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01 Introduction and Existing Conditions

1.1 Introduction and Context

This study was prepared to define the anticipated impacts of a new mixed multi-unit residential development located in the north-eastern quadrant of the intersection of Portland Street and Carver Street in Dartmouth, Nova Scotia. As shown in the figure below (north is approximately toward the top of the figure), the development is located within a predominantly residential area to the north, east, west and southeast. To the southwest, there is significant commercial development along the Portland Street and Baker Drive corridors.

The proposed development is expected to include up to 86 residential units over a 7-story building (subject to approvals) with surface parking and two levels of underground parking. The development site will be accessed from a full access driveway on Carver Street and a right-in, right-out access on Portland Street.

The study was carried out using methodologies and guidelines provided in HRM's Guidelines for the Preparation of Transportation Impact Studies, guidance provided by the Institute of Transportation Engineers (ITE), and general traffic, transportation and road safety engineering principles for such studies. Specifically, the study includes:

- A summary of existing conditions (traffic, transit, active transportation and truck traffic);
- A definition of the proposed development and its associated anticipated traffic contributions to the transportation network;
- Transportation modeling and analysis of the existing and future road network conditions; and,
- Discussion and recommendations addressing key operational, geometric, and safety considerations that may be required to support the proposed development and overall development area.



1.2 Study Area

The development is situated between residential areas to the north, west and east, and a mixed-use commercial area to the south. The majority of residential development is single family homes on relatively low volume local streets. These streets connect directly to Portland Street and Woodlawn Road which in-turn meet at the major signalized intersection of Portland / Woodlawn / Baker about 600 meters east of the development. About 300 meters further east is the interchange at Portland Street and Highway 111. These various roadways provide excellent connectivity to all areas of Dartmouth.

Immediately adjacent to the development, Carver Street is a two-lane, two-way roadway, though the intersection of Carver Street with Portland Street is reduced to a southbound exiting movement through the use of a bump-out which restricts right and left turn movements from Portland Street onto Carver Street. Carver Street does allow for right, through and left turn movements from Carver to Portland Street. The intersection of Carver and Portland is signalized with pedestrian crossings on the north, south and east sides of the street with a restriction to pedestrians crossing on the west leg of the intersection.

To the west, Settle Street is configured as a stop controlled, right-in, right-out only intersection with single lanes in each direction. Settle Street and Carver Street are connected by Elizabeth Street which runs parallel to, and approximately 100 meters north of Portland Street. Elizabeth allows for some interconnection between the two roadways that can accommodate the various turn movements to and from the development.

Both Carver Street (via Day Avenue) and Settle Street connect to Woodlawn Road just north of the development allowing traffic to distribute itself in a variety of directions to intersections with fully permitted turn movements.



1.3 Existing Roads and Intersections



Day Avenue

Day Avenue is a 325m long, two-lane local road with an urban curbed cross-section, concrete sidewalk on one side and a posted speed of 50km/h. To the west, Day Ave connects to Woodlawn Road via a stop-controlled intersection, and to the east connects to Clifford Drive via a stop-controlled intersection. Day Avenue also provides access to Walters Street and Carver Street, both similar types of local roads. Day Avenue predominantly features single-detached homes and one convenience store at the corner of Day Avenue and Woodlawn Road.



Settle Street facing Elizabeth St.

Settle Street is an approximately 250m long, two-lane local road with an urban curbed cross-section. There are no sidewalks on either side of the road. To the south, it connects to Portland Street via a stop-controlled intersection. To the north, it connects to Woodlawn Road via a light-controlled intersection with a dedicated channelized right-turning lane and a combined left/straight-through lane. Settle Street also connects to Elizabeth Street to the east via a stop-controlled intersection with free-flowing traffic on Settle Street. Settle Street is occupied mostly by single-detached homes.



Elizabeth Street at Carver Street

Elizabeth Street is a 225m long, two-lane local road with an urban curbed cross-section. There are no sidewalks on either side of the road. To the west, Elizabeth Street connects to Settle Street via a stop-controlled intersection and traffic on Settle Street free-flowing. To the east, Elizabeth Street connects to Carver Street via a stop-controlled intersection and traffic on Carver Street free-flowing. Elizabeth Street features predominantly single-detached homes.



