130
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		359			147			141			211	
Travel Time (s)		7.9			3.2			3.1			4.6	
Volume (vph)	0	0	0	771	138	62	401	257	0	0	812	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	0	0	0	855	153	69	445	285	0	0	900	130
Lane Group Flow (vph)	0	0	0	855	153	69	445	285	0	0	900	130
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				21.5	21.5	21.5	9.3	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	21.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	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
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	C-Max			C-Max	C-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)				28.8	28.8	28.8	53.7	53.7			29.1	29.1
Actuated g/C Ratio				0.32	0.32	0.32	0.59	0.59			0.32	0.32
v/c Ratio				0.78	0.26	0.13	0.90	0.26			0.79	0.22
Control Delay				33.4	23.3	6.0	43.1	10.2			35.9	5.8
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				33.4	23.3	6.0	43.1	10.2			35.9	5.8
LOS				C	C	A	D	B			D	A
Approach Delay					30.2			30.3			32.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS					C			C			C	
Queue Length 50th (ft)				227	65	0	194	80			273	0
Queue Length 95th (ft)				295	112	28	#376	129			#395	42
Internal Link Dist (ft)		279			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	596	523	1105			1138	597
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				0.72	0.24	0.12	0.85	0.26			0.79	0.22

Intersection Summary

Area Type: Other
Cycle Length: 90.5
Actuated Cycle Length: 90.5
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 30.9 Intersection LOS: C
Intersection Capacity Utilization 78.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 23: Route 65 & Western

Movement	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Sign Control	Free		Yield		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	0	108	274	94	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	120	304	104	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None		None	
Median storage veh)						
Upstream signal (ft)	876					
pX, platoon unblocked						
vC, conflicting volume	0		120	0	256	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		120	0	256	0
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	100		61	90	100	100
cM capacity (veh/h)	1623		771	1085	436	896

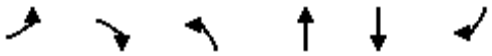
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	120	152	152	104
Volume Left	0	0	0	0
Volume Right	120	0	0	104
cSH	1700	771	771	1085
Volume to Capacity	0.07	0.20	0.20	0.10
Queue Length 95th (ft)	0	19	19	8
Control Delay (s)	0.0	10.8	10.8	8.7
Lane LOS		B	B	A
Approach Delay (s)	0.0	10.3		
Approach LOS		B		

Intersection Summary			
Average Delay	7.9		
Intersection Capacity Utilization	11.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	254	160	151	113	0	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	282	177	167	125	0	63
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			459		768	370
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			438		759	346
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			84		100	90
cM capacity (veh/h)			1076		279	626

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	459	209	84	63
Volume Left	0	167	0	0
Volume Right	177	0	0	63
cSH	1700	1076	1700	626
Volume to Capacity	0.27	0.16	0.05	0.10
Queue Length 95th (ft)	0	14	0	9
Control Delay (s)	0.0	7.5	0.0	11.4
Lane LOS		A		B
Approach Delay (s)	0.0	5.3		11.4
Approach LOS				B

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		



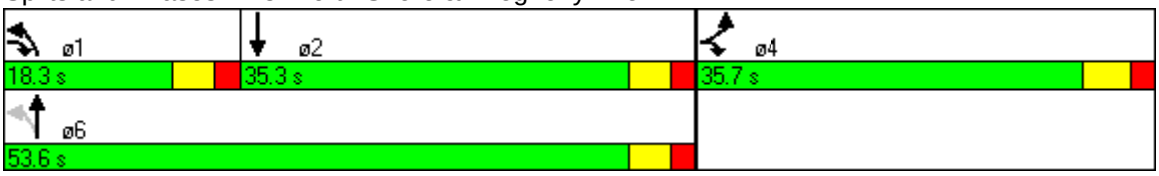
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					1.00	
Frt		0.850			0.993	
Flt Protected	0.950			0.992		
Satd. Flow (prot)	3433	1441	0	3511	3510	0
Flt Permitted	0.950			0.937		
Satd. Flow (perm)	3433	1441	0	3316	3510	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		47			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	53	42	14	74	78	4
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	59	47	16	82	86	4
Lane Group Flow (vph)	59	47	0	98	90	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	35.7	54.0	18.3	53.6	35.3	0.0
Total Split (%)	40.0%	60.5%	20.5%	60.0%	39.5%	0.0%
Maximum Green (s)	30.0		13.0	48.3	30.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	10.2	28.1		43.6	36.9	
Actuated g/C Ratio	0.16	0.38		0.74	0.63	
v/c Ratio	0.11	0.08		0.04	0.04	
Control Delay	11.2	2.3		3.1	7.3	

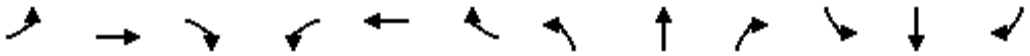
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	11.2	2.3		3.1	7.3	
LOS	B	A		A	A	
Approach Delay	7.3			3.1	7.3	
Approach LOS	A			A	A	
Queue Length 50th (ft)	5	0		3	3	
Queue Length 95th (ft)	15	9		10	18	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1433	871		2835	2622	
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	0.04	0.05		0.03	0.03	

Intersection Summary

Area Type: Other
Cycle Length: 89.3
Actuated Cycle Length: 58.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.11
Intersection Signal Delay: 5.9 Intersection LOS: A
Intersection Capacity Utilization 20.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 8: North Shore & Allegheny Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost 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
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.955				0.850		0.944	
Flt Protected	0.950			0.950				0.997		0.950		
Satd. Flow (prot)	1770	1840	0	1770	1779	0	0	1857	1583	1770	1758	0
Flt Permitted	0.685			0.708				0.990		0.623		
Satd. Flow (perm)	1276	1840	0	1319	1779	0	0	1844	1583	1160	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			28				153		29	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	18	62	5	43	70	30	10	176	138	233	43	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	20	69	6	48	78	33	11	195	153	258	48	29
Lane Group Flow (vph)	20	75	0	48	111	0	0	206	153	258	77	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.05	0.12		0.11	0.19			0.19	0.16	0.39	0.08	
Control Delay	19.1	18.4		19.9	15.7			8.7	1.9	11.4	5.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	19.1	18.4		19.9	15.7			8.7	1.9	11.4	5.4	
LOS	B	B		B	B			A	A	B	A	
Approach Delay		18.6			16.9			5.8			10.1	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)	7	25		17	30			47	0	67	10	
Queue Length 95th (ft)	23	56		42	68			81	23	120	28	
Internal Link Dist (ft)		796			276			349			154	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	300											
Base Capacity (vph)	415	602		429	597			1060	975	667	1023	
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	0.05	0.12		0.11	0.19			0.19	0.16	0.39	0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 42.3%		ICU Level of Service A	
Analysis Period (min) 15			

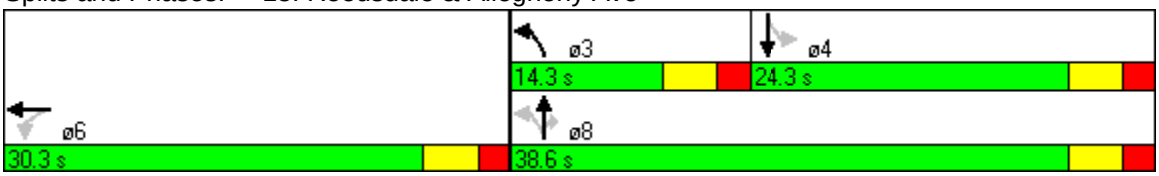
Splits and Phases: 12: Ridge Street & Allegheny Ave

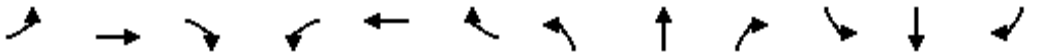
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.868				0.850		0.955	
Flt Protected				0.950			0.950				0.984	
Satd. Flow (prot)	0	0	0	1770	3072	0	1770	1863	1583	0	1750	0
Flt Permitted				0.950			0.647				0.903	
Satd. Flow (perm)	0	0	0	1770	3072	0	1205	1863	1583	0	1606	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					296				60		33	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	48	36	267	10	62	54	30	30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	0	0	0	53	40	296	11	69	60	33	33	33
Lane Group Flow (vph)	0	0	0	53	336	0	11	69	60	0	99	0
Turn Type				Perm			pm+pt		Perm	Perm		
Protected Phases					6		3	8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		3	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.0	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		9.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	30.3	30.3	0.0	14.3	38.6	38.6	24.3	24.3	0.0
Total Split (%)	0.0%	0.0%	0.0%	44.0%	44.0%	0.0%	20.8%	56.0%	56.0%	35.3%	35.3%	0.0%
Maximum Green (s)				25.0	25.0		9.0	33.3	33.3	19.0	19.0	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes					
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			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)				42.8	42.8		13.3	13.5	13.5		10.9	
Actuated g/C Ratio				0.67	0.67		0.18	0.21	0.21		0.17	
v/c Ratio				0.04	0.16		0.04	0.18	0.16		0.34	
Control Delay				6.1	1.7		14.5	13.9	5.0		14.8	
Queue Delay				0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay				6.1	1.7		14.5	13.9	5.0		14.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				A	A		B	B	A		B	
Approach Delay					2.3			10.1			14.8	
Approach LOS					A			B			B	
Queue Length 50th (ft)				4	1		2	15	0		14	
Queue Length 95th (ft)				27	23		10	35	18		55	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				1192	2165		323	805	718		505	
Starvation Cap Reductn				0	0		0	0	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.04	0.16		0.03	0.09	0.08		0.20	

Intersection Summary			
Area Type:	Other		
Cycle Length: 68.9			
Actuated Cycle Length: 63.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 28.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



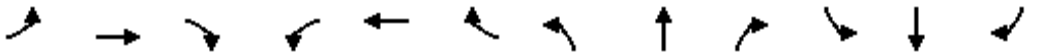


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.914				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3532	0	3433	1703	0	1770	0	1583
Flt Permitted	0.617						0.950			0.950		
Satd. Flow (perm)	1149	1863	0	0	3532	0	3433	1703	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			4				14
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			646			286	
Travel Time (s)		7.3			6.6			14.2			6.3	
Volume (vph)	9	224	0	0	173	3	67	3	4	10	0	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	10	248	0	0	192	3	74	3	4	11	0	14
Lane Group Flow (vph)	10	248	0	0	195	0	74	7	0	11	0	14
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	C-Max	C-Max			C-Max		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	99.3	99.3			99.3		8.5	8.5		7.3		7.3
Actuated g/C Ratio	0.83	0.83			0.83		0.07	0.07		0.06		0.06
v/c Ratio	0.01	0.16			0.07		0.30	0.06		0.10		0.13
Control Delay	3.8	3.5			3.1		55.9	39.2		54.8		26.2
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	3.8	3.5			3.1		55.9	39.2		54.8		26.2
LOS	A	A			A		E	D		D		C
Approach Delay		3.6			3.1			54.4				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			A			D				
Queue Length 50th (ft)	2	45			16		29	2		9		0
Queue Length 95th (ft)	6	78			29		55	18		29		23
Internal Link Dist (ft)		253			222			566			206	
Turn Bay Length (ft)												
Base Capacity (vph)	951	1542			2924		1459	726		236		223
Starvation Cap Reductn	0	0			0		0	0		0		0
Spillback Cap Reductn	0	0			0		0	0		0		0
Storage Cap Reductn	0	0			0		0	0		0		0
Reduced v/c Ratio	0.01	0.16			0.07		0.05	0.01		0.05		0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 27.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 19: Western & Fulton



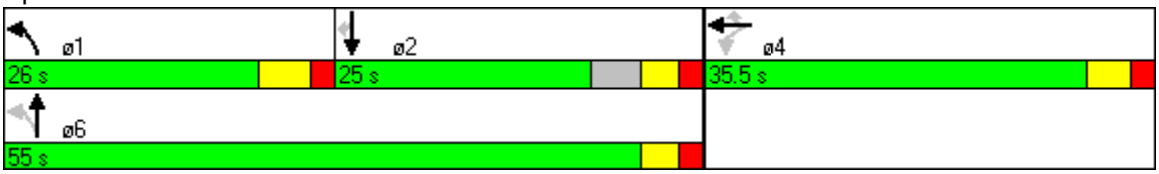
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.537					
Satd. Flow (perm)	0	0	0	3433	1863	1583	1000	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						76						55
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		273			147			141			211	
Travel Time (s)		6.0			3.2			3.1			4.6	
Volume (vph)	0	0	0	255	108	69	236	157	0	0	181	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%	102%
Adj. Flow (vph)	0	0	0	283	120	76	262	174	0	0	201	55
Lane Group Flow (vph)	0	0	0	283	120	76	262	174	0	0	201	55
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				21.5	21.5	21.5	10.0	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	20.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	4.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
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	C-Max			C-Max	C-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)				13.7	13.7	13.7	68.8	68.8			53.3	53.3
Actuated g/C Ratio				0.15	0.15	0.15	0.76	0.76			0.59	0.59
v/c Ratio				0.55	0.43	0.25	0.31	0.12			0.10	0.06
Control Delay				39.2	39.0	10.1	4.4	3.4			9.2	3.3
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				39.2	39.0	10.1	4.4	3.4			9.2	3.3
LOS				D	D	B	A	A			A	A
Approach Delay					34.5			4.0			7.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS					C			A			A	
Queue Length 50th (ft)				81	66	0	35	22			24	0
Queue Length 95th (ft)				116	115	37	70	47			50	19
Internal Link Dist (ft)		193			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	601	948	1417			2086	956
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				0.24	0.19	0.13	0.28	0.12			0.10	0.06

Intersection Summary

Area Type: Other
Cycle Length: 90.5
Actuated Cycle Length: 90.5
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 17.3 Intersection LOS: B
Intersection Capacity Utilization 35.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 23: Route 65 & Western



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	31	53	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	34	59	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	646					
pX, platoon unblocked	0.00	0.00	0.00	0.00	0.00	0.00
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			0		0	0
cM capacity (veh/h)			0		0	0

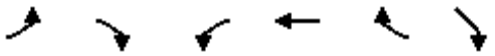
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	34	29	29	17
Volume Left	0	29	29	0
Volume Right	0	0	0	17
cSH	0	0	0	0
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.0		
Approach LOS		A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

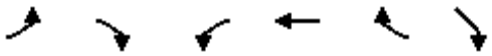
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	78	80	78	29	0	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	86	89	86	32	0	41
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked						
vC, conflicting volume			175		320	131
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			175		320	131
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		100	95
cM capacity (veh/h)			1399		608	894

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	175	97	21	41
Volume Left	0	86	0	0
Volume Right	89	0	0	41
cSH	1700	1399	1700	894
Volume to Capacity	0.10	0.06	0.01	0.05
Queue Length 95th (ft)	0	5	0	4
Control Delay (s)	0.0	6.9	0.0	9.2
Lane LOS		A		A
Approach Delay (s)	0.0	5.7		9.2
Approach LOS				A

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	20.3%	ICU Level of Service	A
Analysis Period (min)	15		



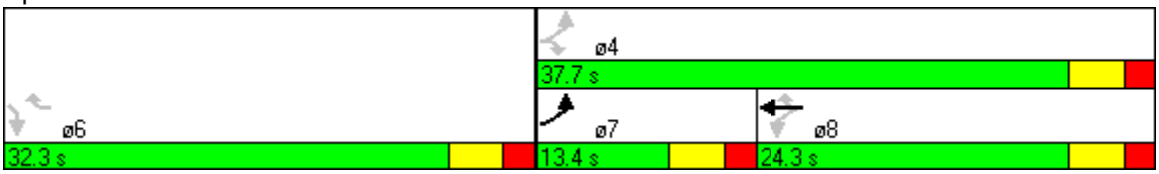
Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	50			0
Storage Lanes	1	2	1			2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	49
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	16	9	16		16	16
Lane Util. Factor	1.00	0.88	1.00	0.95	0.88	0.88
Frt		0.850			0.850	0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	2787	1770	3539	2787	2787
Flt Permitted	0.377		0.950			
Satd. Flow (perm)	702	2787	1770	3539	2787	2787
Right Turn on Red		No	Yes		Yes	
Satd. Flow (RTOR)			98		161	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)				31		
Link Distance (ft)				275		
Travel Time (s)				6.0		
Volume (vph)	101	366	90	368	148	664
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	398	98	400	161	722
Lane Group Flow (vph)	110	398	98	400	161	722
Turn Type	custom	custom	Perm		custom	custom
Protected Phases	7			8		
Permitted Phases	4	4	8		6 8	6
Detector Phases	7	4	8	8	6 8	6
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.3	21.3	21.3	21.3		21.3
Total Split (s)	13.4	37.7	24.3	24.3	56.6	32.3
Total Split (%)	19.1%	53.9%	34.7%	34.7%	80.9%	46.1%
Maximum Green (s)	8.1	32.4	19.0	19.0		27.0
Yellow Time (s)	3.3	3.3	3.3	3.3		3.3
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	None	None		C-Max
Walk Time (s)		5.0	5.0	5.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	25.7	25.7	15.1	15.1	56.1	36.3
Actuated g/C Ratio	0.37	0.37	0.22	0.22	0.80	0.52
v/c Ratio	0.28	0.39	0.21	0.53	0.07	0.50
Control Delay	14.3	16.3	6.1	26.3	0.5	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.3	16.3	6.1	26.3	0.5	14.4
LOS	B	B	A	C	A	B



Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Approach Delay				17.0		
Approach LOS				B		
Queue Length 50th (ft)	30	68	0	84	0	121
Queue Length 95th (ft)	53	89	32	113	5	206
Internal Link Dist (ft)				195		
Turn Bay Length (ft)	400		50			
Base Capacity (vph)	401	1342	583	1026	2266	1445
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.30	0.17	0.39	0.07	0.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SER, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: Reedsdale & Fontella

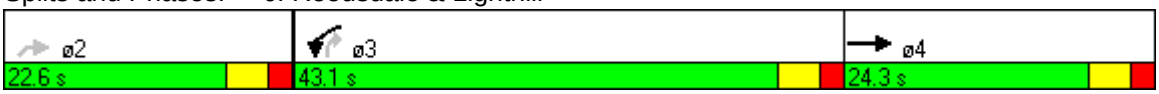


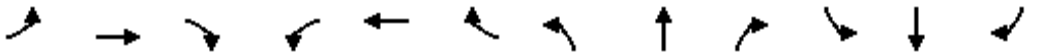
Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49		49				49		49	
Trailing Detector (ft)	0		0				0		0	
Turning Speed (mph)		9	16	16		16	9	16	9	9
Lane Util. Factor	0.95	0.95	0.97	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt	0.976						0.850		0.865	
Flt Protected			0.950							
Satd. Flow (prot)	3454	0	3433	0	0	0	2787	0	1611	0
Flt Permitted			0.950							
Satd. Flow (perm)	3454	0	3433	0	0	0	2787	0	1611	0
Right Turn on Red							Yes			Yes
Satd. Flow (RTOR)							1314		22	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31				31	31		31		
Link Distance (ft)	332				721	268		384		
Travel Time (s)	7.3				15.9	5.9		8.4		
Volume (vph)	109	20	374	0	0	0	358	0	20	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	22	407	0	0	0	389	0	22	22
Lane Group Flow (vph)	140	0	407	0	0	0	389	0	44	0
Turn Type			Prot				custom		custom	
Protected Phases	4		3							
Permitted Phases							3		2	
Detector Phases	4		3				3		2	
Minimum Initial (s)	4.0		4.0				4.0		4.0	
Minimum Split (s)	21.3		9.3				9.3		21.3	
Total Split (s)	24.3	0.0	43.1	0.0	0.0	0.0	43.1	0.0	22.6	0.0
Total Split (%)	27.0%	0.0%	47.9%	0.0%	0.0%	0.0%	47.9%	0.0%	25.1%	0.0%
Maximum Green (s)	19.0		37.8				37.8		17.3	
Yellow Time (s)	3.3		3.3				3.3		3.3	
All-Red Time (s)	2.0		2.0				2.0		2.0	
Lead/Lag	Lag		Lead				Lead			
Lead-Lag Optimize?	Yes		Yes				Yes			
Vehicle Extension (s)	3.0		3.0				3.0		3.0	
Recall Mode	None		None				None		C-Min	
Walk Time (s)	5.0								5.0	
Flash Dont Walk (s)	11.0								11.0	
Pedestrian Calls (#/hr)	0								0	
Act Effct Green (s)	10.1		17.1				17.1		50.8	
Actuated g/C Ratio	0.11		0.19				0.19		0.56	
v/c Ratio	0.36		0.62				0.24		0.05	
Control Delay	39.2		37.4				0.4		7.1	
Queue Delay	0.0		0.0				0.0		0.0	
Total Delay	39.2		37.4				0.4		7.1	
LOS	D		D				A		A	
Approach Delay	39.2									
Approach LOS	D									

Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Queue Length 50th (ft)	41		115				0		5	
Queue Length 95th (ft)	69		151				0		25	
Internal Link Dist (ft)	252				641	188		304		
Turn Bay Length (ft)										
Base Capacity (vph)	779		1491				1954		919	
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	0.18		0.27				0.20		0.05	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NER and 6:, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 21.6	Intersection LOS: C
Intersection Capacity Utilization 29.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: Reedsdale & Lighthill



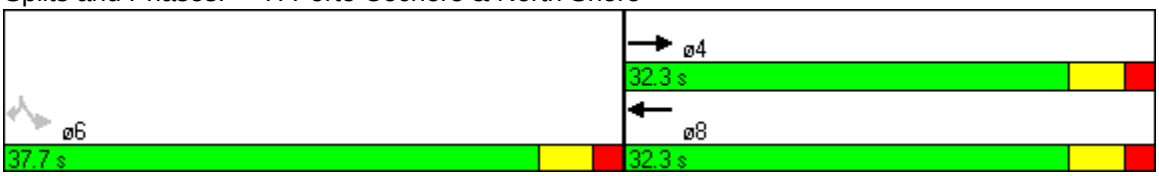


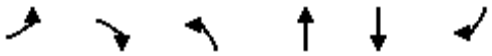
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		49			49					49		49
Trailing Detector (ft)		0			0					0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
Frt												0.850
Flt Protected										0.950		
Satd. Flow (prot)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Flt Permitted										0.950		
Satd. Flow (perm)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												203
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		302			249			302			334	
Travel Time (s)		6.6			5.5			6.6			7.3	
Volume (vph)	0	145	0	0	50	0	0	0	0	934	0	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	158	0	0	54	0	0	0	0	1015	0	203
Lane Group Flow (vph)	0	158	0	0	54	0	0	0	0	1015	0	203
Turn Type										custom		custom
Protected Phases		4			8							
Permitted Phases										6		6
Detector Phases		4			8					6		6
Minimum Initial (s)		4.0			4.0					4.0		4.0
Minimum Split (s)		21.3			21.3					21.3		21.3
Total Split (s)	0.0	32.3	0.0	0.0	32.3	0.0	0.0	0.0	0.0	37.7	0.0	37.7
Total Split (%)	0.0%	46.1%	0.0%	0.0%	46.1%	0.0%	0.0%	0.0%	0.0%	53.9%	0.0%	53.9%
Maximum Green (s)		27.0			27.0					32.4		32.4
Yellow Time (s)		3.3			3.3					3.3		3.3
All-Red Time (s)		2.0			2.0					2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0					3.0		3.0
Recall Mode		None			None					C-Max		C-Max
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)		9.3			9.2					55.7		55.7
Actuated g/C Ratio		0.13			0.13					0.80		0.80
v/c Ratio		0.34			0.22					0.26		0.16
Control Delay		29.2			28.7					2.7		1.3
Queue Delay		0.0			0.0					0.1		0.0
Total Delay		29.2			28.7					2.8		1.3
LOS		C			C					A		A
Approach Delay		29.2			28.7							
Approach LOS		C			C							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		34			22					49		2
Queue Length 95th (ft)		60			52					56		11
Internal Link Dist (ft)		222			169			222			254	
Turn Bay Length (ft)												
Base Capacity (vph)		1431			753					3974		1302
Starvation Cap Reductn		0			0					1315		0
Spillback Cap Reductn		0			0					0		0
Storage Cap Reductn		0			0					0		0
Reduced v/c Ratio		0.11			0.07					0.38		0.16

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.5		Intersection LOS: A	
Intersection Capacity Utilization 28.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Porte Cochere & North Shore



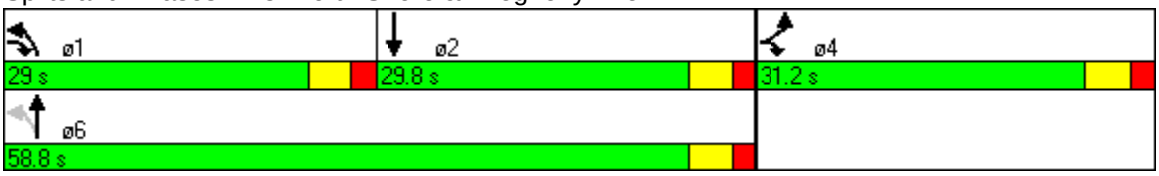


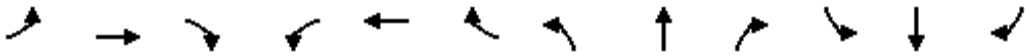
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					1.00	
Frt		0.850			0.985	
Flt Protected	0.950			0.981		
Satd. Flow (prot)	3433	1441	0	3472	3477	0
Flt Permitted	0.950			0.922		
Satd. Flow (perm)	3433	1441	0	3263	3477	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		315			13	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	321	290	23	35	195	22
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	349	315	25	38	212	24
Lane Group Flow (vph)	349	315	0	63	236	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	31.2	60.2	29.0	58.8	29.8	0.0
Total Split (%)	34.7%	66.9%	32.2%	65.3%	33.1%	0.0%
Maximum Green (s)	25.5		23.7	53.5	24.5	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	12.2	23.2		22.6	11.5	
Actuated g/C Ratio	0.29	0.54		0.53	0.27	
v/c Ratio	0.36	0.34		0.04	0.25	
Control Delay	13.1	1.9		5.9	13.4	
Queue Delay	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.1	1.9		5.9	13.4	
LOS	B	A		A	B	
Approach Delay	7.8			5.9	13.4	
Approach LOS	A			A	B	
Queue Length 50th (ft)	35	0		3	22	
Queue Length 95th (ft)	62	25		12	52	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1620	1152		2404	1582	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	6	0		6	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.22	0.27		0.03	0.15	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 42.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 9.0		Intersection LOS: A	
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost 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
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.928				0.850		0.962	
Flt Protected	0.950			0.950				0.987		0.950		
Satd. Flow (prot)	1770	1852	0	1770	1729	0	0	1839	1583	1770	1792	0
Flt Permitted	0.742			0.708				0.910		0.460		
Satd. Flow (perm)	1382	1852	0	1319	1729	0	0	1695	1583	857	1792	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			11				400		13	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	14	66	3	15	11	10	96	273	368	136	36	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	72	3	16	12	11	104	297	400	148	39	13
Lane Group Flow (vph)	15	75	0	16	23	0	0	401	400	148	52	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.03	0.12		0.04	0.04			0.41	0.37	0.30	0.05	
Control Delay	18.9	19.1		18.9	13.3			11.1	2.0	10.8	6.2	
Queue Delay	0.0	0.0		0.0	0.0			0.7	0.3	0.0	0.0	
Total Delay	18.9	19.1		18.9	13.3			11.8	2.2	10.8	6.2	
LOS	B	B		B	B			B	A	B	A	
Approach Delay		19.0			15.6			7.0			9.6	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	5	26		6	4			106	0	36	8	
Queue Length 95th (ft)	19	57		20	21			169	36	73	23	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	449	604		429	569			975	1080	493	1036	
Starvation Cap Reductn	0	0		0	0			284	231	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	0.03	0.12		0.04	0.04			0.58	0.47	0.30	0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 44.7%		ICU Level of Service A	
Analysis Period (min) 15			

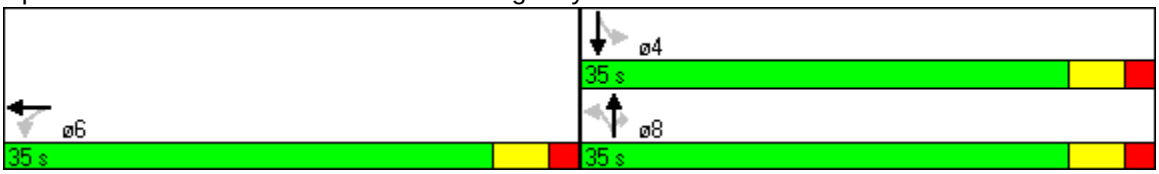
Splits and Phases: 12: Ridge Street & Allegheny Ave

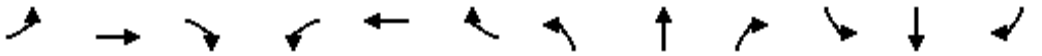
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.934				0.850		0.965	
Flt Protected				0.950			0.950				0.979	
Satd. Flow (prot)	0	0	0	1770	3306	0	1770	1863	1583	0	1760	0
Flt Permitted				0.950			0.706				0.812	
Satd. Flow (perm)	0	0	0	1770	3306	0	1315	1863	1583	0	1460	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					368				262		20	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	215	548	436	64	316	241	31	22	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	234	596	474	70	343	262	34	24	20
Lane Group Flow (vph)	0	0	0	234	1070	0	70	343	262	0	78	0
Turn Type				Perm			Perm		Perm	Perm		
Protected Phases					6			8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		8	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.7	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		10.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	35.0	35.0	0.0	35.0	35.0	35.0	35.0	35.0	0.0
Total Split (%)	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Maximum Green (s)				29.7	29.7		29.7	29.7	29.7	29.7	29.7	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	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	3.0	
Recall Mode				Max	Max		None	None	None	None	None	
Walk Time (s)				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	
Pedestrian Calls (#/hr)				0	0		0	0	0	0	0	
Act Effct Green (s)				31.3	31.3		17.4	17.4	17.4		17.4	
Actuated g/C Ratio				0.55	0.55		0.31	0.31	0.31		0.31	
v/c Ratio				0.24	0.54		0.17	0.60	0.39		0.17	
Control Delay				8.8	7.1		14.6	21.0	4.0		11.5	
Queue Delay				0.0	0.0		0.0	0.1	0.0		0.0	
Total Delay				8.8	7.1		14.6	21.1	4.0		11.5	
LOS				A	A		B	C	A		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					7.4			13.8			11.5	
Approach LOS					A			B			B	
Queue Length 50th (ft)				38	65		18	100	0		14	
Queue Length 95th (ft)				99	157		42	168	40		39	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				976	1987		582	825	847		658	
Starvation Cap Reductn				0	0		0	61	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.24	0.54		0.12	0.45	0.31		0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 56.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 9.6		Intersection LOS: A	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



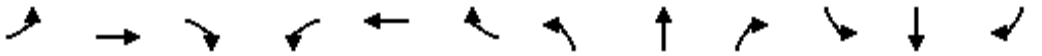


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.996			0.902				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3525	0	3433	1680	0	1770	0	1583
Flt Permitted	0.565						0.950			0.950		
Satd. Flow (perm)	1052	1863	0	0	3525	0	3433	1680	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			45				36
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			649			219	
Travel Time (s)		7.3			6.6			14.3			4.8	
Volume (vph)	70	515	0	0	223	6	176	22	41	12	0	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	560	0	0	242	7	191	24	45	13	0	36
Lane Group Flow (vph)	76	560	0	0	249	0	191	69	0	13	0	36
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		8
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	Min	Min			Min		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	32.8	32.8			32.8		9.8	9.8		7.4		7.4
Actuated g/C Ratio	0.59	0.59			0.59		0.18	0.18		0.12		0.12
v/c Ratio	0.12	0.51			0.12		0.31	0.21		0.06		0.16
Control Delay	7.7	10.0			6.3		20.9	13.5		26.5		12.7
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	7.7	10.0			6.3		20.9	13.5		26.5		12.7
LOS	A	B			A		C	B		C		B
Approach Delay		9.7			6.3			19.0				
Approach LOS		A			A			B				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	62			11		17	4		2		0
Queue Length 95th (ft)	37	252			45		70	44		21		26
Internal Link Dist (ft)		253			222			569			139	
Turn Bay Length (ft)												
Base Capacity (vph)	698	1236			2339		1844	923		412		396
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	0.11	0.45			0.11		0.10	0.07		0.03		0.09

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 55.2			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 44.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Western & Fulton



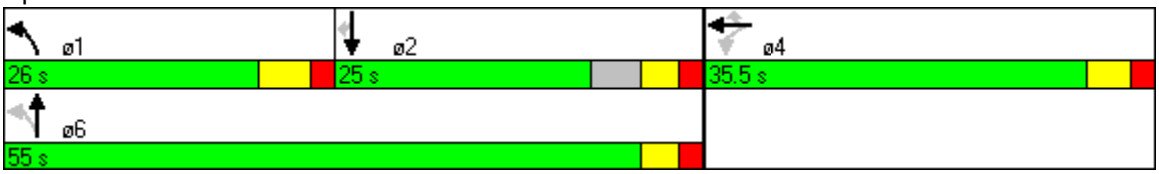
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.491					
Satd. Flow (perm)	0	0	0	3433	1863	1583	915	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						52						26
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		282			147			141			211	
Travel Time (s)		6.2			3.2			3.1			4.6	
Volume (vph)	0	0	0	420	511	48	542	551	0	0	229	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	457	555	52	589	599	0	0	249	26
Lane Group Flow (vph)	0	0	0	457	555	52	589	599	0	0	249	26
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Minimum Split (s)				21.5	21.5	21.5	10.0	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	20.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	4.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
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)				31.5	31.5	31.5	51.0	51.0			25.0	25.0
Actuated g/C Ratio				0.35	0.35	0.35	0.56	0.56			0.28	0.28
v/c Ratio				0.38	0.86	0.09	0.81	0.57			0.25	0.06
Control Delay				23.4	42.4	6.4	24.2	15.4			26.4	9.9
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				23.4	42.4	6.4	24.2	15.4			26.4	9.9
LOS				C	D	A	C	B			C	A
Approach Delay					32.4			19.8			24.8	
Approach LOS					C			B			C	
Queue Length 50th (ft)				104	303	0	213	214			60	0
Queue Length 95th (ft)				146	#494	25	#353	316			94	20
Internal Link Dist (ft)		202			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	585	723	1050			978	456
Starvation Cap Reductn				0	0	0	0	0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.38	0.86	0.09	0.81	0.57			0.25	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 25.7		Intersection LOS: C	
Intersection Capacity Utilization 73.3%		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: 24: Route 65 & Western



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	135	116	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	147	126	90
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	649					
pX, platoon unblocked	0.00	0.00	0.00	0.00	0.00	0.00
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			0		0	0
cM capacity (veh/h)			0		0	0

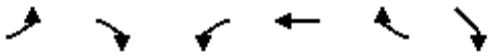
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	147	63	63	90
Volume Left	0	63	63	0
Volume Right	0	0	0	90
cSH	0	0	0	0
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.0		
Approach LOS		A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	17.1%	ICU Level of Service	A
Analysis Period (min)	15		

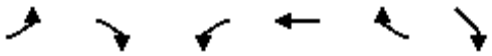
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	446	120	132	50	0	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	485	130	143	54	0	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			0.99		0.99	0.99
vC, conflicting volume			615		864	550
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			611		863	545
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			85		100	76
cM capacity (veh/h)			953		247	477

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	615	162	36	113
Volume Left	0	143	0	0
Volume Right	130	0	0	113
cSH	1700	953	1700	477
Volume to Capacity	0.36	0.15	0.02	0.24
Queue Length 95th (ft)	0	14	0	24
Control Delay (s)	0.0	8.5	0.0	14.9
Lane LOS		A		B
Approach Delay (s)	0.0	7.0		14.9
Approach LOS				B

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		



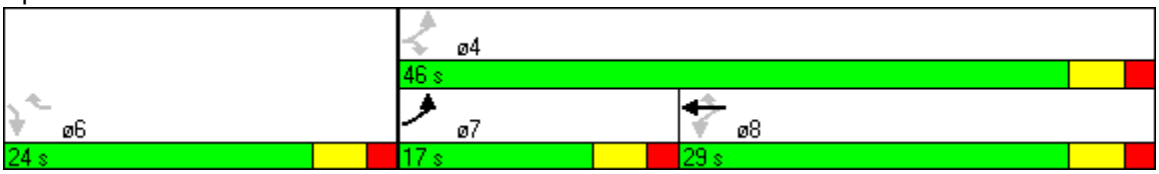
Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	50			0
Storage Lanes	1	2	1			2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	49
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	16	9	16		16	16
Lane Util. Factor	1.00	0.88	1.00	0.95	0.88	0.88
Frt		0.850			0.850	0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	2787	1770	3539	2787	2787
Flt Permitted	0.138		0.950			
Satd. Flow (perm)	257	2787	1770	3539	2787	2787
Right Turn on Red		No	Yes		Yes	
Satd. Flow (RTOR)			29		422	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)				31		
Link Distance (ft)				275		
Travel Time (s)				6.0		
Volume (vph)	252	816	61	921	388	510
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	274	887	66	1001	422	554
Lane Group Flow (vph)	274	887	66	1001	422	554
Turn Type	custom	custom	Perm		custom	custom
Protected Phases	7			8		
Permitted Phases	4	4	8		6 8	6
Detector Phases	7	4	8	8	6 8	6
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.3	21.3	21.3	21.3		21.3
Total Split (s)	17.0	46.0	29.0	29.0	53.0	24.0
Total Split (%)	24.3%	65.7%	41.4%	41.4%	75.7%	34.3%
Maximum Green (s)	11.7	40.7	23.7	23.7		18.7
Yellow Time (s)	3.3	3.3	3.3	3.3		3.3
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	None	None		C-Max
Walk Time (s)		5.0	5.0	5.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	40.7	40.7	24.2	24.2	49.5	21.3
Actuated g/C Ratio	0.58	0.58	0.35	0.35	0.71	0.30
v/c Ratio	0.65	0.55	0.10	0.82	0.20	0.65
Control Delay	19.0	10.3	10.3	27.3	0.6	26.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.0	10.3	10.3	27.3	0.6	26.1
LOS	B	B	B	C	A	C



Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Approach Delay				19.0		
Approach LOS				B		
Queue Length 50th (ft)	56	117	11	207	0	125
Queue Length 95th (ft)	133	168	35	282	11	184
Internal Link Dist (ft)				195		
Turn Bay Length (ft)	400		50			
Base Capacity (vph)	430	1672	651	1264	2094	847
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.53	0.10	0.79	0.20	0.65

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SER, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 17.8		Intersection LOS: B	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: Reedsdale & Fontella

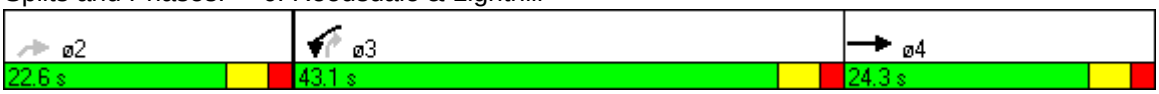


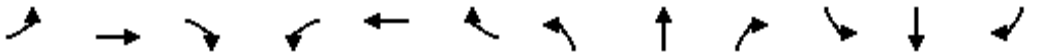
Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49		49				49		49	
Trailing Detector (ft)	0		0				0		0	
Turning Speed (mph)		9	16	16		16	9	16	9	9
Lane Util. Factor	0.95	0.95	0.97	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt	0.967						0.850		0.865	
Flt Protected			0.950							
Satd. Flow (prot)	3422	0	3433	0	0	0	2787	0	1611	0
Flt Permitted			0.950							
Satd. Flow (perm)	3422	0	3433	0	0	0	2787	0	1611	0
Right Turn on Red							Yes			Yes
Satd. Flow (RTOR)							996		50	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31				31	31		31		
Link Distance (ft)	332				721	268		384		
Travel Time (s)	7.3				15.9	5.9		8.4		
Volume (vph)	174	50	936	0	0	0	895	0	50	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	54	1017	0	0	0	973	0	54	54
Lane Group Flow (vph)	243	0	1017	0	0	0	973	0	108	0
Turn Type			Prot				custom		custom	
Protected Phases	4		3							
Permitted Phases							3		2	
Detector Phases	4		3				3		2	
Minimum Initial (s)	4.0		4.0				4.0		4.0	
Minimum Split (s)	21.3		9.3				9.3		21.3	
Total Split (s)	24.3	0.0	43.1	0.0	0.0	0.0	43.1	0.0	22.6	0.0
Total Split (%)	27.0%	0.0%	47.9%	0.0%	0.0%	0.0%	47.9%	0.0%	25.1%	0.0%
Maximum Green (s)	19.0		37.8				37.8		17.3	
Yellow Time (s)	3.3		3.3				3.3		3.3	
All-Red Time (s)	2.0		2.0				2.0		2.0	
Lead/Lag	Lag		Lead				Lead			
Lead-Lag Optimize?	Yes		Yes				Yes			
Vehicle Extension (s)	3.0		3.0				3.0		3.0	
Recall Mode	None		None				None		C-Min	
Walk Time (s)	5.0								5.0	
Flash Dont Walk (s)	11.0								11.0	
Pedestrian Calls (#/hr)	0								0	
Act Effct Green (s)	12.7		39.3				39.3		26.0	
Actuated g/C Ratio	0.14		0.44				0.44		0.29	
v/c Ratio	0.50		0.68				0.55		0.22	
Control Delay	39.1		22.4				2.1		17.9	
Queue Delay	0.0		0.0				0.0		0.0	
Total Delay	39.1		22.4				2.1		17.9	
LOS	D		C				A		B	
Approach Delay	39.1									
Approach LOS	D									

Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Queue Length 50th (ft)	71		226				0		26	
Queue Length 95th (ft)	105		285				30		75	
Internal Link Dist (ft)	252				641	188		304		
Turn Bay Length (ft)										
Base Capacity (vph)	772		1596				1829		504	
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	0.31		0.64				0.53		0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NER and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 15.5		Intersection LOS: B	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Reedsdale & Lighthill



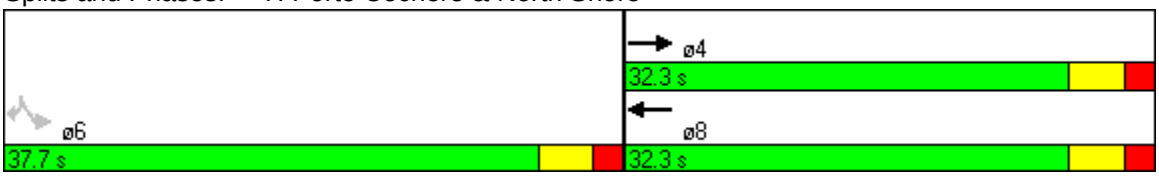


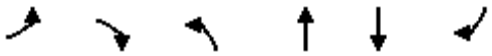
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		49			49					49		49
Trailing Detector (ft)		0			0					0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
Frt												0.850
Flt Protected										0.950		
Satd. Flow (prot)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Flt Permitted										0.950		
Satd. Flow (perm)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												509
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		302			249			302			334	
Travel Time (s)		6.6			5.5			6.6			7.3	
Volume (vph)	0	365	0	0	100	0	0	0	0	918	0	468
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	397	0	0	109	0	0	0	0	998	0	509
Lane Group Flow (vph)	0	397	0	0	109	0	0	0	0	998	0	509
Turn Type										custom		custom
Protected Phases		4			8							
Permitted Phases										6		6
Detector Phases		4			8					6		6
Minimum Initial (s)		4.0			4.0					4.0		4.0
Minimum Split (s)		21.3			21.3					21.3		21.3
Total Split (s)	0.0	32.3	0.0	0.0	32.3	0.0	0.0	0.0	0.0	37.7	0.0	37.7
Total Split (%)	0.0%	46.1%	0.0%	0.0%	46.1%	0.0%	0.0%	0.0%	0.0%	53.9%	0.0%	53.9%
Maximum Green (s)		27.0			27.0					32.4		32.4
Yellow Time (s)		3.3			3.3					3.3		3.3
All-Red Time (s)		2.0			2.0					2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0					3.0		3.0
Recall Mode		None			None					C-Max		C-Max
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)		13.6			13.6					48.4		48.4
Actuated g/C Ratio		0.19			0.19					0.69		0.69
v/c Ratio		0.58			0.30					0.29		0.41
Control Delay		28.8			25.7					7.0		3.3
Queue Delay		0.0			0.0					0.2		0.4
Total Delay		28.8			25.7					7.2		3.6
LOS		C			C					A		A
Approach Delay		28.8			25.7							
Approach LOS		C			C							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		85			42					69		20
Queue Length 95th (ft)		121			80					102		70
Internal Link Dist (ft)		222			169			222			254	
Turn Bay Length (ft)												
Base Capacity (vph)		1431			753					3453		1252
Starvation Cap Reductn		0			0					1414		312
Spillback Cap Reductn		0			0					0		0
Storage Cap Reductn		0			0					0		0
Reduced v/c Ratio		0.28			0.14					0.49		0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Porte Cochere & North Shore



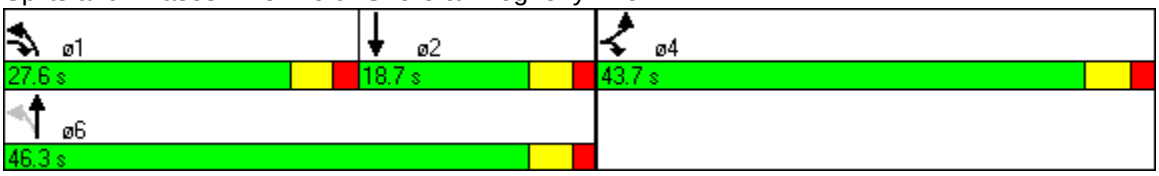


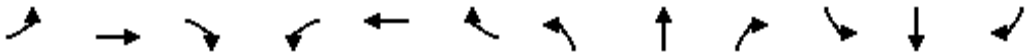
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99	
Frt		0.850			0.931	
Flt Protected	0.950			0.983		
Satd. Flow (prot)	3433	1441	0	3479	3256	0
Flt Permitted	0.950			0.855		
Satd. Flow (perm)	3433	1441	0	3026	3256	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		487			66	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	805	448	69	132	71	61
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	875	487	75	143	77	66
Lane Group Flow (vph)	875	487	0	218	143	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	43.7	71.3	27.6	46.3	18.7	0.0
Total Split (%)	48.6%	79.2%	30.7%	51.4%	20.8%	0.0%
Maximum Green (s)	38.0		22.3	41.0	13.4	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	23.8	35.3		23.0	11.5	
Actuated g/C Ratio	0.43	0.64		0.42	0.21	
v/c Ratio	0.59	0.44		0.16	0.19	
Control Delay	13.2	1.7		12.2	13.6	
Queue Delay	0.1	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.3	1.7		12.3	13.6	
LOS	B	A		B	B	
Approach Delay	9.2			12.3	13.6	
Approach LOS	A			B	B	
Queue Length 50th (ft)	105	0		23	11	
Queue Length 95th (ft)	159	23		56	38	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1939	1228		1775	884	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	269	0		215	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.52	0.40		0.14	0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 55			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave



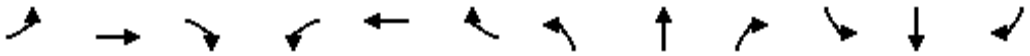


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.960				0.850		0.939	
Flt Protected	0.950			0.950				0.984		0.950		
Satd. Flow (prot)	1770	1853	0	1770	1788	0	0	1833	1583	1770	1749	0
Flt Permitted	0.687			0.653				0.888		0.535		
Satd. Flow (perm)	1280	1853	0	1216	1788	0	0	1654	1583	997	1749	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			24				263		26	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	20	124	5	37	73	27	91	192	242	195	35	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	135	5	40	79	29	99	209	263	212	38	26
Lane Group Flow (vph)	22	140	0	40	108	0	0	308	263	212	64	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.05	0.23		0.10	0.18			0.32	0.26	0.37	0.06	
Control Delay	19.1	20.7		19.8	16.1			10.0	1.8	11.5	5.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	19.1	20.7		19.8	16.1			10.0	1.8	11.5	5.3	
LOS	B	C		B	B			B	A	B	A	
Approach Delay		20.5			17.1			6.2			10.1	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)	8	52		14	31			77	0	54	8	
Queue Length 95th (ft)	25	97		37	68			126	30	103	24	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	416	604		395	597			951	1022	573	1017	
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	0.05	0.23		0.10	0.18			0.32	0.26	0.37	0.06	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 49.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave



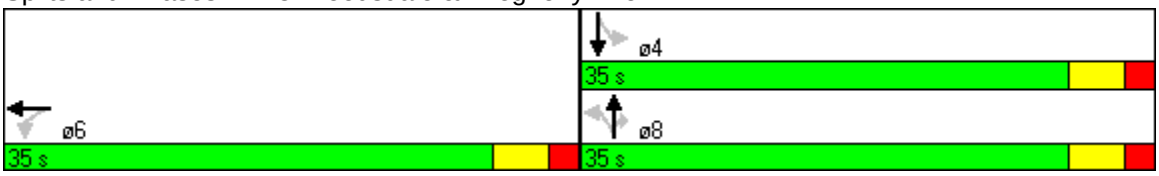
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.963				0.850		0.958	
Flt Protected				0.950			0.950				0.982	
Satd. Flow (prot)	0	0	0	1770	3408	0	1770	1863	1583	0	1752	0
Flt Permitted				0.950			0.729				0.575	
Satd. Flow (perm)	0	0	0	1770	3408	0	1358	1863	1583	0	1026	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					81				332		33	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	123	950	311	105	608	305	37	31	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	134	1033	338	114	661	332	40	34	33
Lane Group Flow (vph)	0	0	0	134	1371	0	114	661	332	0	107	0
Turn Type				Perm			Perm		Perm	Perm		
Protected Phases					6			8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		8	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.7	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		10.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	35.0	35.0	0.0	35.0	35.0	35.0	35.0	35.0	0.0
Total Split (%)	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Maximum Green (s)				29.7	29.7		29.7	29.7	29.7	29.7	29.7	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	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	3.0	
Recall Mode				Max	Max		None	None	None	None	None	
Walk Time (s)				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	
Pedestrian Calls (#/hr)				0	0		0	0	0	0	0	
Act Effct Green (s)				31.1	31.1		27.9	27.9	27.9		27.9	
Actuated g/C Ratio				0.46	0.46		0.42	0.42	0.42		0.42	
v/c Ratio				0.16	0.84		0.20	0.85	0.39		0.24	
Control Delay				12.2	22.2		13.2	30.1	3.1		10.5	
Queue Delay				0.0	0.0		0.0	46.4	0.3		0.0	
Total Delay				12.2	22.2		13.2	76.4	3.4		10.5	
LOS				B	C		B	E	A		B	

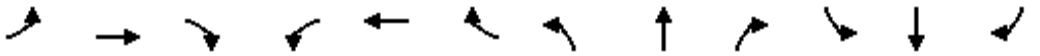
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					21.3			48.0			10.5	
Approach LOS					C			D			B	
Queue Length 50th (ft)				35	267		30	245	0		19	
Queue Length 95th (ft)				68	#415		61	#435	42		50	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				821	1624		601	825	886		473	
Starvation Cap Reductn				0	0		0	218	178		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.16	0.84		0.19	1.09	0.47		0.23	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 67.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 31.8 Intersection LOS: C
Intersection Capacity Utilization 80.7% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Reedsdale & Allegheny Ave



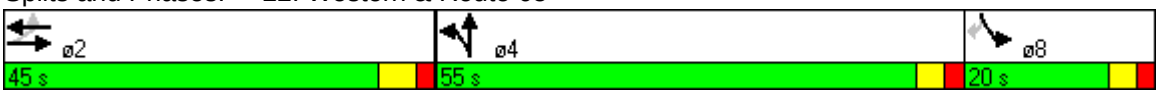


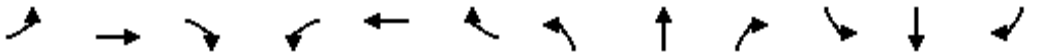
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.941				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3536	0	3433	1753	0	1770	0	1583
Flt Permitted	0.313						0.950			0.950		
Satd. Flow (perm)	583	1863	0	0	3536	0	3433	1753	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								11				53
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			643			224	
Travel Time (s)		7.3			6.6			14.1			4.9	
Volume (vph)	9	289	0	0	521	2	902	16	10	13	0	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	314	0	0	566	2	980	17	11	14	0	53
Lane Group Flow (vph)	10	314	0	0	568	0	980	28	0	14	0	53
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Minimum Split (s)	22.0	22.0			22.0		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	41.0	41.0			41.0		51.0	51.0		16.0		16.0
Actuated g/C Ratio	0.34	0.34			0.34		0.42	0.42		0.13		0.13
v/c Ratio	0.05	0.49			0.47		0.67	0.04		0.06		0.21
Control Delay	27.6	34.5			32.6		30.6	14.4		46.3		14.4
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	27.6	34.5			32.6		30.6	14.4		46.3		14.4
LOS	C	C			C		C	B		D		B
Approach Delay		34.3			32.6			30.1				
Approach LOS		C			C			C				
Queue Length 50th (ft)	5	199			187		321	8		10		0
Queue Length 95th (ft)	19	292			244		398	27		31		40
Internal Link Dist (ft)		253			222			563			144	
Turn Bay Length (ft)												
Base Capacity (vph)	199	637			1208		1459	751		236		257
Starvation Cap Reductn	0	0			0		0	0		0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0		0	0		0		0
Storage Cap Reductn	0	0			0		0	0		0		0
Reduced v/c Ratio	0.05	0.49			0.47		0.67	0.04		0.06		0.21

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 1.3 (1%), Referenced to phase 2:EBWB and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 31.2		Intersection LOS: C	
Intersection Capacity Utilization 53.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Western & Route 65



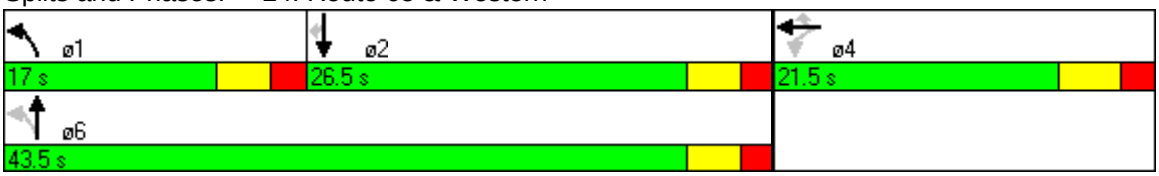


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.151					
Satd. Flow (perm)	0	0	0	3433	1863	1583	281	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						68						167
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		269			147			141			211	
Travel Time (s)		5.9			3.2			3.1			4.6	
Volume (vph)	0	0	0	786	141	63	409	262	0	0	1075	154
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	854	153	68	445	285	0	0	1168	167
Lane Group Flow (vph)	0	0	0	854	153	68	445	285	0	0	1168	167
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				21.5	21.5	21.5	9.3	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	21.5	21.5	21.5	17.0	43.5	0.0	0.0	26.5	26.5
Total Split (%)	0.0%	0.0%	0.0%	33.1%	33.1%	33.1%	26.2%	66.9%	0.0%	0.0%	40.8%	40.8%
Maximum Green (s)				16.0	16.0	16.0	12.0	38.5			21.5	21.5
Yellow Time (s)				3.5	3.5	3.5	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
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	C-Max			C-Max	C-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)				17.5	17.5	17.5	39.5	39.5			22.5	22.5
Actuated g/C Ratio				0.27	0.27	0.27	0.61	0.61			0.35	0.35
v/c Ratio				0.92	0.30	0.14	0.95	0.25			0.95	0.25
Control Delay				41.2	21.0	6.4	48.4	6.6			39.4	4.0
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				41.2	21.0	6.4	48.4	6.6			39.4	4.0
LOS				D	C	A	D	A			D	A
Approach Delay					36.1			32.1			35.0	
Approach LOS					D			C			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)				175	50	0	126	48			242	0
Queue Length 95th (ft)				#286	96	27	#303	82			#377	36
Internal Link Dist (ft)		189			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				924	502	476	469	1132			1225	657
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				0.92	0.30	0.14	0.95	0.25			0.95	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 65			
Actuated Cycle Length: 65			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 34.7		Intersection LOS: C	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 24: Route 65 & Western



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	309	463	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	336	503	171
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	643					
pX, platoon unblocked	0.00	0.00	0.00	0.00	0.00	0.00
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			0		0	0
cM capacity (veh/h)			0		0	0

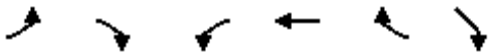
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	336	252	252	171
Volume Left	0	252	252	0
Volume Right	0	0	0	171
cSH	0	0	0	0
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.0		
Approach LOS		A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	36.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	323	203	154	115	0	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	351	221	167	125	0	63
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			0.93		0.93	0.93
vC, conflicting volume			572		859	461
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			542		849	424
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			82		100	88
cM capacity (veh/h)			956		231	541

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	572	209	83	63
Volume Left	0	167	0	0
Volume Right	221	0	0	63
cSH	1700	956	1700	541
Volume to Capacity	0.34	0.18	0.05	0.12
Queue Length 95th (ft)	0	16	0	10
Control Delay (s)	0.0	8.0	0.0	12.5
Lane LOS		A		B
Approach Delay (s)	0.0	5.7		12.5
Approach LOS				B

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	50			0
Storage Lanes	1	2	1			2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	49
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	16	9	16		16	16
Lane Util. Factor	1.00	0.88	1.00	0.95	0.88	0.88
Frt		0.850			0.850	0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	2787	1770	3539	2787	2787
Flt Permitted	0.094		0.950			
Satd. Flow (perm)	175	2787	1770	3539	2787	2787
Right Turn on Red		No	Yes		Yes	
Satd. Flow (RTOR)			21		82	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)				31		
Link Distance (ft)				275		
Travel Time (s)				6.0		
Volume (vph)	324	847	79	1434	75	724
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	352	921	86	1559	82	787
Lane Group Flow (vph)	352	921	86	1559	82	787
Turn Type	custom	custom	Perm		custom	custom
Protected Phases	7			8		
Permitted Phases	4	4	8		6 8	6
Detector Phases	7	4	8	8	6 8	6
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.3	21.3	21.3	21.3		21.3
Total Split (s)	18.0	60.7	42.7	42.7	72.0	29.3
Total Split (%)	20.0%	67.4%	47.4%	47.4%	80.0%	32.6%
Maximum Green (s)	12.7	55.4	37.4	37.4		24.0
Yellow Time (s)	3.3	3.3	3.3	3.3		3.3
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	None	None		C-Max
Walk Time (s)		5.0	5.0	5.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	56.7	56.7	38.7	38.7	68.0	25.3
Actuated g/C Ratio	0.63	0.63	0.43	0.43	0.76	0.28
v/c Ratio	0.98	0.52	0.11	1.02	0.04	1.01
Control Delay	65.5	10.6	12.4	56.2	0.7	67.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.5	10.6	12.4	56.2	0.7	67.2
LOS	E	B	B	E	A	E

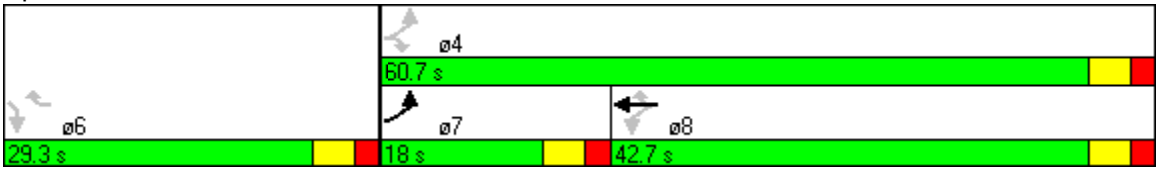
Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Approach Delay				51.4		
Approach LOS				D		
Queue Length 50th (ft)	155	154	22	~522	0	~265
Queue Length 95th (ft)	#337	213	51	#662	5	#409
Internal Link Dist (ft)				195		
Turn Bay Length (ft)	400		50			
Base Capacity (vph)	358	1756	773	1522	2126	783
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.52	0.11	1.02	0.04	1.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 6:SER, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 46.1		Intersection LOS: D	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

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

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

Splits and Phases: 3: Reedsdale & Fontella

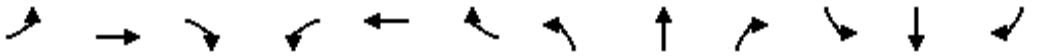


Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49		49				49		49	
Trailing Detector (ft)	0		0				0		0	
Turning Speed (mph)		9	16	16		16	9	16	9	9
Lane Util. Factor	0.95	0.95	0.97	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt	0.893						0.850		0.865	
Flt Protected			0.950							
Satd. Flow (prot)	3161	0	3433	0	0	0	2787	0	1611	0
Flt Permitted			0.950							
Satd. Flow (perm)	3161	0	3433	0	0	0	2787	0	1611	0
Right Turn on Red							Yes			Yes
Satd. Flow (RTOR)							1664		54	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31				31	31		31		
Link Distance (ft)	332				721	268		310		
Travel Time (s)	7.3				15.9	5.9		6.8		
Volume (vph)	20	50	1457	0	0	0	1150	0	20	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	54	1584	0	0	0	1250	0	22	54
Lane Group Flow (vph)	76	0	1584	0	0	0	1250	0	76	0
Turn Type			Prot				custom		custom	
Protected Phases	4		3							
Permitted Phases							3		2	
Detector Phases	4		3				3		2	
Minimum Initial (s)	4.0		4.0				4.0		4.0	
Minimum Split (s)	21.3		9.3				9.3		21.3	
Total Split (s)	21.3	0.0	47.0	0.0	0.0	0.0	47.0	0.0	21.7	0.0
Total Split (%)	23.7%	0.0%	52.2%	0.0%	0.0%	0.0%	52.2%	0.0%	24.1%	0.0%
Maximum Green (s)	16.0		41.7				41.7		16.4	
Yellow Time (s)	3.3		3.3				3.3		3.3	
All-Red Time (s)	2.0		2.0				2.0		2.0	
Lead/Lag	Lag		Lead				Lead			
Lead-Lag Optimize?	Yes		Yes				Yes			
Vehicle Extension (s)	3.0		3.0				3.0		3.0	
Recall Mode	None		None				None		C-Min	
Walk Time (s)	5.0								5.0	
Flash Dont Walk (s)	11.0								11.0	
Pedestrian Calls (#/hr)	0								0	
Act Effct Green (s)	8.7		50.0				50.0		21.4	
Actuated g/C Ratio	0.10		0.56				0.56		0.24	
v/c Ratio	0.25		0.83				0.55		0.18	
Control Delay	39.1		40.2				0.9		14.1	
Queue Delay	0.0		0.0				0.0		0.0	
Total Delay	39.1		40.2				0.9		14.1	
LOS	D		D				A		B	
Approach Delay	39.1									
Approach LOS	D									

Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Queue Length 50th (ft)	22		509				0		11	
Queue Length 95th (ft)	44		m498				0		48	
Internal Link Dist (ft)	252				641	188		230		
Turn Bay Length (ft)										
Base Capacity (vph)	608		1908				2288		430	
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	0.13		0.83				0.55		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NER and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 23.1		Intersection LOS: C	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Reedsdale & Lighthill

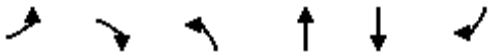


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		49			49					49		49
Trailing Detector (ft)		0			0					0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
Frt												0.850
Flt Protected										0.950		
Satd. Flow (prot)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Flt Permitted										0.950		
Satd. Flow (perm)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												637
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		302			249			302			334	
Travel Time (s)		6.6			5.5			6.6			7.3	
Volume (vph)	0	470	0	0	120	0	0	0	0	916	0	729
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	511	0	0	130	0	0	0	0	996	0	792
Lane Group Flow (vph)	0	511	0	0	130	0	0	0	0	996	0	792
Turn Type										custom		custom
Protected Phases		4			8							
Permitted Phases										6		6
Detector Phases		4			8					6		6
Minimum Initial (s)		4.0			4.0					4.0		4.0
Minimum Split (s)		21.3			21.3					21.3		21.3
Total Split (s)	0.0	31.8	0.0	0.0	31.8	0.0	0.0	0.0	0.0	58.2	0.0	58.2
Total Split (%)	0.0%	35.3%	0.0%	0.0%	35.3%	0.0%	0.0%	0.0%	0.0%	64.7%	0.0%	64.7%
Maximum Green (s)		26.5			26.5					52.9		52.9
Yellow Time (s)		3.3			3.3					3.3		3.3
All-Red Time (s)		2.0			2.0					2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0					3.0		3.0
Recall Mode		None			None					C-Max		C-Max
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)		18.8			18.8					63.2		63.2
Actuated g/C Ratio		0.21			0.21					0.70		0.70
v/c Ratio		0.69			0.33					0.28		0.61
Control Delay		37.7			31.7					3.9		2.1
Queue Delay		0.0			0.0					0.3		0.7
Total Delay		37.7			31.7					4.2		2.7
LOS		D			C					A		A
Approach Delay		37.7			31.7							
Approach LOS		D			C							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		148			66					37		0
Queue Length 95th (ft)		189			111					m67		m8
Internal Link Dist (ft)		222			169			222			254	
Turn Bay Length (ft)												
Base Capacity (vph)		1093			575					3502		1301
Starvation Cap Reductn		0			0					1680		213
Spillback Cap Reductn		0			0					0		0
Storage Cap Reductn		0			0					0		0
Reduced v/c Ratio		0.47			0.23					0.55		0.73

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 74.9%		ICU Level of Service D	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 7: Porte Cochere & North Shore

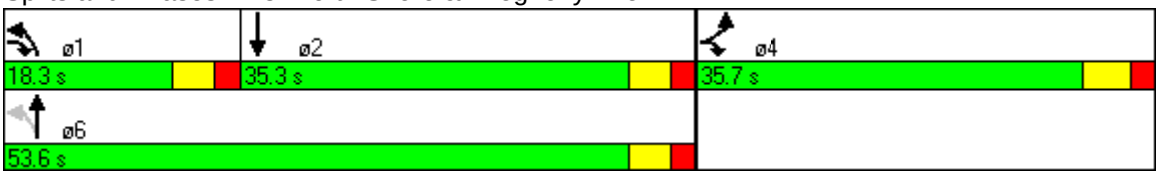


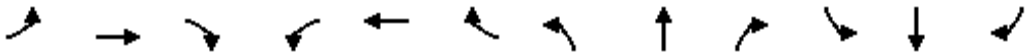
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99	
Frt		0.850			0.941	
Flt Protected	0.950			0.984		
Satd. Flow (prot)	3433	1441	0	3483	3297	0
Flt Permitted	0.950			0.824		
Satd. Flow (perm)	3433	1441	0	2916	3297	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		555			55	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	879	511	85	168	78	51
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	955	555	92	183	85	55
Lane Group Flow (vph)	955	555	0	275	140	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	35.7	54.0	18.3	53.6	35.3	0.0
Total Split (%)	40.0%	60.5%	20.5%	60.0%	39.5%	0.0%
Maximum Green (s)	30.0		13.0	48.3	30.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	25.2	36.8		23.1	11.5	
Actuated g/C Ratio	0.45	0.65		0.41	0.20	
v/c Ratio	0.62	0.49		0.22	0.20	
Control Delay	13.7	2.0		12.5	14.8	
Queue Delay	0.2	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.9	2.0		12.6	14.8	
LOS	B	A		B	B	
Approach Delay	9.5			12.6	14.8	
Approach LOS	A			B	B	
Queue Length 50th (ft)	119	0		32	13	
Queue Length 95th (ft)	181	25		63	38	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1741	1194		1799	1393	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	173	0		280	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.61	0.46		0.18	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 89.3			
Actuated Cycle Length: 56.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave



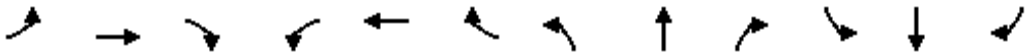


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.955				0.850		0.945	
Flt Protected	0.950			0.950				0.971		0.950		
Satd. Flow (prot)	1770	1853	0	1770	1779	0	0	1809	1583	1770	1760	0
Flt Permitted	0.687			0.621				0.772		0.395		
Satd. Flow (perm)	1280	1853	0	1157	1779	0	0	1438	1583	736	1760	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			29				416		28	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	18	144	5	43	70	30	269	179	383	236	44	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	157	5	47	76	33	292	195	416	257	48	28
Lane Group Flow (vph)	20	162	0	47	109	0	0	487	416	257	76	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.05	0.27		0.12	0.18			0.59	0.38	0.61	0.07	
Control Delay	19.1	21.2		20.2	15.4			14.6	2.0	18.8	5.5	
Queue Delay	0.0	0.0		0.0	0.0			1.1	0.3	0.0	0.0	
Total Delay	19.1	21.2		20.2	15.4			15.7	2.3	18.8	5.5	
LOS	B	C		C	B			B	A	B	A	
Approach Delay		21.0			16.9			9.5			15.7	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)	7	61		17	29			149	0	80	10	
Queue Length 95th (ft)	23	110		43	67			245	36	169	28	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	416	604		376	598			827	1087	423	1024	
Starvation Cap Reductn	0	0		0	0			150	227	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	0.05	0.27		0.13	0.18			0.72	0.48	0.61	0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave



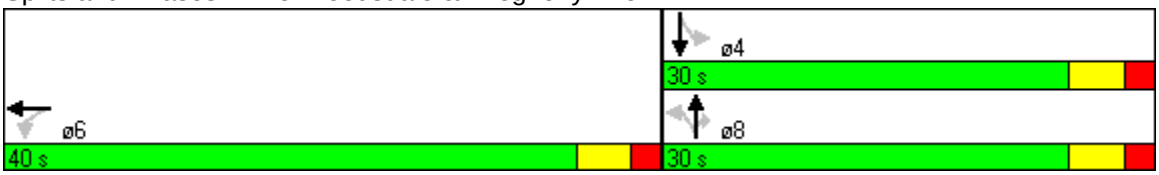
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.976				0.850		0.955	
Flt Protected				0.950			0.950				0.984	
Satd. Flow (prot)	0	0	0	1770	3454	0	1770	1863	1583	0	1750	0
Flt Permitted				0.950			0.737				0.526	
Satd. Flow (perm)	0	0	0	1770	3454	0	1373	1863	1583	0	936	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					46				411		19	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	95	1399	267	151	564	378	30	30	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	103	1521	290	164	613	411	33	33	33
Lane Group Flow (vph)	0	0	0	103	1811	0	164	613	411	0	99	0
Turn Type				Perm			Perm		Perm	Perm		
Protected Phases					6			8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		8	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.7	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		10.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	40.0	40.0	0.0	30.0	30.0	30.0	30.0	30.0	0.0
Total Split (%)	0.0%	0.0%	0.0%	57.1%	57.1%	0.0%	42.9%	42.9%	42.9%	42.9%	42.9%	0.0%
Maximum Green (s)				34.7	34.7		24.7	24.7	24.7	24.7	24.7	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	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	3.0	
Recall Mode				Max	Max		None	None	None	None	None	
Walk Time (s)				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	
Pedestrian Calls (#/hr)				0	0		0	0	0	0	0	
Act Effct Green (s)				36.0	36.0		25.3	25.3	25.3		25.3	
Actuated g/C Ratio				0.52	0.52		0.37	0.37	0.37		0.37	
v/c Ratio				0.11	1.00		0.33	0.90	0.49		0.28	
Control Delay				9.2	38.7		18.1	40.2	4.1		15.4	
Queue Delay				0.0	0.1		0.0	56.0	0.2		0.0	
Total Delay				9.2	38.8		18.1	96.2	4.3		15.4	
LOS				A	D		B	F	A		B	

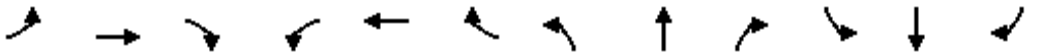
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					37.2			53.6			15.4	
Approach LOS					D			D			B	
Queue Length 50th (ft)				22	~400		51	251	0		24	
Queue Length 95th (ft)				46	#592		98	#448	54		60	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				919	1817		510	692	846		360	
Starvation Cap Reductn				0	0		0	144	87		0	
Spillback Cap Reductn				0	1		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.11	1.00		0.32	1.12	0.54		0.28	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 69.3			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 42.6		Intersection LOS: D	
Intersection Capacity Utilization 85.1%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 13: Reedsdale & Allegheny Ave



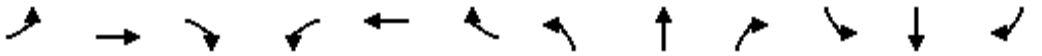


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.915				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3532	0	3433	1704	0	1770	0	1583
Flt Permitted	0.618						0.950			0.950		
Satd. Flow (perm)	1151	1863	0	0	3532	0	3433	1704	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			33				14
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			646			212	
Travel Time (s)		7.3			6.6			14.2			4.7	
Volume (vph)	9	228	0	0	176	3	520	23	30	10	0	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	248	0	0	191	3	565	25	33	11	0	14
Lane Group Flow (vph)	10	248	0	0	194	0	565	58	0	11	0	14
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	C-Max	C-Max			C-Max		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	80.4	80.4			80.4		24.5	24.5		7.3		7.3
Actuated g/C Ratio	0.67	0.67			0.67		0.20	0.20		0.06		0.06
v/c Ratio	0.01	0.20			0.08		0.81	0.16		0.10		0.13
Control Delay	10.1	9.8			8.6		54.6	19.9		54.8		26.2
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	10.1	9.8			8.6		54.6	19.9		54.8		26.2
LOS	B	A			A		D	B		D		C
Approach Delay		9.8			8.6			51.3				
Approach LOS		A			A			D				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	3	78			29		224	16		9		0
Queue Length 95th (ft)	12	143			54		271	51		29		23
Internal Link Dist (ft)		253			222			566			132	
Turn Bay Length (ft)												
Base Capacity (vph)	771	1248			2366		1459	743		236		223
Starvation Cap Reductn	0	0			0		0	0		0		0
Spillback Cap Reductn	0	0			0		0	0		0		0
Storage Cap Reductn	0	0			0		0	0		0		0
Reduced v/c Ratio	0.01	0.20			0.08		0.39	0.08		0.05		0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 33.8		Intersection LOS: C	
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Western & Fulton



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost 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
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.269					
Satd. Flow (perm)	0	0	0	3433	1863	1583	501	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						76						146
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		257			147			141			211	
Travel Time (s)		5.7			3.2			3.1			4.6	
Volume (vph)	0	0	0	260	110	70	241	160	0	0	485	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	283	120	76	262	174	0	0	527	146
Lane Group Flow (vph)	0	0	0	283	120	76	262	174	0	0	527	146
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				21.5	21.5	21.5	10.0	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	20.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	4.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
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	C-Max			C-Max	C-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)				13.7	13.7	13.7	68.8	68.8			53.3	53.3
Actuated g/C Ratio				0.15	0.15	0.15	0.76	0.76			0.59	0.59
v/c Ratio				0.55	0.43	0.25	0.48	0.12			0.25	0.15
Control Delay				39.2	39.0	10.1	6.5	3.4			10.1	2.4
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				39.2	39.0	10.1	6.5	3.4			10.1	2.4
LOS				D	D	B	A	A			B	A
Approach Delay					34.5			5.3			8.4	
Approach LOS					C			A			A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)				81	66	0	35	22			72	0
Queue Length 95th (ft)				116	115	37	70	47			125	29
Internal Link Dist (ft)		177			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	601	689	1417			2086	993
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				0.24	0.19	0.13	0.38	0.12			0.25	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 15.4		Intersection LOS: B	
Intersection Capacity Utilization 44.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Route 65 & Western

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	291	297	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	316	323	104
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	646					
pX, platoon unblocked	0.00	0.00	0.00	0.00	0.00	0.00
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			0		0	0
cM capacity (veh/h)			0		0	0

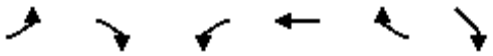
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	316	161	161	104
Volume Left	0	161	161	0
Volume Right	0	0	0	104
cSH	0	0	0	0
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.0		
Approach LOS		A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	175	179	80	30	0	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	190	195	87	33	0	41
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked						
vC, conflicting volume			385		478	288
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			385		478	288
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		100	94
cM capacity (veh/h)			1170		478	709

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	385	98	22	41
Volume Left	0	87	0	0
Volume Right	195	0	0	41
cSH	1700	1170	1700	709
Volume to Capacity	0.23	0.07	0.01	0.06
Queue Length 95th (ft)	0	6	0	5
Control Delay (s)	0.0	7.5	0.0	10.4
Lane LOS		A		B
Approach Delay (s)	0.0	6.1		10.4
Approach LOS				B

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	31.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	50			0
Storage Lanes	1	2	1			2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	49
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	16	9	16		16	16
Lane Util. Factor	1.00	0.88	1.00	0.95	0.88	0.88
Frt		0.850			0.850	0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	2787	1770	3539	2787	2787
Flt Permitted	0.126		0.950			
Satd. Flow (perm)	235	2787	1770	3539	2787	2787
Right Turn on Red		No	Yes		Yes	
Satd. Flow (RTOR)			47		549	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)				31		
Link Distance (ft)				275		
Travel Time (s)				6.0		
Volume (vph)	72	281	118	970	505	914
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	78	305	128	1054	549	993
Lane Group Flow (vph)	78	305	128	1054	549	993
Turn Type	custom	custom	Perm		custom	custom
Protected Phases	7			8		
Permitted Phases	4	4	8		6 8	6
Detector Phases	7	4	8	8	6 8	6
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.3	21.3	21.3	21.3		21.3
Total Split (s)	18.0	60.7	42.7	42.7	72.0	29.3
Total Split (%)	20.0%	67.4%	47.4%	47.4%	80.0%	32.6%
Maximum Green (s)	12.7	55.4	37.4	37.4		24.0
Yellow Time (s)	3.3	3.3	3.3	3.3		3.3
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	None	None		C-Max
Walk Time (s)		5.0	5.0	5.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	48.4	48.4	36.4	36.4	74.8	33.6
Actuated g/C Ratio	0.54	0.54	0.40	0.40	0.83	0.37
v/c Ratio	0.26	0.20	0.17	0.74	0.23	0.95
Control Delay	9.7	10.0	10.5	25.9	0.5	51.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.7	10.0	10.5	25.9	0.5	51.1
LOS	A	B	B	C	A	D

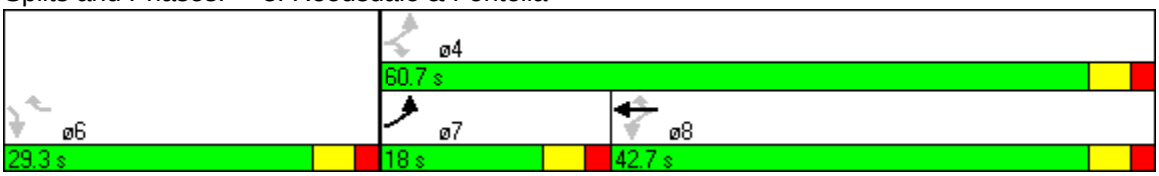
Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Approach Delay				16.7		
Approach LOS				B		
Queue Length 50th (ft)	18	43	28	256	0	~387
Queue Length 95th (ft)	33	58	62	330	11	#563
Internal Link Dist (ft)				195		
Turn Bay Length (ft)	400		50			
Base Capacity (vph)	365	1756	801	1549	2408	1040
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.17	0.16	0.68	0.23	0.95

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 6:SER, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 26.9		Intersection LOS: C	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

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

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

Splits and Phases: 3: Reedsdale & Fontella

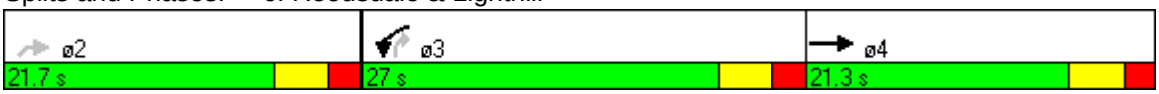


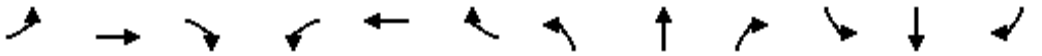
Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49		49				49		49	
Trailing Detector (ft)	0		0				0		0	
Turning Speed (mph)		9	16	16		16	9	16	9	9
Lane Util. Factor	0.95	0.95	0.97	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt	0.950						0.850		0.865	
Flt Protected			0.950							
Satd. Flow (prot)	3362	0	3433	0	0	0	2787	0	1611	0
Flt Permitted			0.950							
Satd. Flow (perm)	3362	0	3433	0	0	0	2787	0	1611	0
Right Turn on Red							Yes			Yes
Satd. Flow (RTOR)							1280		54	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31				31	31		31		
Link Distance (ft)	332				721	268		339		
Travel Time (s)	7.3				15.9	5.9		7.5		
Volume (vph)	100	50	986	0	0	0	256	0	50	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	54	1072	0	0	0	278	0	54	54
Lane Group Flow (vph)	163	0	1072	0	0	0	278	0	108	0
Turn Type			Prot				custom		custom	
Protected Phases	4		3							
Permitted Phases							3		2	
Detector Phases	4		3				3		2	
Minimum Initial (s)	4.0		4.0				4.0		4.0	
Minimum Split (s)	21.3		9.3				9.3		21.3	
Total Split (s)	21.3	0.0	27.0	0.0	0.0	0.0	27.0	0.0	21.7	0.0
Total Split (%)	30.4%	0.0%	38.6%	0.0%	0.0%	0.0%	38.6%	0.0%	31.0%	0.0%
Maximum Green (s)	16.0		21.7				21.7		16.4	
Yellow Time (s)	3.3		3.3				3.3		3.3	
All-Red Time (s)	2.0		2.0				2.0		2.0	
Lead/Lag	Lag		Lead				Lead			
Lead-Lag Optimize?	Yes		Yes				Yes			
Vehicle Extension (s)	3.0		3.0				3.0		3.0	
Recall Mode	None		None				None		C-Min	
Walk Time (s)	5.0								5.0	
Flash Dont Walk (s)	11.0								11.0	
Pedestrian Calls (#/hr)	0								0	
Act Effct Green (s)	9.8		29.9				29.9		18.3	
Actuated g/C Ratio	0.14		0.43				0.43		0.26	
v/c Ratio	0.34		0.73				0.14		0.23	
Control Delay	28.8		20.6				0.2		13.5	
Queue Delay	0.0		0.0				0.0		0.0	
Total Delay	28.8		20.6				0.2		13.5	
LOS	C		C				A		B	
Approach Delay	28.8									
Approach LOS	C									

Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Queue Length 50th (ft)	35		187				0		19	
Queue Length 95th (ft)	61		287				0		56	
Internal Link Dist (ft)	252				641	188		259		
Turn Bay Length (ft)										
Base Capacity (vph)	831		1464				1923		476	
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	0.20		0.73				0.14		0.23	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:NER and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Reedsdale & Lighthill



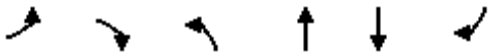


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		49			49					49		49
Trailing Detector (ft)		0			0					0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
Frt												0.850
Flt Protected										0.950		
Satd. Flow (prot)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Flt Permitted										0.950		
Satd. Flow (perm)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												536
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		302			249			302			334	
Travel Time (s)		6.6			5.5			6.6			7.3	
Volume (vph)	0	104	0	0	120	0	0	0	0	854	0	493
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	113	0	0	130	0	0	0	0	928	0	536
Lane Group Flow (vph)	0	113	0	0	130	0	0	0	0	928	0	536
Turn Type										custom		custom
Protected Phases		4			8							
Permitted Phases										6		6
Detector Phases		4			8					6		6
Minimum Initial (s)		4.0			4.0					4.0		4.0
Minimum Split (s)		21.3			21.3					21.3		21.3
Total Split (s)	0.0	31.8	0.0	0.0	31.8	0.0	0.0	0.0	0.0	58.2	0.0	58.2
Total Split (%)	0.0%	35.3%	0.0%	0.0%	35.3%	0.0%	0.0%	0.0%	0.0%	64.7%	0.0%	64.7%
Maximum Green (s)		26.5			26.5					52.9		52.9
Yellow Time (s)		3.3			3.3					3.3		3.3
All-Red Time (s)		2.0			2.0					2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0					3.0		3.0
Recall Mode		None			None					C-Max		C-Max
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)		12.1			12.2					72.9		72.9
Actuated g/C Ratio		0.13			0.14					0.81		0.81
v/c Ratio		0.24			0.51					0.23		0.39
Control Delay		34.8			42.6					1.2		0.9
Queue Delay		0.0			0.0					0.2		0.5
Total Delay		34.8			42.6					1.4		1.4
LOS		C			D					A		A
Approach Delay		34.8			42.7							
Approach LOS		C			D							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		31			72					11		0
Queue Length 95th (ft)		54			124					m26		m0
Internal Link Dist (ft)		222			169			222			254	
Turn Bay Length (ft)												
Base Capacity (vph)		1093			575					4043		1384
Starvation Cap Reductn		0			0					2022		453
Spillback Cap Reductn		0			0					0		0
Storage Cap Reductn		0			0					0		0
Reduced v/c Ratio		0.10			0.23					0.46		0.58

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 7: Porte Cochere & North Shore

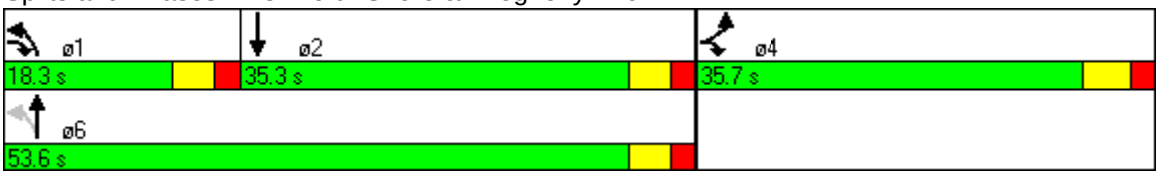


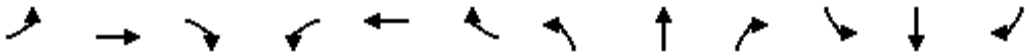
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor	1.00				0.99	
Frt	0.994	0.850			0.964	
Flt Protected	0.954			0.991		
Satd. Flow (prot)	3422	1441	0	3507	3391	0
Flt Permitted	0.954			0.847		
Satd. Flow (perm)	3422	1441	0	2998	3391	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6	423			51	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	459	409	103	489	150	47
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	499	445	112	532	163	51
Lane Group Flow (vph)	521	423	0	644	214	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	35.7	54.0	18.3	53.6	35.3	0.0
Total Split (%)	40.0%	60.5%	20.5%	60.0%	39.5%	0.0%
Maximum Green (s)	30.0		13.0	48.3	30.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	15.4	26.7		22.8	11.5	
Actuated g/C Ratio	0.33	0.58		0.49	0.25	
v/c Ratio	0.46	0.42		0.41	0.24	
Control Delay	13.1	1.9		9.1	12.9	
Queue Delay	0.1	0.0		0.1	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.2	1.9		9.2	12.9	
LOS	B	A		A	B	
Approach Delay	8.1			9.2	12.9	
Approach LOS	A			A	B	
Queue Length 50th (ft)	54	0		51	18	
Queue Length 95th (ft)	92	25		111	50	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1743	1156		2088	1639	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	213	0		299	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.34	0.37		0.36	0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 89.3			
Actuated Cycle Length: 46.3			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost 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
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.952				0.850		0.978	
Flt Protected	0.950			0.950				0.990		0.950		
Satd. Flow (prot)	1770	1848	0	1770	1773	0	0	1844	1583	1770	1822	0
Flt Permitted	0.690			0.697				0.919		0.448		
Satd. Flow (perm)	1285	1848	0	1298	1773	0	0	1712	1583	835	1822	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			31				260		16	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	18	80	5	20	65	30	78	305	239	180	85	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	87	5	22	71	33	85	332	260	196	92	16
Lane Group Flow (vph)	20	92	0	22	104	0	0	417	260	196	108	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.05	0.15		0.05	0.17			0.42	0.25	0.41	0.10	
Control Delay	19.1	19.2		19.1	14.9			11.2	1.8	12.7	6.8	
Queue Delay	0.0	0.0		0.0	0.0			0.8	0.0	0.0	0.0	
Total Delay	19.1	19.2		19.1	14.9			12.0	1.8	12.7	6.8	
LOS	B	B		B	B			B	A	B	A	
Approach Delay		19.2			15.6			8.1			10.6	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)	7	32		8	26			112	0	52	20	
Queue Length 95th (ft)	23	67		25	63			177	30	102	42	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	418	603		422	597			984	1021	480	1054	
Starvation Cap Reductn	0	0		0	0			289	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	0.05	0.15		0.05	0.17			0.60	0.25	0.41	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave

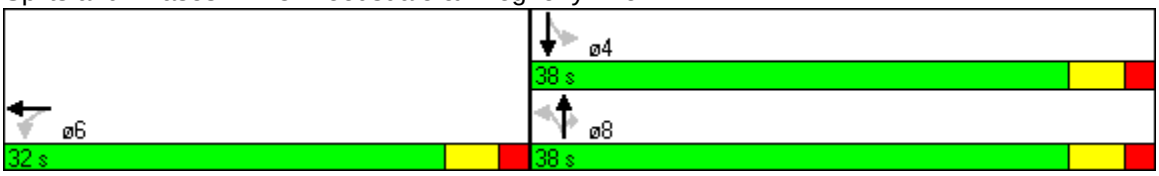
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.987				0.850		0.976	
Flt Protected				0.950			0.950				0.998	
Satd. Flow (prot)	0	0	0	1770	3493	0	1770	1863	1583	0	1814	0
Flt Permitted				0.950			0.719				0.977	
Satd. Flow (perm)	0	0	0	1770	3493	0	1339	1863	1583	0	1776	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					17				95		21	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	107	927	90	210	682	87	5	90	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	116	1008	98	228	741	95	5	98	22
Lane Group Flow (vph)	0	0	0	116	1106	0	228	741	95	0	125	0
Turn Type				Perm			Perm		Perm	Perm		
Protected Phases					6			8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		8	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.7	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		10.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	32.0	32.0	0.0	38.0	38.0	38.0	38.0	38.0	0.0
Total Split (%)	0.0%	0.0%	0.0%	45.7%	45.7%	0.0%	54.3%	54.3%	54.3%	54.3%	54.3%	0.0%
Maximum Green (s)				26.7	26.7		32.7	32.7	32.7	32.7	32.7	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	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	3.0	
Recall Mode				Max	Max		None	None	None	None	None	
Walk Time (s)				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	
Pedestrian Calls (#/hr)				0	0		0	0	0	0	0	
Act Effct Green (s)				28.2	28.2		30.5	30.5	30.5		30.5	
Actuated g/C Ratio				0.42	0.42		0.46	0.46	0.46		0.46	
v/c Ratio				0.16	0.75		0.37	0.87	0.12		0.15	
Control Delay				14.0	20.7		13.6	29.0	3.0		9.0	
Queue Delay				0.0	0.0		0.0	60.0	0.0		0.0	
Total Delay				14.0	20.7		13.6	89.0	3.0		9.0	
LOS				B	C		B	F	A		A	

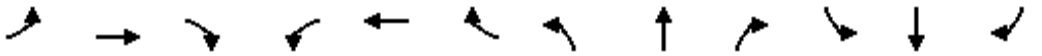
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					20.1			65.2			9.0	
Approach LOS					C			E			A	
Queue Length 50th (ft)				32	217		60	267	0		24	
Queue Length 95th (ft)				65	296		109	#480	22		52	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				747	1484		650	905	818		873	
Starvation Cap Reductn				0	0		0	246	0		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.16	0.75		0.35	1.12	0.12		0.14	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 66.7
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 39.4 Intersection LOS: D
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: Reedsdale & Allegheny Ave



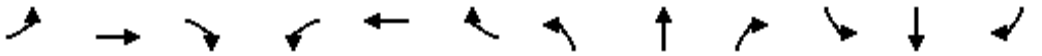


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.940				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3536	0	3433	1751	0	1770	0	1583
Flt Permitted	0.313						0.950			0.950		
Satd. Flow (perm)	583	1863	0	0	3536	0	3433	1751	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								12				54
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			643			229	
Travel Time (s)		7.3			6.6			14.1			5.0	
Volume (vph)	9	289	0	0	521	2	959	17	11	13	0	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	314	0	0	566	2	1042	18	12	14	0	54
Lane Group Flow (vph)	10	314	0	0	568	0	1042	30	0	14	0	54
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	C-Max	C-Max			C-Max		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	59.6	59.6			59.6		42.8	42.8		7.7		7.7
Actuated g/C Ratio	0.50	0.50			0.50		0.36	0.36		0.06		0.06
v/c Ratio	0.03	0.34			0.32		0.85	0.05		0.12		0.35
Control Delay	21.3	22.2			20.8		42.7	15.4		54.4		20.4
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	21.3	22.2			20.8		42.7	15.4		54.4		20.4
LOS	C	C			C		D	B		D		C
Approach Delay		22.2			20.8			42.0				
Approach LOS		C			C			D				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	4	154			145		394	9		11		0
Queue Length 95th (ft)	18	269			225		432	28		33		42
Internal Link Dist (ft)		253			222			563			149	
Turn Bay Length (ft)												
Base Capacity (vph)	289	925			1756		1459	751		236		258
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	0.03	0.34			0.32		0.71	0.04		0.06		0.21

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBWB and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 32.4		Intersection LOS: C	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 22: Western & Fulton



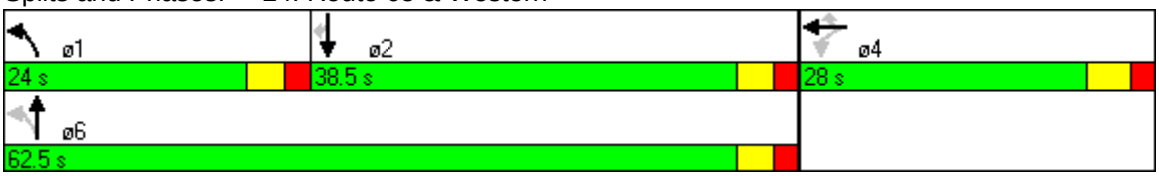
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.104					
Satd. Flow (perm)	0	0	0	3433	1863	1583	194	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						68						177
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		249			147			141			211	
Travel Time (s)		5.5			3.2			3.1			4.6	
Volume (vph)	0	0	0	786	141	63	409	262	0	0	1136	163
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	854	153	68	445	285	0	0	1235	177
Lane Group Flow (vph)	0	0	0	854	153	68	445	285	0	0	1235	177
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				21.5	21.5	21.5	9.3	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	28.0	28.0	28.0	24.0	62.5	0.0	0.0	38.5	38.5
Total Split (%)	0.0%	0.0%	0.0%	30.9%	30.9%	30.9%	26.5%	69.1%	0.0%	0.0%	42.5%	42.5%
Maximum Green (s)				22.5	22.5	22.5	19.0	57.5			33.5	33.5
Yellow Time (s)				3.5	3.5	3.5	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
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	C-Max			C-Max	C-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)				24.0	24.0	24.0	58.5	58.5			34.7	34.7
Actuated g/C Ratio				0.27	0.27	0.27	0.65	0.65			0.38	0.38
v/c Ratio				0.94	0.31	0.14	0.94	0.24			0.91	0.25
Control Delay				51.8	28.7	7.7	54.9	7.3			38.1	4.0
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				51.8	28.7	7.7	54.9	7.3			38.1	4.0
LOS				D	C	A	D	A			D	A
Approach Delay					45.7			36.3			33.8	
Approach LOS					D			D			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)				256	73	0	205	63			360	0
Queue Length 95th (ft)				#377	128	33	#401	100			#503	42
Internal Link Dist (ft)		169			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				910	494	470	474	1204			1355	715
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				0.94	0.31	0.14	0.94	0.24			0.91	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 38.4		Intersection LOS: D	
Intersection Capacity Utilization 86.5%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 24: Route 65 & Western



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	208	779	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	226	847	161
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	643					
pX, platoon unblocked	0.00	0.00	0.00	0.00	0.00	0.00
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			0		0	0
cM capacity (veh/h)			0		0	0

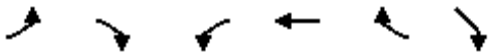
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	226	423	423	161
Volume Left	0	423	423	0
Volume Right	0	0	0	161
cSH	0	0	0	0
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.0		
Approach LOS		A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

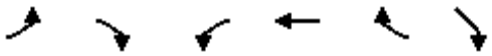
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	346	218	154	115	0	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	376	237	167	125	0	63
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			613		892	495
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			597		887	474
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			82		100	88
cM capacity (veh/h)			937		224	516

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	613	209	83	63
Volume Left	0	167	0	0
Volume Right	237	0	0	63
cSH	1700	937	1700	516
Volume to Capacity	0.36	0.18	0.05	0.12
Queue Length 95th (ft)	0	17	0	11
Control Delay (s)	0.0	8.1	0.0	12.9
Lane LOS		A		B
Approach Delay (s)	0.0	5.8		12.9
Approach LOS				B

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		



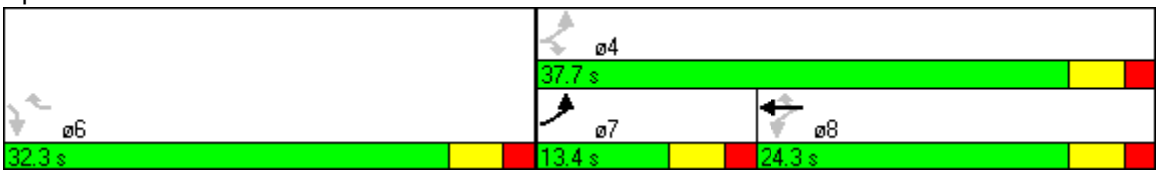
Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	50			0
Storage Lanes	1	2	1			2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	49
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	16	9	16		16	16
Lane Util. Factor	1.00	0.88	1.00	0.95	0.88	0.88
Frt		0.850			0.850	0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	2787	1770	3539	2787	2787
Flt Permitted	0.377		0.950			
Satd. Flow (perm)	702	2787	1770	3539	2787	2787
Right Turn on Red		No	Yes		Yes	
Satd. Flow (RTOR)			102		168	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)				31		
Link Distance (ft)				275		
Travel Time (s)				6.0		
Volume (vph)	101	371	94	368	155	688
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	403	102	400	168	748
Lane Group Flow (vph)	110	403	102	400	168	748
Turn Type	custom	custom	Perm		custom	custom
Protected Phases	7			8		
Permitted Phases	4	4	8		6 8	6
Detector Phases	7	4	8	8	6 8	6
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.3	21.3	21.3	21.3		21.3
Total Split (s)	13.4	37.7	24.3	24.3	56.6	32.3
Total Split (%)	19.1%	53.9%	34.7%	34.7%	80.9%	46.1%
Maximum Green (s)	8.1	32.4	19.0	19.0		27.0
Yellow Time (s)	3.3	3.3	3.3	3.3		3.3
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	None	None		C-Max
Walk Time (s)		5.0	5.0	5.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	25.9	25.9	15.2	15.2	56.1	36.1
Actuated g/C Ratio	0.37	0.37	0.22	0.22	0.80	0.52
v/c Ratio	0.28	0.39	0.22	0.52	0.07	0.52
Control Delay	14.2	16.2	6.0	26.1	0.5	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.2	16.2	6.0	26.1	0.5	14.8
LOS	B	B	A	C	A	B



Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Approach Delay				16.6		
Approach LOS				B		
Queue Length 50th (ft)	30	69	0	84	0	127
Queue Length 95th (ft)	53	90	32	113	5	215
Internal Link Dist (ft)				195		
Turn Bay Length (ft)	400		50			
Base Capacity (vph)	403	1342	586	1026	2263	1439
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.30	0.17	0.39	0.07	0.52

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SER, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: Reedsdale & Fontella

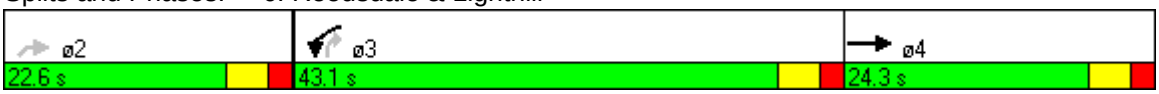


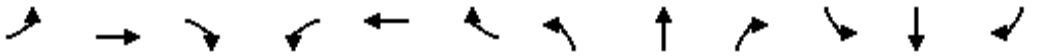
Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49		49				49		49	
Trailing Detector (ft)	0		0				0		0	
Turning Speed (mph)		9	16	16		16	9	16	9	9
Lane Util. Factor	0.95	0.95	0.97	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt	0.976						0.850		0.865	
Flt Protected			0.950							
Satd. Flow (prot)	3454	0	3433	0	0	0	2787	0	1611	0
Flt Permitted			0.950							
Satd. Flow (perm)	3454	0	3433	0	0	0	2787	0	1611	0
Right Turn on Red							Yes			Yes
Satd. Flow (RTOR)							1314		22	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31				31	31		31		
Link Distance (ft)	332				721	268		384		
Travel Time (s)	7.3				15.9	5.9		8.4		
Volume (vph)	109	20	374	0	0	0	358	0	20	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	22	407	0	0	0	389	0	22	22
Lane Group Flow (vph)	140	0	407	0	0	0	389	0	44	0
Turn Type			Prot				custom		custom	
Protected Phases	4		3							
Permitted Phases							3		2	
Detector Phases	4		3				3		2	
Minimum Initial (s)	4.0		4.0				4.0		4.0	
Minimum Split (s)	21.3		9.3				9.3		21.3	
Total Split (s)	24.3	0.0	43.1	0.0	0.0	0.0	43.1	0.0	22.6	0.0
Total Split (%)	27.0%	0.0%	47.9%	0.0%	0.0%	0.0%	47.9%	0.0%	25.1%	0.0%
Maximum Green (s)	19.0		37.8				37.8		17.3	
Yellow Time (s)	3.3		3.3				3.3		3.3	
All-Red Time (s)	2.0		2.0				2.0		2.0	
Lead/Lag	Lag		Lead				Lead			
Lead-Lag Optimize?	Yes		Yes				Yes			
Vehicle Extension (s)	3.0		3.0				3.0		3.0	
Recall Mode	None		None				None		C-Min	
Walk Time (s)	5.0								5.0	
Flash Dont Walk (s)	11.0								11.0	
Pedestrian Calls (#/hr)	0								0	
Act Effct Green (s)	10.1		17.1				17.1		50.8	
Actuated g/C Ratio	0.11		0.19				0.19		0.56	
v/c Ratio	0.36		0.62				0.24		0.05	
Control Delay	39.2		37.4				0.4		7.1	
Queue Delay	0.0		0.0				0.0		0.0	
Total Delay	39.2		37.4				0.4		7.1	
LOS	D		D				A		A	
Approach Delay	39.2									
Approach LOS	D									

Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Queue Length 50th (ft)	41		115				0		5	
Queue Length 95th (ft)	69		151				0		25	
Internal Link Dist (ft)	252				641	188		304		
Turn Bay Length (ft)										
Base Capacity (vph)	779		1491				1954		919	
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	0.18		0.27				0.20		0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NER and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 21.6		Intersection LOS: C	
Intersection Capacity Utilization 29.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Reedsdale & Lighthill



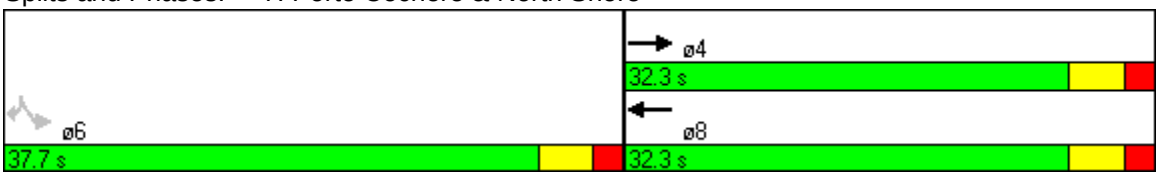


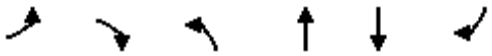
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		49			49					49		49
Trailing Detector (ft)		0			0					0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
Frt												0.850
Flt Protected										0.950		
Satd. Flow (prot)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Flt Permitted										0.950		
Satd. Flow (perm)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												203
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		302			249			302			334	
Travel Time (s)		6.6			5.5			6.6			7.3	
Volume (vph)	0	146	0	0	50	0	0	0	0	967	0	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	159	0	0	54	0	0	0	0	1051	0	203
Lane Group Flow (vph)	0	159	0	0	54	0	0	0	0	1051	0	203
Turn Type										custom		custom
Protected Phases		4			8							
Permitted Phases										6		6
Detector Phases		4			8					6		6
Minimum Initial (s)		4.0			4.0					4.0		4.0
Minimum Split (s)		21.3			21.3					21.3		21.3
Total Split (s)	0.0	32.3	0.0	0.0	32.3	0.0	0.0	0.0	0.0	37.7	0.0	37.7
Total Split (%)	0.0%	46.1%	0.0%	0.0%	46.1%	0.0%	0.0%	0.0%	0.0%	53.9%	0.0%	53.9%
Maximum Green (s)		27.0			27.0					32.4		32.4
Yellow Time (s)		3.3			3.3					3.3		3.3
All-Red Time (s)		2.0			2.0					2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0					3.0		3.0
Recall Mode		None			None					C-Max		C-Max
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)		9.3			9.2					55.7		55.7
Actuated g/C Ratio		0.13			0.13					0.80		0.80
v/c Ratio		0.34			0.22					0.26		0.16
Control Delay		29.2			28.7					2.7		1.2
Queue Delay		0.0			0.0					0.1		0.0
Total Delay		29.2			28.7					2.7		1.2
LOS		C			C					A		A
Approach Delay		29.2			28.7							
Approach LOS		C			C							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		34			22					50		2
Queue Length 95th (ft)		60			52					57		11
Internal Link Dist (ft)		222			169			222			254	
Turn Bay Length (ft)												
Base Capacity (vph)		1431			753					3974		1302
Starvation Cap Reductn		0			0					1308		0
Spillback Cap Reductn		0			0					0		0
Storage Cap Reductn		0			0					0		0
Reduced v/c Ratio		0.11			0.07					0.39		0.16

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.4		Intersection LOS: A	
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Porte Cochere & North Shore



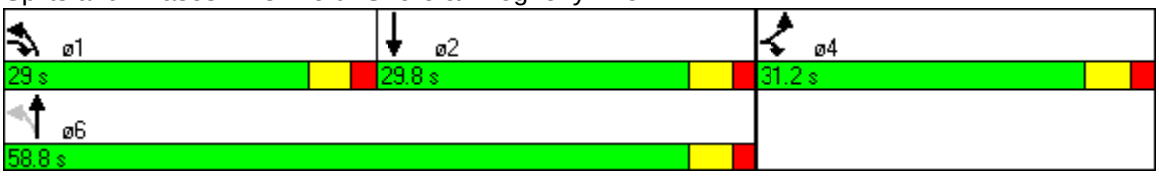


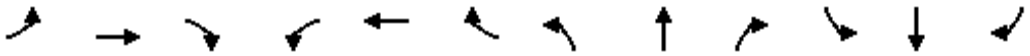
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					1.00	
Frt		0.850			0.985	
Flt Protected	0.950			0.981		
Satd. Flow (prot)	3433	1441	0	3472	3477	0
Flt Permitted	0.950			0.921		
Satd. Flow (perm)	3433	1441	0	3260	3477	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		332			13	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	337	305	23	36	204	23
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	366	332	25	39	222	25
Lane Group Flow (vph)	366	332	0	64	247	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	31.2	60.2	29.0	58.8	29.8	0.0
Total Split (%)	34.7%	66.9%	32.2%	65.3%	33.1%	0.0%
Maximum Green (s)	25.5		23.7	53.5	24.5	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	12.4	23.4		22.6	11.5	
Actuated g/C Ratio	0.29	0.54		0.53	0.27	
v/c Ratio	0.37	0.35		0.04	0.26	
Control Delay	13.2	1.9		6.0	13.6	
Queue Delay	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.2	1.9		6.0	13.6	
LOS	B	A		A	B	
Approach Delay	7.8			6.0	13.6	
Approach LOS	A			A	B	
Queue Length 50th (ft)	36	0		3	23	
Queue Length 95th (ft)	65	25		12	54	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1619	1156		2395	1577	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	6	0		5	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.23	0.29		0.03	0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 43			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 39.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost 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
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.928				0.850		0.961	
Flt Protected	0.950			0.950				0.988		0.950		
Satd. Flow (prot)	1770	1852	0	1770	1729	0	0	1840	1583	1770	1790	0
Flt Permitted	0.741			0.707				0.911		0.449		
Satd. Flow (perm)	1380	1852	0	1317	1729	0	0	1697	1583	836	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			12				415		14	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	15	68	3	16	12	11	97	286	382	143	37	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	74	3	17	13	12	105	311	415	155	40	14
Lane Group Flow (vph)	16	77	0	17	25	0	0	416	415	155	54	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.04	0.13		0.04	0.04			0.43	0.38	0.32	0.05	
Control Delay	18.9	19.1		18.9	13.2			11.3	2.0	11.2	6.1	
Queue Delay	0.0	0.0		0.0	0.0			0.7	0.3	0.0	0.0	
Total Delay	18.9	19.1		18.9	13.2			12.0	2.3	11.2	6.1	
LOS	B	B		B	B			B	A	B	A	
Approach Delay		19.1			15.5			7.1			9.9	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	6	27		6	5			112	0	39	8	
Queue Length 95th (ft)	19	58		20	22			177	36	78	23	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	449	604		428	570			976	1087	481	1035	
Starvation Cap Reductn	0	0		0	0			280	228	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	0.04	0.13		0.04	0.04			0.60	0.48	0.32	0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 45.9%		ICU Level of Service A	
Analysis Period (min) 15			

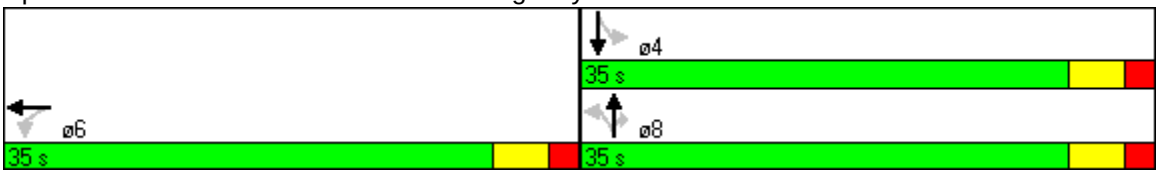
Splits and Phases: 12: Ridge Street & Allegheny Ave

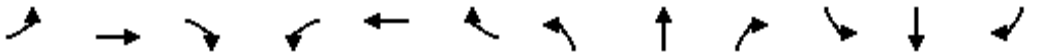
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.932				0.850		0.965	
Flt Protected				0.950			0.950				0.979	
Satd. Flow (prot)	0	0	0	1770	3299	0	1770	1863	1583	0	1760	0
Flt Permitted				0.950			0.704				0.805	
Satd. Flow (perm)	0	0	0	1770	3299	0	1311	1863	1583	0	1447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					380				270		21	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	225	558	458	65	323	248	33	23	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	245	607	498	71	351	270	36	25	21
Lane Group Flow (vph)	0	0	0	245	1105	0	71	351	270	0	82	0
Turn Type				Perm			Perm		Perm	Perm		
Protected Phases					6			8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		8	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.7	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		10.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	35.0	35.0	0.0	35.0	35.0	35.0	35.0	35.0	0.0
Total Split (%)	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Maximum Green (s)				29.7	29.7		29.7	29.7	29.7	29.7	29.7	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	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	3.0	
Recall Mode				Max	Max		None	None	None	None	None	
Walk Time (s)				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	
Pedestrian Calls (#/hr)				0	0		0	0	0	0	0	
Act Effct Green (s)				31.3	31.3		17.7	17.7	17.7		17.7	
Actuated g/C Ratio				0.55	0.55		0.31	0.31	0.31		0.31	
v/c Ratio				0.25	0.56		0.17	0.61	0.40		0.18	
Control Delay				9.1	7.3		14.5	21.1	4.0		11.5	
Queue Delay				0.0	0.0		0.0	0.1	0.0		0.0	
Total Delay				9.1	7.3		14.5	21.2	4.0		11.5	
LOS				A	A		B	C	A		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					7.7			13.8			11.5	
Approach LOS					A			B			B	
Queue Length 50th (ft)				40	69		18	103	0		15	
Queue Length 95th (ft)				104	167		43	173	40		40	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				971	1982		581	825	851		653	
Starvation Cap Reductn				0	0		0	68	36		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.25	0.56		0.12	0.46	0.33		0.13	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 57.1			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Reedsdale & Allegheny Ave



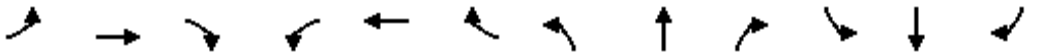


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.996			0.902				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3525	0	3433	1680	0	1770	0	1583
Flt Permitted	0.565						0.950			0.950		
Satd. Flow (perm)	1052	1863	0	0	3525	0	3433	1680	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			45				36
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			649			245	
Travel Time (s)		7.3			6.6			14.3			5.4	
Volume (vph)	70	515	0	0	223	6	176	22	41	12	0	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	560	0	0	242	7	191	24	45	13	0	36
Lane Group Flow (vph)	76	560	0	0	249	0	191	69	0	13	0	36
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		8
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	Min	Min			Min		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	32.8	32.8			32.8		9.8	9.8		7.4		7.4
Actuated g/C Ratio	0.59	0.59			0.59		0.18	0.18		0.12		0.12
v/c Ratio	0.12	0.51			0.12		0.31	0.21		0.06		0.16
Control Delay	7.7	10.0			6.3		20.9	13.5		26.5		12.7
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	7.7	10.0			6.3		20.9	13.5		26.5		12.7
LOS	A	B			A		C	B		C		B
Approach Delay		9.7			6.3			19.0				
Approach LOS		A			A			B				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	62			11		17	4		2		0
Queue Length 95th (ft)	37	252			45		70	44		21		26
Internal Link Dist (ft)		253			222			569			165	
Turn Bay Length (ft)												
Base Capacity (vph)	698	1236			2339		1844	923		412		396
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	0.11	0.45			0.11		0.10	0.07		0.03		0.09

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 55.2			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 11.3		Intersection LOS: B	
Intersection Capacity Utilization 44.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Western & Fulton



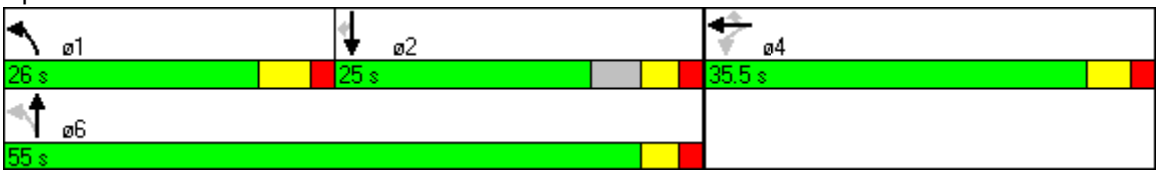
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.489					
Satd. Flow (perm)	0	0	0	3433	1863	1583	911	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						52						26
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		272			147			141			211	
Travel Time (s)		6.0			3.2			3.1			4.6	
Volume (vph)	0	0	0	420	511	48	542	551	0	0	232	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	457	555	52	589	599	0	0	252	26
Lane Group Flow (vph)	0	0	0	457	555	52	589	599	0	0	252	26
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Minimum Split (s)				21.5	21.5	21.5	10.0	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	20.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	4.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
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)				31.5	31.5	31.5	51.0	51.0			25.0	25.0
Actuated g/C Ratio				0.35	0.35	0.35	0.56	0.56			0.28	0.28
v/c Ratio				0.38	0.86	0.09	0.82	0.57			0.26	0.06
Control Delay				23.4	42.4	6.4	24.3	15.4			26.4	9.9
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				23.4	42.4	6.4	24.3	15.4			26.4	9.9
LOS				C	D	A	C	B			C	A
Approach Delay					32.4			19.8			24.9	
Approach LOS					C			B			C	
Queue Length 50th (ft)				104	303	0	213	214			61	0
Queue Length 95th (ft)				146	#494	25	#354	316			94	20
Internal Link Dist (ft)		192			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	585	722	1050			978	456
Starvation Cap Reductn				0	0	0	0	0			0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn				0	0	0	0	0			0	0
Storage Cap Reductn				0	0	0	0	0			0	0
Reduced v/c Ratio				0.38	0.86	0.09	0.82	0.57			0.26	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 25.7		Intersection LOS: C	
Intersection Capacity Utilization 73.3%		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: 24: Route 65 & Western



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	138	118	86
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	150	128	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	649			876		
pX, platoon unblocked						
vC, conflicting volume			0		150	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		150	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		85	91
cM capacity (veh/h)			1623		842	1085

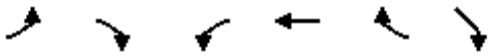
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	150	64	64	93
Volume Left	0	64	64	0
Volume Right	0	0	0	93
cSH	1700	842	842	1085
Volume to Capacity	0.09	0.08	0.08	0.09
Queue Length 95th (ft)	0	6	6	7
Control Delay (s)	0.0	9.6	9.6	8.6
Lane LOS		A	A	A
Approach Delay (s)	0.0	9.2		
Approach LOS		A		

Intersection Summary			
Average Delay	5.5		
Intersection Capacity Utilization	17.3%	ICU Level of Service	A
Analysis Period (min)	15		

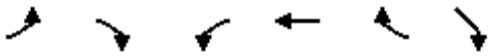
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	458	124	132	50	0	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	498	135	143	54	0	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			0.99		0.99	0.99
vC, conflicting volume			633		879	565
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			627		878	559
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			85		100	76
cM capacity (veh/h)			937		240	466

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	633	162	36	113
Volume Left	0	143	0	0
Volume Right	135	0	0	113
cSH	1700	937	1700	466
Volume to Capacity	0.37	0.15	0.02	0.24
Queue Length 95th (ft)	0	14	0	24
Control Delay (s)	0.0	8.6	0.0	15.2
Lane LOS		A		C
Approach Delay (s)	0.0	7.0		15.2
Approach LOS				C

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		



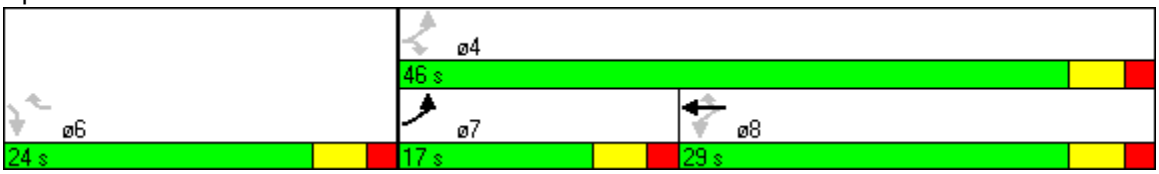
Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	50			0
Storage Lanes	1	2	1			2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	49
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	16	9	16		16	16
Lane Util. Factor	1.00	0.88	1.00	0.95	0.88	0.88
Frt		0.850			0.850	0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	2787	1770	3539	2787	2787
Flt Permitted	0.138		0.950			
Satd. Flow (perm)	257	2787	1770	3539	2787	2787
Right Turn on Red		No	Yes		Yes	
Satd. Flow (RTOR)			29		422	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)				31		
Link Distance (ft)				275		
Travel Time (s)				6.0		
Volume (vph)	252	825	61	921	388	510
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	274	897	66	1001	422	554
Lane Group Flow (vph)	274	897	66	1001	422	554
Turn Type	custom	custom	Perm		custom	custom
Protected Phases	7			8		
Permitted Phases	4	4	8		6 8	6
Detector Phases	7	4	8	8	6 8	6
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.3	21.3	21.3	21.3		21.3
Total Split (s)	17.0	46.0	29.0	29.0	53.0	24.0
Total Split (%)	24.3%	65.7%	41.4%	41.4%	75.7%	34.3%
Maximum Green (s)	11.7	40.7	23.7	23.7		18.7
Yellow Time (s)	3.3	3.3	3.3	3.3		3.3
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	None	None		C-Max
Walk Time (s)		5.0	5.0	5.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	40.7	40.7	24.3	24.3	49.5	21.3
Actuated g/C Ratio	0.58	0.58	0.35	0.35	0.71	0.30
v/c Ratio	0.65	0.55	0.10	0.82	0.20	0.65
Control Delay	19.0	10.4	10.3	27.2	0.6	26.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.0	10.4	10.3	27.2	0.6	26.1
LOS	B	B	B	C	A	C



Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Approach Delay				19.0		
Approach LOS				B		
Queue Length 50th (ft)	56	119	11	207	0	125
Queue Length 95th (ft)	133	170	35	282	11	184
Internal Link Dist (ft)				195		
Turn Bay Length (ft)	400		50			
Base Capacity (vph)	430	1672	651	1265	2095	847
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.54	0.10	0.79	0.20	0.65

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SER, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 17.8		Intersection LOS: B	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: Reedsdale & Fontella

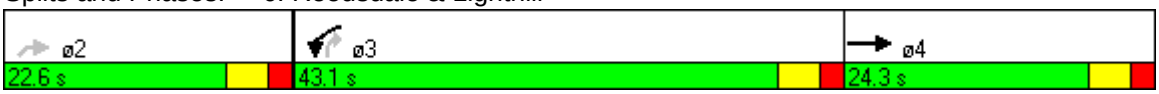


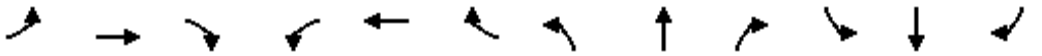
Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49		49				49		49	
Trailing Detector (ft)	0		0				0		0	
Turning Speed (mph)		9	16	16		16	9	16	9	9
Lane Util. Factor	0.95	0.95	0.97	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt	0.967						0.850		0.865	
Flt Protected			0.950							
Satd. Flow (prot)	3422	0	3433	0	0	0	2787	0	1611	0
Flt Permitted			0.950							
Satd. Flow (perm)	3422	0	3433	0	0	0	2787	0	1611	0
Right Turn on Red							Yes			Yes
Satd. Flow (RTOR)							996		50	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31				31	31		31		
Link Distance (ft)	332				721	268		384		
Travel Time (s)	7.3				15.9	5.9		8.4		
Volume (vph)	174	50	936	0	0	0	895	0	50	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	54	1017	0	0	0	973	0	54	54
Lane Group Flow (vph)	243	0	1017	0	0	0	973	0	108	0
Turn Type			Prot				custom		custom	
Protected Phases	4		3							
Permitted Phases							3		2	
Detector Phases	4		3				3		2	
Minimum Initial (s)	4.0		4.0				4.0		4.0	
Minimum Split (s)	21.3		9.3				9.3		21.3	
Total Split (s)	24.3	0.0	43.1	0.0	0.0	0.0	43.1	0.0	22.6	0.0
Total Split (%)	27.0%	0.0%	47.9%	0.0%	0.0%	0.0%	47.9%	0.0%	25.1%	0.0%
Maximum Green (s)	19.0		37.8				37.8		17.3	
Yellow Time (s)	3.3		3.3				3.3		3.3	
All-Red Time (s)	2.0		2.0				2.0		2.0	
Lead/Lag	Lag		Lead				Lead			
Lead-Lag Optimize?	Yes		Yes				Yes			
Vehicle Extension (s)	3.0		3.0				3.0		3.0	
Recall Mode	None		None				None		C-Min	
Walk Time (s)	5.0								5.0	
Flash Dont Walk (s)	11.0								11.0	
Pedestrian Calls (#/hr)	0								0	
Act Effct Green (s)	12.7		39.3				39.3		26.0	
Actuated g/C Ratio	0.14		0.44				0.44		0.29	
v/c Ratio	0.50		0.68				0.55		0.22	
Control Delay	39.1		22.4				2.1		17.9	
Queue Delay	0.0		0.0				0.0		0.0	
Total Delay	39.1		22.4				2.1		17.9	
LOS	D		C				A		B	
Approach Delay	39.1									
Approach LOS	D									

Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Queue Length 50th (ft)	71		226				0		26	
Queue Length 95th (ft)	105		285				30		75	
Internal Link Dist (ft)	252				641	188		304		
Turn Bay Length (ft)										
Base Capacity (vph)	772		1596				1829		504	
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	0.31		0.64				0.53		0.21	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NER and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 15.5		Intersection LOS: B	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: Reedsdale & Lighthill



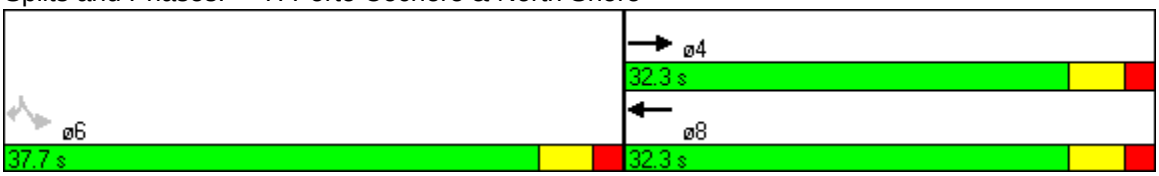


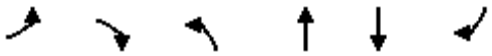
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		49			49					49		49
Trailing Detector (ft)		0			0					0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
Frt												0.850
Flt Protected										0.950		
Satd. Flow (prot)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Flt Permitted										0.950		
Satd. Flow (perm)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												509
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		302			249			302			334	
Travel Time (s)		6.6			5.5			6.6			7.3	
Volume (vph)	0	365	0	0	100	0	0	0	0	931	0	468
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	397	0	0	109	0	0	0	0	1012	0	509
Lane Group Flow (vph)	0	397	0	0	109	0	0	0	0	1012	0	509
Turn Type										custom		custom
Protected Phases		4			8							
Permitted Phases										6		6
Detector Phases		4			8					6		6
Minimum Initial (s)		4.0			4.0					4.0		4.0
Minimum Split (s)		21.3			21.3					21.3		21.3
Total Split (s)	0.0	32.3	0.0	0.0	32.3	0.0	0.0	0.0	0.0	37.7	0.0	37.7
Total Split (%)	0.0%	46.1%	0.0%	0.0%	46.1%	0.0%	0.0%	0.0%	0.0%	53.9%	0.0%	53.9%
Maximum Green (s)		27.0			27.0					32.4		32.4
Yellow Time (s)		3.3			3.3					3.3		3.3
All-Red Time (s)		2.0			2.0					2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0					3.0		3.0
Recall Mode		None			None					C-Max		C-Max
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)		13.6			13.6					48.4		48.4
Actuated g/C Ratio		0.19			0.19					0.69		0.69
v/c Ratio		0.58			0.30					0.29		0.41
Control Delay		28.8			25.7					7.1		3.3
Queue Delay		0.0			0.0					0.2		0.4
Total Delay		28.8			25.7					7.3		3.7
LOS		C			C					A		A
Approach Delay		28.8			25.7							
Approach LOS		C			C							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		85			42					71		21
Queue Length 95th (ft)		121			80					104		71
Internal Link Dist (ft)		222			169			222			254	
Turn Bay Length (ft)												
Base Capacity (vph)		1431			753					3453		1252
Starvation Cap Reductn		0			0					1410		314
Spillback Cap Reductn		0			0					0		0
Storage Cap Reductn		0			0					0		0
Reduced v/c Ratio		0.28			0.14					0.50		0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 55.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Porte Cochere & North Shore



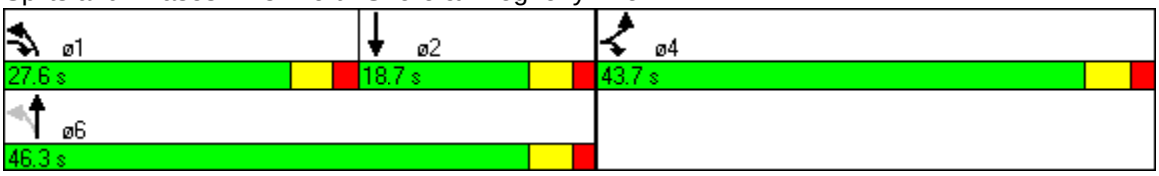


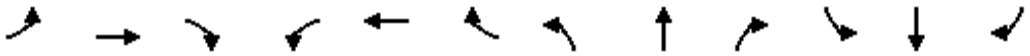
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99	
Frt		0.850			0.933	
Flt Protected	0.950			0.983		
Satd. Flow (prot)	3433	1441	0	3479	3264	0
Flt Permitted	0.950			0.854		
Satd. Flow (perm)	3433	1441	0	3022	3264	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		491			67	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	813	452	70	136	75	62
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	884	491	76	148	82	67
Lane Group Flow (vph)	884	491	0	224	149	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	43.7	71.3	27.6	46.3	18.7	0.0
Total Split (%)	48.6%	79.2%	30.7%	51.4%	20.8%	0.0%
Maximum Green (s)	38.0		22.3	41.0	13.4	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	24.0	35.4		23.0	11.5	
Actuated g/C Ratio	0.44	0.64		0.42	0.21	
v/c Ratio	0.59	0.45		0.17	0.20	
Control Delay	13.2	1.7		12.3	13.8	
Queue Delay	0.1	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.3	1.7		12.4	13.8	
LOS	B	A		B	B	
Approach Delay	9.2			12.4	13.8	
Approach LOS	A			B	B	
Queue Length 50th (ft)	107	0		23	11	
Queue Length 95th (ft)	161	23		57	40	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1939	1229		1769	885	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	290	0		222	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.54	0.40		0.14	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 55.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 10.0		Intersection LOS: A	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave



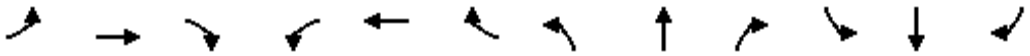


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.959				0.850		0.937	
Flt Protected	0.950			0.950				0.985		0.950		
Satd. Flow (prot)	1770	1853	0	1770	1786	0	0	1835	1583	1770	1745	0
Flt Permitted	0.682			0.649				0.890		0.528		
Satd. Flow (perm)	1270	1853	0	1209	1786	0	0	1658	1583	984	1745	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			25				272		28	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	21	127	5	38	77	29	91	201	250	204	36	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	138	5	41	84	32	99	218	272	222	39	28
Lane Group Flow (vph)	23	143	0	41	116	0	0	317	272	222	67	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.06	0.24		0.10	0.19			0.33	0.27	0.39	0.07	
Control Delay	19.1	20.8		19.9	16.3			10.2	1.8	11.9	5.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	19.1	20.8		19.9	16.3			10.2	1.8	11.9	5.2	
LOS	B	C		B	B			B	A	B	A	
Approach Delay		20.6			17.2			6.3			10.4	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)	8	53		15	33			79	0	58	8	
Queue Length 95th (ft)	25	98		38	72			130	30	109	24	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	413	604		393	597			953	1026	566	1015	
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	0.06	0.24		0.10	0.19			0.33	0.27	0.39	0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 50.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave



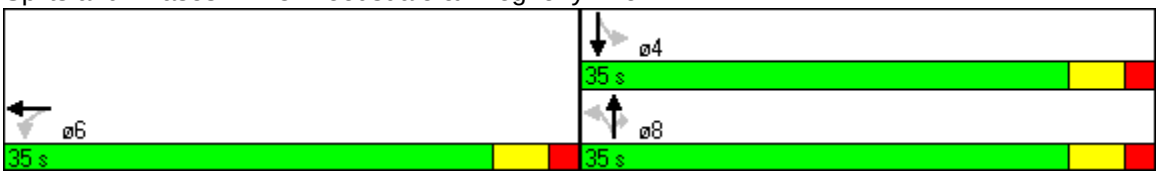
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.962				0.850		0.958	
Flt Protected				0.950			0.950				0.982	
Satd. Flow (prot)	0	0	0	1770	3405	0	1770	1863	1583	0	1752	0
Flt Permitted				0.950			0.724				0.557	
Satd. Flow (perm)	0	0	0	1770	3405	0	1349	1863	1583	0	994	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					86				334		35	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	127	954	326	106	619	307	38	33	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	138	1037	354	115	673	334	41	36	35
Lane Group Flow (vph)	0	0	0	138	1391	0	115	673	334	0	112	0
Turn Type				Perm			Perm		Perm	Perm		
Protected Phases					6			8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		8	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.7	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		10.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	35.0	35.0	0.0	35.0	35.0	35.0	35.0	35.0	0.0
Total Split (%)	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%
Maximum Green (s)				29.7	29.7		29.7	29.7	29.7	29.7	29.7	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	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	3.0	
Recall Mode				Max	Max		None	None	None	None	None	
Walk Time (s)				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	
Pedestrian Calls (#/hr)				0	0		0	0	0	0	0	
Act Effct Green (s)				31.1	31.1		28.2	28.2	28.2		28.2	
Actuated g/C Ratio				0.46	0.46		0.42	0.42	0.42		0.42	
v/c Ratio				0.17	0.86		0.20	0.86	0.39		0.26	
Control Delay				12.3	23.1		13.2	31.0	3.1		10.7	
Queue Delay				0.0	0.0		0.0	51.7	0.3		0.0	
Total Delay				12.3	23.1		13.2	82.7	3.4		10.7	
LOS				B	C		B	F	A		B	

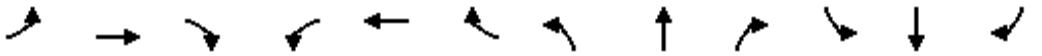
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					22.1			52.0			10.7	
Approach LOS					C			D			B	
Queue Length 50th (ft)				36	273		30	252	0		20	
Queue Length 95th (ft)				69	#425		62	#447	43		52	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				818	1619		597	825	887		460	
Starvation Cap Reductn				0	0		0	215	179		0	
Spillback Cap Reductn				0	0		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.17	0.86		0.19	1.10	0.47		0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 67.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 33.8		Intersection LOS: C	
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			

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

Splits and Phases: 13: Reedsdale & Allegheny Ave



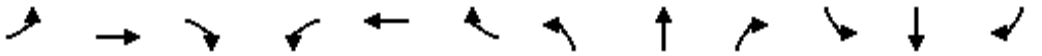


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.999			0.941				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3536	0	3433	1753	0	1770	0	1583
Flt Permitted	0.313						0.950			0.950		
Satd. Flow (perm)	583	1863	0	0	3536	0	3433	1753	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								11				53
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			643			192	
Travel Time (s)		7.3			6.6			14.1			4.2	
Volume (vph)	9	289	0	0	521	2	921	16	10	13	0	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	314	0	0	566	2	1001	17	11	14	0	53
Lane Group Flow (vph)	10	314	0	0	568	0	1001	28	0	14	0	53
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Minimum Split (s)	22.0	22.0			22.0		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	41.0	41.0			41.0		51.0	51.0		16.0		16.0
Actuated g/C Ratio	0.34	0.34			0.34		0.42	0.42		0.13		0.13
v/c Ratio	0.05	0.49			0.47		0.69	0.04		0.06		0.21
Control Delay	27.6	34.5			32.6		31.0	14.4		46.3		14.4
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	27.6	34.5			32.6		31.0	14.4		46.3		14.4
LOS	C	C			C		C	B		D		B
Approach Delay		34.3			32.6			30.6				
Approach LOS		C			C			C				
Queue Length 50th (ft)	5	199			187		331	8		10		0
Queue Length 95th (ft)	19	292			244		409	27		31		40
Internal Link Dist (ft)		253			222			563			112	
Turn Bay Length (ft)												
Base Capacity (vph)	199	637			1208		1459	751		236		257
Starvation Cap Reductn	0	0			0		0	0		0		0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0		0	0		0		0
Storage Cap Reductn	0	0			0		0	0		0		0
Reduced v/c Ratio	0.05	0.49			0.47		0.69	0.04		0.06		0.21

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 1.3 (1%), Referenced to phase 2:EBWB and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 31.4		Intersection LOS: C	
Intersection Capacity Utilization 54.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Western & Fulton



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost 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
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.107					
Satd. Flow (perm)	0	0	0	3433	1863	1583	199	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						68						170
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		237			147			141			211	
Travel Time (s)		5.2			3.2			3.1			4.6	
Volume (vph)	0	0	0	786	141	63	409	262	0	0	1087	156
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	854	153	68	445	285	0	0	1182	170
Lane Group Flow (vph)	0	0	0	854	153	68	445	285	0	0	1182	170
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				21.5	21.5	21.5	9.3	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	28.0	28.0	28.0	25.0	62.5	0.0	0.0	37.5	37.5
Total Split (%)	0.0%	0.0%	0.0%	30.9%	30.9%	30.9%	27.6%	69.1%	0.0%	0.0%	41.4%	41.4%
Maximum Green (s)				22.5	22.5	22.5	20.0	57.5			32.5	32.5
Yellow Time (s)				3.5	3.5	3.5	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
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	C-Max			C-Max	C-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)				24.0	24.0	24.0	58.5	58.5			34.2	34.2
Actuated g/C Ratio				0.27	0.27	0.27	0.65	0.65			0.38	0.38
v/c Ratio				0.94	0.31	0.14	0.93	0.24			0.88	0.24
Control Delay				51.8	28.7	7.7	50.6	7.3			36.0	4.1
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				51.8	28.7	7.7	50.6	7.3			36.0	4.1
LOS				D	C	A	D	A			D	A
Approach Delay					45.7			33.7			32.0	
Approach LOS					D			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)				256	73	0	201	63			344	0
Queue Length 95th (ft)				#377	128	33	#388	100			#480	41
Internal Link Dist (ft)		157			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				910	494	470	493	1204			1339	705
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				0.94	0.31	0.14	0.90	0.24			0.88	0.24

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 37.1		Intersection LOS: D	
Intersection Capacity Utilization 85.1%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 24: Route 65 & Western

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	314	477	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	341	518	176
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	643					
pX, platoon unblocked	0.00	0.00	0.00	0.00	0.00	0.00
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			0		0	0
cM capacity (veh/h)			0		0	0

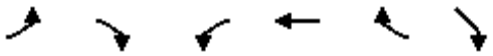
Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	341	259	259	176
Volume Left	0	259	259	0
Volume Right	0	0	0	176
cSH	0	0	0	0
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.0		
Approach LOS		A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

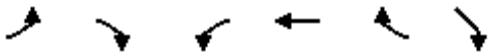
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	333	209	154	115	0	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	362	227	167	125	0	63
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked			0.93		0.93	0.93
vC, conflicting volume			589		873	476
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			558		863	436
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			82		100	88
cM capacity (veh/h)			938		224	528

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	589	209	83	63
Volume Left	0	167	0	0
Volume Right	227	0	0	63
cSH	1700	938	1700	528
Volume to Capacity	0.35	0.18	0.05	0.12
Queue Length 95th (ft)	0	17	0	10
Control Delay (s)	0.0	8.1	0.0	12.7
Lane LOS		A		B
Approach Delay (s)	0.0	5.8		12.7
Approach LOS				B

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	50			0
Storage Lanes	1	2	1			2
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	49
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	16	9	16		16	16
Lane Util. Factor	1.00	0.88	1.00	0.95	0.88	0.88
Frt		0.850			0.850	0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	2787	1770	3539	2787	2787
Flt Permitted	0.094		0.950			
Satd. Flow (perm)	175	2787	1770	3539	2787	2787
Right Turn on Red		No	Yes		Yes	
Satd. Flow (RTOR)			21		86	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)				31		
Link Distance (ft)				275		
Travel Time (s)				6.0		
Volume (vph)	324	848	79	1434	79	728
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	352	922	86	1559	86	791
Lane Group Flow (vph)	352	922	86	1559	86	791
Turn Type	custom	custom	Perm		custom	custom
Protected Phases	7			8		
Permitted Phases	4	4	8		6 8	6
Detector Phases	7	4	8	8	6 8	6
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0
Minimum Split (s)	9.3	21.3	21.3	21.3		21.3
Total Split (s)	18.0	60.7	42.7	42.7	72.0	29.3
Total Split (%)	20.0%	67.4%	47.4%	47.4%	80.0%	32.6%
Maximum Green (s)	12.7	55.4	37.4	37.4		24.0
Yellow Time (s)	3.3	3.3	3.3	3.3		3.3
All-Red Time (s)	2.0	2.0	2.0	2.0		2.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	None	None	None	None		C-Max
Walk Time (s)		5.0	5.0	5.0		
Flash Dont Walk (s)		11.0	11.0	11.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)	56.7	56.7	38.7	38.7	68.0	25.3
Actuated g/C Ratio	0.63	0.63	0.43	0.43	0.76	0.28
v/c Ratio	0.98	0.53	0.11	1.02	0.04	1.01
Control Delay	65.5	10.6	12.4	56.2	0.7	68.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.5	10.6	12.4	56.2	0.7	68.4
LOS	E	B	B	E	A	E



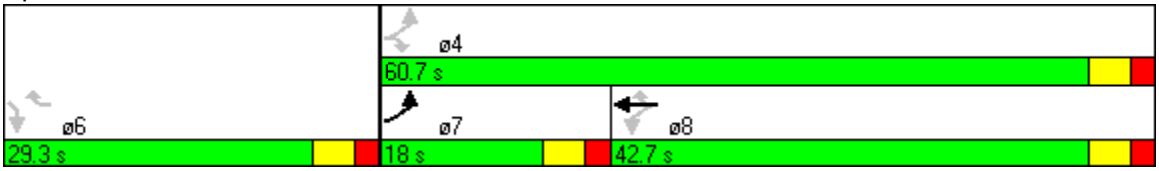
Lane Group	EBL	EBR	WBL	WBT	WBR2	SER
Approach Delay				51.3		
Approach LOS				D		
Queue Length 50th (ft)	155	155	22	~522	0	~269
Queue Length 95th (ft)	#337	213	51	#662	5	#412
Internal Link Dist (ft)				195		
Turn Bay Length (ft)	400		50			
Base Capacity (vph)	358	1756	773	1522	2127	783
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.53	0.11	1.02	0.04	1.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 6:SER, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 46.3		Intersection LOS: D	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

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

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

Splits and Phases: 3: Reedsdale & Fontella

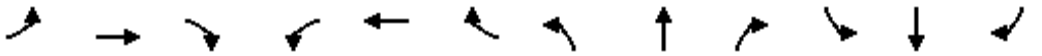


Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49		49				49		49	
Trailing Detector (ft)	0		0				0		0	
Turning Speed (mph)		9	16	16		16	9	16	9	9
Lane Util. Factor	0.95	0.95	0.97	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt	0.893						0.850		0.865	
Flt Protected			0.950							
Satd. Flow (prot)	3161	0	3433	0	0	0	2787	0	1611	0
Flt Permitted			0.950							
Satd. Flow (perm)	3161	0	3433	0	0	0	2787	0	1611	0
Right Turn on Red							Yes			Yes
Satd. Flow (RTOR)							1664		54	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31				31	31		31		
Link Distance (ft)	332				721	268		310		
Travel Time (s)	7.3				15.9	5.9		6.8		
Volume (vph)	20	50	1457	0	0	0	1150	0	20	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	54	1584	0	0	0	1250	0	22	54
Lane Group Flow (vph)	76	0	1584	0	0	0	1250	0	76	0
Turn Type			Prot				custom		custom	
Protected Phases	4		3							
Permitted Phases							3		2	
Detector Phases	4		3				3		2	
Minimum Initial (s)	4.0		4.0				4.0		4.0	
Minimum Split (s)	21.3		9.3				9.3		21.3	
Total Split (s)	21.3	0.0	47.0	0.0	0.0	0.0	47.0	0.0	21.7	0.0
Total Split (%)	23.7%	0.0%	52.2%	0.0%	0.0%	0.0%	52.2%	0.0%	24.1%	0.0%
Maximum Green (s)	16.0		41.7				41.7		16.4	
Yellow Time (s)	3.3		3.3				3.3		3.3	
All-Red Time (s)	2.0		2.0				2.0		2.0	
Lead/Lag	Lag		Lead				Lead			
Lead-Lag Optimize?	Yes		Yes				Yes			
Vehicle Extension (s)	3.0		3.0				3.0		3.0	
Recall Mode	None		None				None		C-Min	
Walk Time (s)	5.0								5.0	
Flash Dont Walk (s)	11.0								11.0	
Pedestrian Calls (#/hr)	0								0	
Act Effct Green (s)	8.7		50.0				50.0		21.4	
Actuated g/C Ratio	0.10		0.56				0.56		0.24	
v/c Ratio	0.25		0.83				0.55		0.18	
Control Delay	39.1		40.2				0.9		14.1	
Queue Delay	0.0		0.0				0.0		0.0	
Total Delay	39.1		40.2				0.9		14.1	
LOS	D		D				A		B	
Approach Delay	39.1									
Approach LOS	D									