Carver Street at Elizabeth Dr.

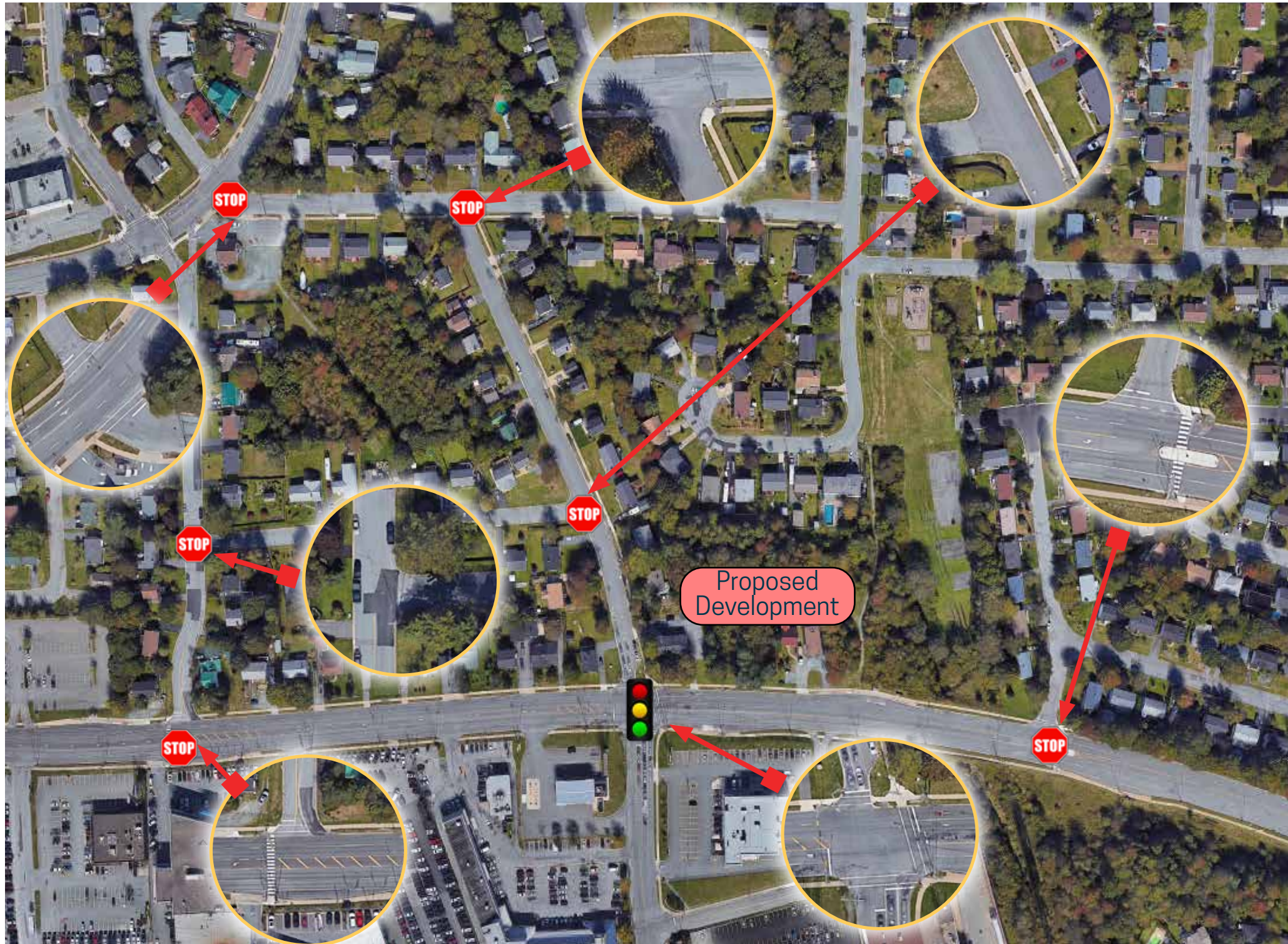
Carver Street is a 225m long, two-lane local road with an urban curbed cross-section with a concrete sidewalk on one side of the roadway. To the north, Carver Street connects to Day Ave via a stop-controlled intersection with traffic free-flowing on Day Avenue. To the south, Carver Street connects to Portland Street via a signal-controlled intersection with a dedicated left-turn lane and combined right/through lane. Carver Street features predominantly single-detached homes.

**Carver Street at Portland Street**

Carver Street connects to Portland Street via a signal-controlled intersection with a dedicated left-turning lane and a combined straight-through/right-turn lane. Beyond Portland Street, Carver Street transitions to Eisener Boulevard. Currently there is no driveway connecting to the development lands on either Portland Street and Carver Street.

**Portland Street Facing Carver Street**

Portland Street is a major arterial route that runs from downtown Dartmouth and through Woodside and beyond. It is part of Nova Scotia Route 207, which is 39km in length. In the vicinity of the development site, Portland Street has a four-lane urban curbed cross section with sidewalks on the north and south sides of Portland Street. Adjacent to the development, the intersection of Portland Street and Carver Street signalized and includes a dedicated left turn lane in the westbound direction.



1.4 Other Transportation Infrastructure

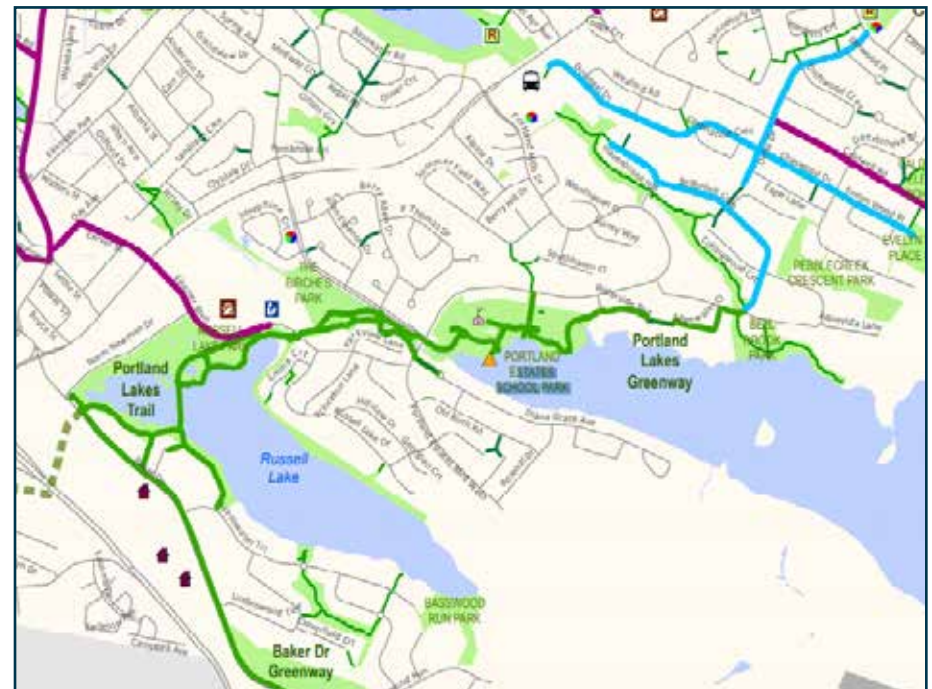
Active Transportation

A number of walking paths exist throughout the neighbourhood immediately surrounding the development site which make connections between a number of residential streets. South of Portland Street is the Portland Lakes Trail which spans from Baker Drive to Waterside Terrace.

The Halifax Regional Municipality's Active Transportation Plan outlines a five-year plan which outlines its "approach that the municipality will take to attract more residents to walking and bicycling for the next five years and supports the objectives of Halifax's Regional Municipal Planning Strategy to increase the number of residents who travel by sustainable transportation modes." The map on the bottom-left details the HRM's vision to create a Regional Greenway and Bicycle Network.

The map on the bottom-right details the HRM's plans for the immediate region surrounding the Development Area. In green is the Portland Lakes Greenway, which is approximately 0.5 km away from the development site. Further, Carver Street directly adjacent to the development has been identified as a desired future bicycle route connecting the Portland Lakes Trail to the south to a much large interconnected bicycle network throughout Dartmouth. Further details on these connections can be found at:

https://www.halifax.ca/sites/default/files/documents/transportation/transportation-projects/Map_2B_Greenway_Network_March24.pdf



Transit

The area of the development is extremely well-served by public transportation, and is within 500m of roughly a dozen different routes. The development area is within 1km of Portland Hills Bus Terminal and Penhorn Bus Terminal, the former of which provides connections between nine different routes and provides access to a wide range of different areas of the HRM, and the latter which provides connections between eight different routes. Additionally, route 57 provides access throughout the Portland Hills area, and Route 58 provides access throughout the neighbourhood that the development area is situated in. The Route Map from Halifax Transit below details the transit access in the area of the development lands.