Lane Group	EBT	EBR	WBL2	WBL	WBT	NBL	NBR	NEL	NER	NER2
Queue Length 50th (ft)	22		509				0		11	
Queue Length 95th (ft)	44		m498				0		48	
Internal Link Dist (ft)	252				641	188		230		
Turn Bay Length (ft)										
Base Capacity (vph)	608		1908				2288		430	
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	0.13		0.83				0.55		0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NER and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 23.1		Intersection LOS: C	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 6: Reedsdale & Lighthill

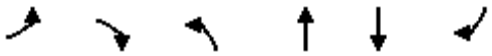


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		49			49					49		49
Trailing Detector (ft)		0			0					0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	1.00
Frt												0.850
Flt Protected										0.950		
Satd. Flow (prot)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Flt Permitted										0.950		
Satd. Flow (perm)	0	3539	0	0	1863	0	0	0	0	4990	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												642
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		302			249			302			334	
Travel Time (s)		6.6			5.5			6.6			7.3	
Volume (vph)	0	470	0	0	118	0	0	0	0	920	0	729
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	511	0	0	128	0	0	0	0	1000	0	792
Lane Group Flow (vph)	0	511	0	0	128	0	0	0	0	1000	0	792
Turn Type										custom		custom
Protected Phases		4			8							
Permitted Phases										6		6
Detector Phases		4			8					6		6
Minimum Initial (s)		4.0			4.0					4.0		4.0
Minimum Split (s)		21.3			21.3					21.3		21.3
Total Split (s)	0.0	31.8	0.0	0.0	31.8	0.0	0.0	0.0	0.0	58.2	0.0	58.2
Total Split (%)	0.0%	35.3%	0.0%	0.0%	35.3%	0.0%	0.0%	0.0%	0.0%	64.7%	0.0%	64.7%
Maximum Green (s)		26.5			26.5					52.9		52.9
Yellow Time (s)		3.3			3.3					3.3		3.3
All-Red Time (s)		2.0			2.0					2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0			3.0					3.0		3.0
Recall Mode		None			None					C-Max		C-Max
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)		18.8			18.8					63.2		63.2
Actuated g/C Ratio		0.21			0.21					0.70		0.70
v/c Ratio		0.69			0.33					0.29		0.61
Control Delay		37.7			31.6					3.9		2.0
Queue Delay		0.0			0.0					0.3		0.7
Total Delay		37.7			31.6					4.2		2.7
LOS		D			C					A		A
Approach Delay		37.7			31.6							
Approach LOS		D			C							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		148			65					37		0
Queue Length 95th (ft)		189			109					m67		m7
Internal Link Dist (ft)		222			169			222			254	
Turn Bay Length (ft)												
Base Capacity (vph)		1093			575					3502		1303
Starvation Cap Reductn		0			0					1680		215
Spillback Cap Reductn		0			0					0		0
Storage Cap Reductn		0			0					0		0
Reduced v/c Ratio		0.47			0.22					0.55		0.73

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 6:SBL, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 12.2	Intersection LOS: B
Intersection Capacity Utilization 75.0%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 7: Porte Cochere & North Shore

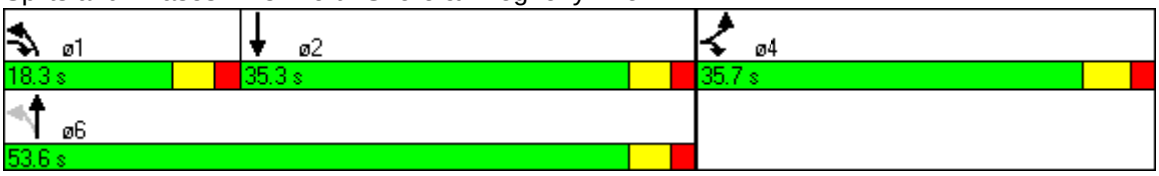


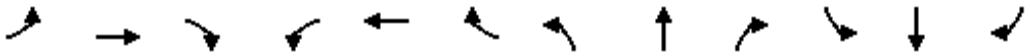
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			100
Storage Lanes	2	1	0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49	49	49	49	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	16	9	16			9
Lane Util. Factor	0.97	0.91	0.95	0.95	0.95	0.95
Ped Bike Factor					0.99	
Frt		0.850			0.943	
Flt Protected	0.950			0.984		
Satd. Flow (prot)	3433	1441	0	3483	3305	0
Flt Permitted	0.950			0.824		
Satd. Flow (perm)	3433	1441	0	2916	3305	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		558			55	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	31			31	31	
Link Distance (ft)	599			211	330	
Travel Time (s)	13.2			4.6	7.3	
Volume (vph)	882	513	85	172	82	51
Confl. Peds. (#/hr)		4				2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	959	558	92	187	89	55
Lane Group Flow (vph)	959	558	0	279	144	0
Turn Type		pt+ov	pm+pt			
Protected Phases	4	1 4	1	6	2	
Permitted Phases			6			
Detector Phases	4	1 4	1	6	2	
Minimum Initial (s)	5.0		5.0	10.0	10.0	
Minimum Split (s)	10.7		10.3	15.3	15.3	
Total Split (s)	35.7	54.0	18.3	53.6	35.3	0.0
Total Split (%)	40.0%	60.5%	20.5%	60.0%	39.5%	0.0%
Maximum Green (s)	30.0		13.0	48.3	30.0	
Yellow Time (s)	3.7		3.3	3.3	3.3	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	None		None	Min	Min	
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)	25.3	36.9		23.1	11.5	
Actuated g/C Ratio	0.45	0.65		0.41	0.20	
v/c Ratio	0.62	0.49		0.22	0.20	
Control Delay	13.7	2.0		12.6	15.0	
Queue Delay	0.2	0.0		0.0	0.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Delay	13.9	2.0		12.6	15.0	
LOS	B	A		B	B	
Approach Delay	9.5			12.6	15.0	
Approach LOS	A			B	B	
Queue Length 50th (ft)	119	0		32	13	
Queue Length 95th (ft)	182	25		64	39	
Internal Link Dist (ft)	519			131	250	
Turn Bay Length (ft)						
Base Capacity (vph)	1741	1195		1797	1395	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	175	0		284	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.61	0.47		0.18	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 89.3			
Actuated Cycle Length: 56.5			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 8: North Shore & Allegheny Ave



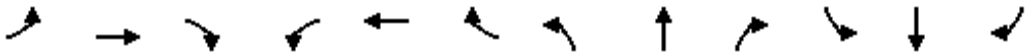


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	0		1	1		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.954				0.850		0.944	
Flt Protected	0.950			0.950				0.971		0.950		
Satd. Flow (prot)	1770	1853	0	1770	1777	0	0	1809	1583	1770	1758	0
Flt Permitted	0.684			0.616				0.773		0.388		
Satd. Flow (perm)	1274	1853	0	1147	1777	0	0	1440	1583	723	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			30				424		30	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		876			356			429			234	
Travel Time (s)		19.3			7.8			9.4			5.1	
Volume (vph)	19	147	5	45	73	32	270	187	390	248	46	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	160	5	49	79	35	293	203	424	270	50	30
Lane Group Flow (vph)	21	165	0	49	114	0	0	496	424	270	80	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	21.3	21.3		21.3	21.3		21.3	21.3	21.3	21.3	21.3	
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	50.0	50.0	50.0	50.0	50.0	0.0
Total Split (%)	37.5%	37.5%	0.0%	37.5%	37.5%	0.0%	62.5%	62.5%	62.5%	62.5%	62.5%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	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	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)	26.0	26.0		26.0	26.0			46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.32	0.32		0.32	0.32			0.58	0.58	0.58	0.58	
v/c Ratio	0.05	0.27		0.13	0.19			0.60	0.39	0.65	0.08	
Control Delay	19.1	21.3		20.3	15.5			14.8	2.0	20.7	5.4	
Queue Delay	0.0	0.0		0.0	0.0			1.1	0.3	0.0	0.0	
Total Delay	19.1	21.3		20.3	15.5			16.0	2.3	20.7	5.4	
LOS	B	C		C	B			B	A	C	A	
Approach Delay		21.0			16.9			9.7			17.2	
Approach LOS		C			B			A			B	
Queue Length 50th (ft)	7	62		18	31			153	0	87	10	
Queue Length 95th (ft)	24	112		43	69			253	37	188	29	
Internal Link Dist (ft)		796			276			349			154	
Turn Bay Length (ft)	300											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	414	604		373	598			828	1090	416	1024	
Starvation Cap Reductn	0	0		0	0			148	226	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	0.05	0.27		0.13	0.19			0.73	0.49	0.65	0.08	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 13.3		Intersection LOS: B	
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: Ridge Street & Allegheny Ave



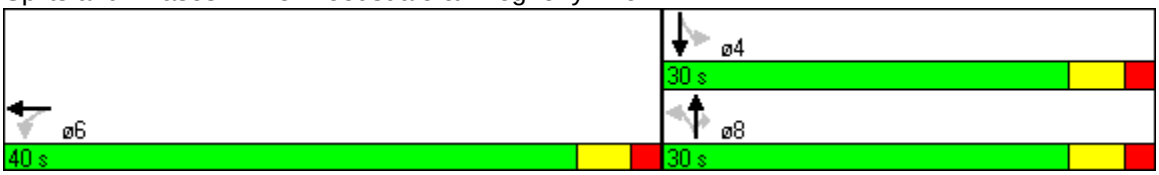
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	0		0
Storage Lanes	0		0	1		0	1		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)				49	49		49	49	49	49	49	
Trailing Detector (ft)				0	0		0	0	0	0	0	
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.975				0.850		0.955	
Flt Protected				0.950			0.950				0.984	
Satd. Flow (prot)	0	0	0	1770	3451	0	1770	1863	1583	0	1750	0
Flt Permitted				0.950			0.729				0.509	
Satd. Flow (perm)	0	0	0	1770	3451	0	1358	1863	1583	0	905	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					49				413		19	
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		605			357			330			429	
Travel Time (s)		13.3			7.9			7.3			9.4	
Volume (vph)	0	0	0	97	1400	280	152	567	380	32	32	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	105	1522	304	165	616	413	35	35	35
Lane Group Flow (vph)	0	0	0	105	1826	0	165	616	413	0	105	0
Turn Type				Perm			Perm		Perm	Perm		
Protected Phases					6			8			4	
Permitted Phases				6			8		8	4		
Detector Phases				6	6		8	8	8	4	4	
Minimum Initial (s)				10.0	10.0		4.7	4.7	4.7	5.0	5.0	
Minimum Split (s)				15.3	15.3		10.3	10.3	10.3	10.3	10.3	
Total Split (s)	0.0	0.0	0.0	40.0	40.0	0.0	30.0	30.0	30.0	30.0	30.0	0.0
Total Split (%)	0.0%	0.0%	0.0%	57.1%	57.1%	0.0%	42.9%	42.9%	42.9%	42.9%	42.9%	0.0%
Maximum Green (s)				34.7	34.7		24.7	24.7	24.7	24.7	24.7	
Yellow Time (s)				3.3	3.3		3.3	3.3	3.3	3.3	3.3	
All-Red Time (s)				2.0	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	3.0	
Recall Mode				Max	Max		None	None	None	None	None	
Walk Time (s)				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	
Pedestrian Calls (#/hr)				0	0		0	0	0	0	0	
Act Effct Green (s)				36.0	36.0		25.4	25.4	25.4		25.4	
Actuated g/C Ratio				0.52	0.52		0.37	0.37	0.37		0.37	
v/c Ratio				0.11	1.01		0.33	0.90	0.49		0.31	
Control Delay				9.2	40.9		18.2	40.6	4.1		15.9	
Queue Delay				0.0	0.9		0.0	57.1	0.2		0.0	
Total Delay				9.2	41.8		18.2	97.8	4.3		15.9	
LOS				A	D		B	F	A		B	

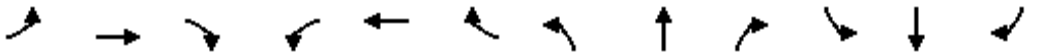
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					40.1			54.5			15.9	
Approach LOS					D			D			B	
Queue Length 50th (ft)				23	~415		52	253	0		26	
Queue Length 95th (ft)				46	#599		99	#450	54		64	
Internal Link Dist (ft)		525			277			250			349	
Turn Bay Length (ft)							150					
Base Capacity (vph)				919	1816		504	692	848		348	
Starvation Cap Reductn				0	0		0	143	87		0	
Spillback Cap Reductn				0	6		0	0	0		0	
Storage Cap Reductn				0	0		0	0	0		0	
Reduced v/c Ratio				0.11	1.01		0.33	1.12	0.54		0.30	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 69.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 44.6	Intersection LOS: D
Intersection Capacity Utilization 87.7%	ICU Level of Service E
Analysis Period (min) 15	

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

Splits and Phases: 13: Reedsdale & Allegheny Ave



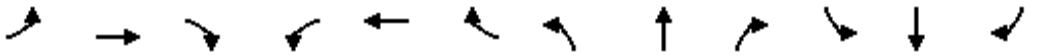


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	49	49			49		49	49		49		49
Trailing Detector (ft)	0	0			0		0	0		0		0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00
Frt					0.998			0.915				0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1770	1863	0	0	3532	0	3433	1704	0	1770	0	1583
Flt Permitted	0.618						0.950			0.950		
Satd. Flow (perm)	1151	1863	0	0	3532	0	3433	1704	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			33				14
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		333			302			646			209	
Travel Time (s)		7.3			6.6			14.2			4.6	
Volume (vph)	9	228	0	0	176	3	524	23	30	10	0	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	248	0	0	191	3	570	25	33	11	0	14
Lane Group Flow (vph)	10	248	0	0	194	0	570	58	0	11	0	14
Turn Type	Perm						custom			Prot		custom
Protected Phases		2			2		4	4		8		
Permitted Phases	2						4					8
Detector Phases	2	2			2		4	4		8		8
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		21.3	21.3		21.3		21.3
Total Split (s)	45.0	45.0	0.0	0.0	45.0	0.0	55.0	55.0	0.0	20.0	0.0	20.0
Total Split (%)	37.5%	37.5%	0.0%	0.0%	37.5%	0.0%	45.8%	45.8%	0.0%	16.7%	0.0%	16.7%
Maximum Green (s)	39.0	39.0			39.0		50.0	50.0		15.0		15.0
Yellow Time (s)	4.0	4.0			4.0		3.0	3.0		3.0		3.0
All-Red Time (s)	2.0	2.0			2.0		2.0	2.0		2.0		2.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0		3.0
Recall Mode	C-Max	C-Max			C-Max		None	None		None		None
Walk Time (s)	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
Pedestrian Calls (#/hr)	0	0			0		0	0		0		0
Act Effct Green (s)	80.2	80.2			80.2		24.7	24.7		7.3		7.3
Actuated g/C Ratio	0.67	0.67			0.67		0.21	0.21		0.06		0.06
v/c Ratio	0.01	0.20			0.08		0.81	0.15		0.10		0.13
Control Delay	10.2	9.8			8.7		54.6	19.8		54.8		26.2
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0		0.0
Total Delay	10.2	9.8			8.7		54.6	19.8		54.8		26.2
LOS	B	A			A		D	B		D		C
Approach Delay		9.9			8.7			51.4				
Approach LOS		A			A			D				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	3	79			29		226	16		9		0
Queue Length 95th (ft)	12	144			54		273	51		29		23
Internal Link Dist (ft)		253			222			566			129	
Turn Bay Length (ft)												
Base Capacity (vph)	769	1245			2361		1459	743		236		223
Starvation Cap Reductn	0	0			0		0	0		0		0
Spillback Cap Reductn	0	0			0		0	0		0		0
Storage Cap Reductn	0	0			0		0	0		0		0
Reduced v/c Ratio	0.01	0.20			0.08		0.39	0.08		0.05		0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 33.9		Intersection LOS: C	
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 22: Western & Fulton



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost 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
Leading Detector (ft)				49	49	49	49	49			49	49
Trailing Detector (ft)				0	0	0	0	0			0	0
Turning Speed (mph)	16		9	16		9	16		9	16		9
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3433	1863	1583	1770	1863	0	0	3539	1583
Flt Permitted				0.950			0.267					
Satd. Flow (perm)	0	0	0	3433	1863	1583	497	1863	0	0	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						76						147
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
Link Speed (mph)		31			31			31			31	
Link Distance (ft)		215			147			141			211	
Travel Time (s)		4.7			3.2			3.1			4.6	
Volume (vph)	0	0	0	260	110	70	241	160	0	0	487	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	283	120	76	262	174	0	0	529	147
Lane Group Flow (vph)	0	0	0	283	120	76	262	174	0	0	529	147
Turn Type				Perm		Perm	pm+pt					Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phases				4	4	4	1	6			2	2
Minimum Initial (s)				4.0	4.0	4.0	4.0	4.0			4.0	4.0
Minimum Split (s)				21.5	21.5	21.5	10.0	21.3			21.3	21.3
Total Split (s)	0.0	0.0	0.0	35.5	35.5	35.5	26.0	55.0	0.0	0.0	25.0	25.0
Total Split (%)	0.0%	0.0%	0.0%	39.2%	39.2%	39.2%	28.7%	60.8%	0.0%	0.0%	27.6%	27.6%
Maximum Green (s)				30.0	30.0	30.0	20.0	50.0			20.0	20.0
Yellow Time (s)				3.5	3.5	3.5	4.0	3.0			3.0	3.0
All-Red Time (s)				2.0	2.0	2.0	2.0	2.0			2.0	2.0
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	C-Max			C-Max	C-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)				13.7	13.7	13.7	68.8	68.8			53.3	53.3
Actuated g/C Ratio				0.15	0.15	0.15	0.76	0.76			0.59	0.59
v/c Ratio				0.55	0.43	0.25	0.49	0.12			0.25	0.15
Control Delay				39.2	39.0	10.1	6.6	3.4			10.1	2.4
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				39.2	39.0	10.1	6.6	3.4			10.1	2.4
LOS				D	D	B	A	A			B	A
Approach Delay					34.5			5.3			8.4	
Approach LOS					C			A			A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)				81	66	0	35	22			72	0
Queue Length 95th (ft)				116	115	37	70	47			125	29
Internal Link Dist (ft)		135			67			61			131	
Turn Bay Length (ft)												
Base Capacity (vph)				1195	648	601	687	1417			2086	993
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				0.24	0.19	0.13	0.38	0.12			0.25	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 90.5			
Actuated Cycle Length: 90.5			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 15.4		Intersection LOS: B	
Intersection Capacity Utilization 44.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 24: Route 65 & Western

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	0	0	0	292	299	97
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	317	325	105
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	646					
pX, platoon unblocked	0.00	0.00	0.00	0.00	0.00	0.00
vC, conflicting volume			0		0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		0	0
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			0		0	0
cM capacity (veh/h)			0		0	0

Direction, Lane #	WB 1	NB 1	NB 2	NB 3
Volume Total	317	162	162	105
Volume Left	0	162	162	0
Volume Right	0	0	0	105
cSH	0	0	0	0
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.0		
Approach LOS		A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	183	188	80	30	0	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	199	204	87	33	0	41
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	356					
pX, platoon unblocked						
vC, conflicting volume			403		491	301
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			403		491	301
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			92		100	94
cM capacity (veh/h)			1152		468	695

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	403	98	22	41
Volume Left	0	87	0	0
Volume Right	204	0	0	41
cSH	1700	1152	1700	695
Volume to Capacity	0.24	0.08	0.01	0.06
Queue Length 95th (ft)	0	6	0	5
Control Delay (s)	0.0	7.5	0.0	10.5
Lane LOS		A		B
Approach Delay (s)	0.0	6.2		10.5
Approach LOS				B

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX C

FUNCTIONAL DESIGN

	No.	Date	Revisions	By	Signed
	10				
	9				
	8				
	7				
	6				
	5				
	4				
	3				
	2				
Information	1				

Seal:

Seal:

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Project Title

SITE ACCESS

Design:	FS	Drawn:	FS	Checked:		2917
Scales:	N.T.S.			Date:	Drawing Number	Sheet Set No.
				NOV. 29, 2005		