HRM is currently preparing a larger scale strategic corridor plan entitled the Portland Street and Cole Harbour Road Functional Planning Study, which includes the portions of Portland Street directly adjacent to the proposed development. Discussions with Halifax Transit and HRM staff



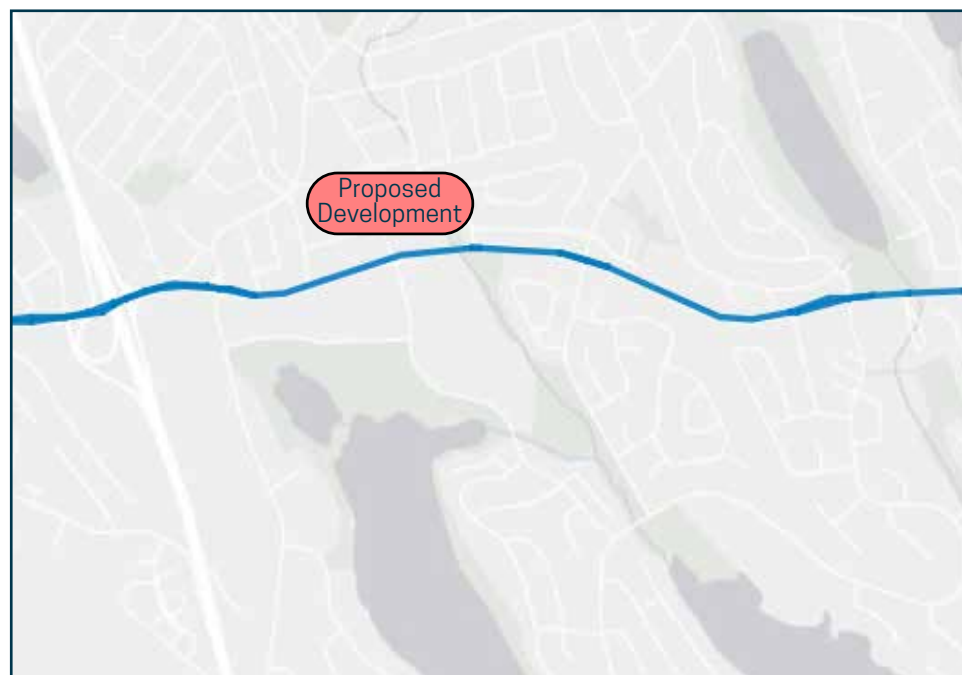
have suggested that Portland Street will further move toward a transit oriented corridor, though it is unclear at this time whether that will involve the conversion of an existing lane to a transit lane, or whether an additional lane would be added to Portland Street.

As part of the future upgrades, it is also anticipated that the existing transit stop located about 13 meters east of Carver Street will be relocated closer to Carver Street to take advantage of the pedestrian crossings at the Carver Street signalized intersection.

The integration of the proposed development with these transit initiatives are discussed in greater details later in this report.

Truck Routes

Portland Street from Prince Albert Road, past the development site and beyond Cole Harbour Road is designated as a full time trucking route. The development site is well-served for truck access in and out of the development lands. The map below from Halifax Open Data details the trucking route running along Portland Street.



02 Existing and Future Traffic Conditions

2.1 Existing Traffic

Existing available traffic volumes were obtained from HRM for the intersections surrounding the proposed development. Counts ranged from 2016 to 2019 and included a combination of intersection turning movement counts, pedestrian counts and road section counts. All counts for this site were taken prior to the COVID19 restrictions that caused significant changes in traffic and travel patterns on the road network. More recent counts were not possible at this time due to the ongoing COVID19 impacts to the road network. Volumes related to the proposed development are very low and therefore are not expected to have any significant impact to the network, therefore new counts are not expected to change any recommendations contained in this report.

2.2 Project Time Horizon

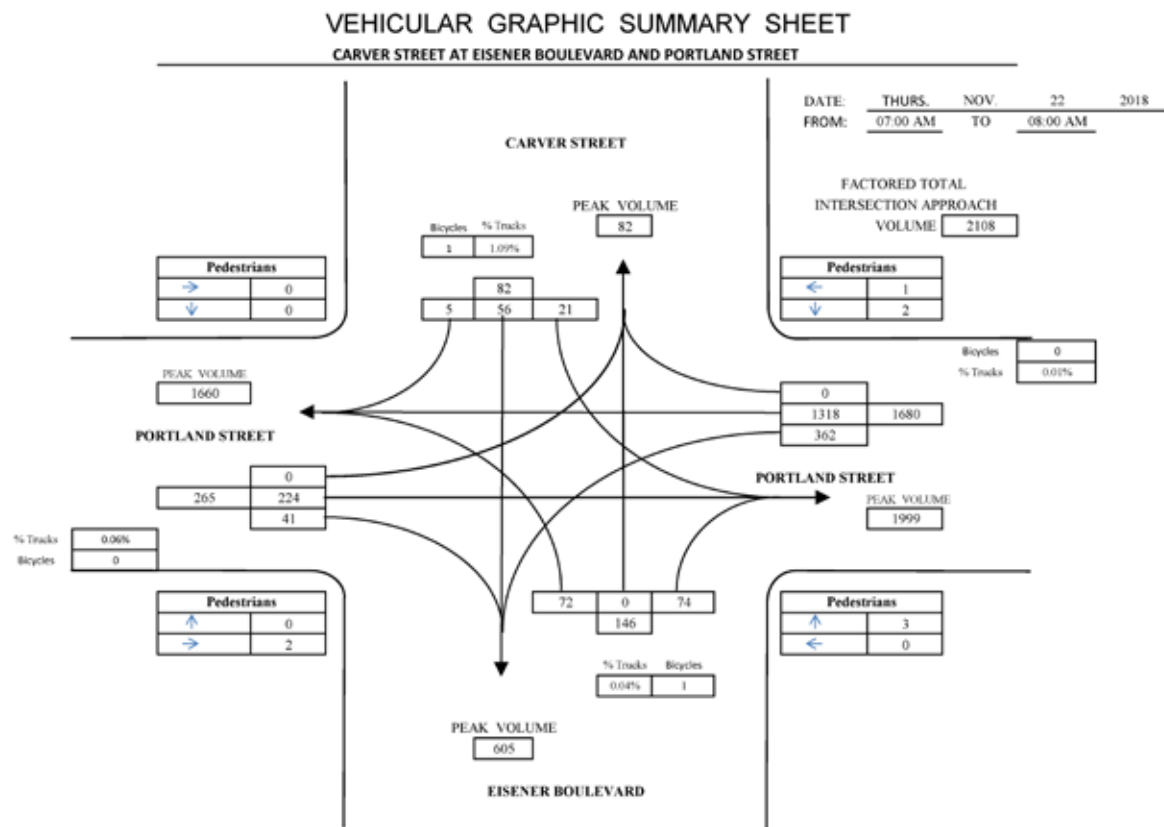
For the purposes of this study, it is assumed that the development would be built-out and occupied within a 5-year time horizon. Given the very low volumes of new traffic relatively to the traffic on the adjacent streets, time horizons beyond a 2026 horizon are not relevant to this study.

2.3 Analysis Periods

The development and surrounding area are composed of a combination of residential and commercial land uses. It is recognized that the commercial uses will generate significant weekend traffic, though the combination of residential development and route connectivity suggest peak hour analysis volumes will occur during the weekday AM and PM peak hours.

2.4 Traffic Growth

Traffic growth will be subject to general overall background traffic growth resulting from development along the Portland Street corridor and points further east. More importantly, the corridor will be impacted by the results of the ongoing work on the Portland Street corridor study being undertaken by HRM, and the further development of Portland Street as an bus rapid transit and active transportation corridor. It is anticipated that these initiatives will have a significant impact on traffic volumes and travel patterns. The extent of impacts are difficult to quantify in the local context of this development, suffice to say that volumes from the development are low enough that they will not cause any noticeable impact to traffic on Portland Street, and further, are located at a prime position to take advantage of future upgrades along the corridor. For the purposes of this analysis, a 1% annual growth rate has been assumed.



03 Proposed Development



3.1 Trip Generation

Trips Generated by the Development

The new trips generated by the development were based on guidance provided from the Institute of Transportation Engineers (ITE) Trip Generation Guide (10th Edition). The table at the bottom of the page shows the estimated trips generated by the proposed development based on an assumed 86-units of residential development.

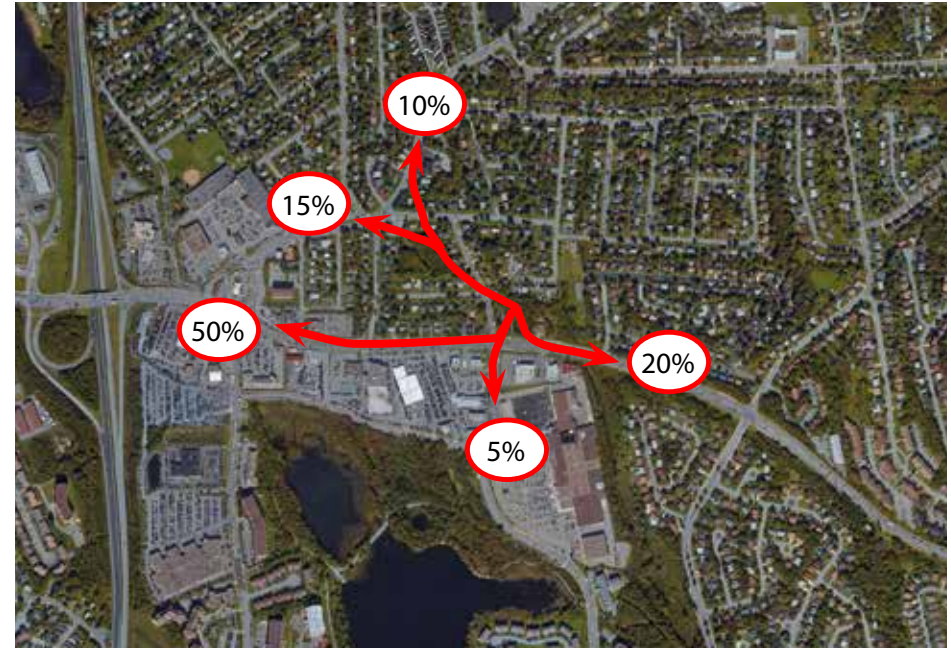
Transit, Active Transportation and Transportation Demand Management

There are a number of features that are likely to contribute to traffic volumes less than those identified in the table below. These include the close proximity of a variety of active transportation trails, the bus rapid transit corridor along Portland Street, and a wide variety commercial destinations within walking distance of the development.

Each of these items is considered a positive attribute of the development site and will most likely reduce the total trips to and from the site. Nonetheless, for the purposes of this study, no reduction in generated trips has been applied in order to keep the analysis conservative.

| Land Use | Trip Code | # Units | Variable | AM Peak | | | PM Peak | | |
|----------------------|-----------|---------|----------|---------|------|-------|---------|------|-------|
| | | | | Enter | Exit | TOTAL | Enter | Exit | TOTAL |
| Mid-Rise Residential | 223 | 86 | Units | 7 | 19 | 26 | 22 | 9 | 31 |

3.2 Trip Distribution and Assignment



Trip Distribution

Trips to and from the proposed site are expected to distribute themselves in a manner similar to today's traffic distribution. Based on the roadway connectivity and urban core areas, it is expected that most traffic will be destined to and from the west of the development site. The trip distribution assumptions are shown in the figure above.

Trip Assignment

The new traffic volumes to and from the development were assigned to the road network based on the most logical access points to the site given the above distribution and the portion of units located in each segment of the site. The assignment process took into account the various existing turn restrictions surrounding the development. The traffic volume assignments used in the analysis for this study are included in Appendix C of this report.

04 Transportation Analysis



4.1 Transportation Modeling

A detailed traffic model for the Portland Street corridor was prepared using the Synchro/SimTraffic (v.11) platform for the weekday AM and PM peak hours of analysis. The model was used to gain insight into traffic operations and capacity utilization at the various intersections potentially impacted by the proposed development under each of the traffic loading scenarios. Results are provided for the following scenarios:

- **2021 Baseline** volumes at the development driveways and intersections immediately surrounding the development; and,
- **2026** Future conditions with **background traffic and full development** traffic added to the network.

The model preparation utilized the Traffic Impact Analysis tool set contained within the Synchro model to distribute development traffic throughout the study area and for the application of future growth of background traffic.

Results are shown in graphical format to allow for the quick comparison of key performance criteria between the different analysis scenarios. All sections include supporting text that highlights key considerations at the intersection and connecting roadways. Key performance indicators include:

- Peak hour analysis volumes (vehicles / hour);
- Volume to capacity ratios (V/C) for 2031 conditions;
- Average Delay (sec/vehicle) for 2031 conditions; and,
- 95% Queue lengths (discussions provided in text).

Additional details are provided in the Synchro reports provided in Appendix D of this report.



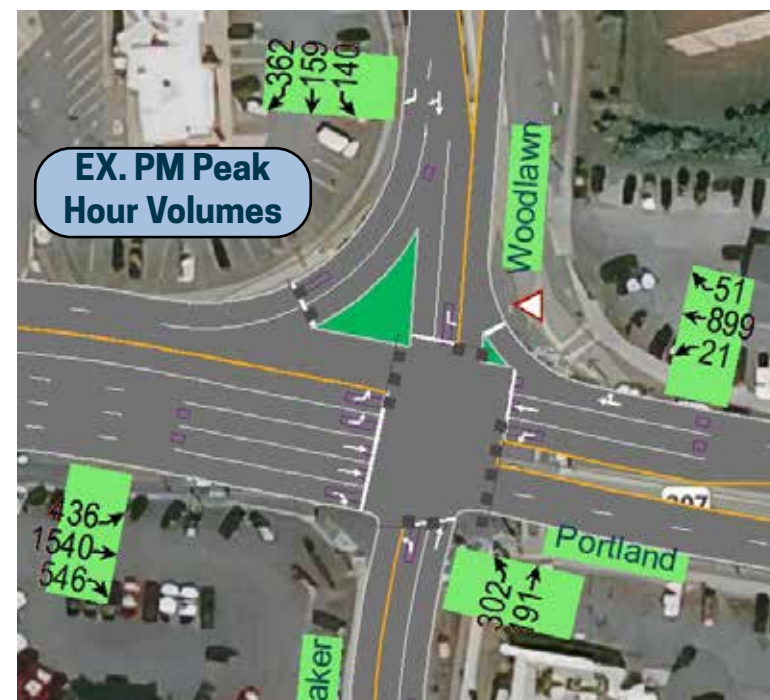
1. Portland St. / Woodlawn Rd. / Baker Dr.
2. Portland Street / Settle Street
3. Portland Street / Carver Street
4. Portland Street / Development Driveway
5. Portland Street / Portland Hills Estates / Spring Ave.

4.2 Main Street / Woodlawn Avenue / Baker Street

The Portland Street intersection with Woodlawn Road intersection is a robust and complex intersection with dual left and right turn movements, BRT transit lanes, and pedestrian accommodation. It services significant commercial development along Portland, Baker and Woodlawn immediately adjacent to the intersection, and residential areas further to the north and south of the intersection. It serves as the primary intersection interconnecting the Baker/Woodlawn north-south routes and Portland Street to Highway 111 and as such is a critical intersection for regional transportation distribution.

Overall volumes through the intersection are around 3500 vehicles during the AM peak hour and close to 4000 vehicles during the PM peak. The analysis in this study show that the proposed development contributes about 12 vehicles to this total, or about 0.3% of the total traffic through the intersection when the development traffic is added. For this reason, a detailed operational analysis of this intersection was not undertaken as the development related impacts are inconsequential.

Furthermore, there is a significant regional planning exercise underway for the Portland Street corridor that is likely to impact operations at this intersection. Suffice to say that the proposed development itself will not have any impacts on the future operations of this intersection regardless of any improvements or modifications to this intersection. For reference and context, the existing AM and PM peak hour volumes are shown in the figures to the right. Future volumes through these intersections can be found in the Synchro reports included in Appendix D of this report.



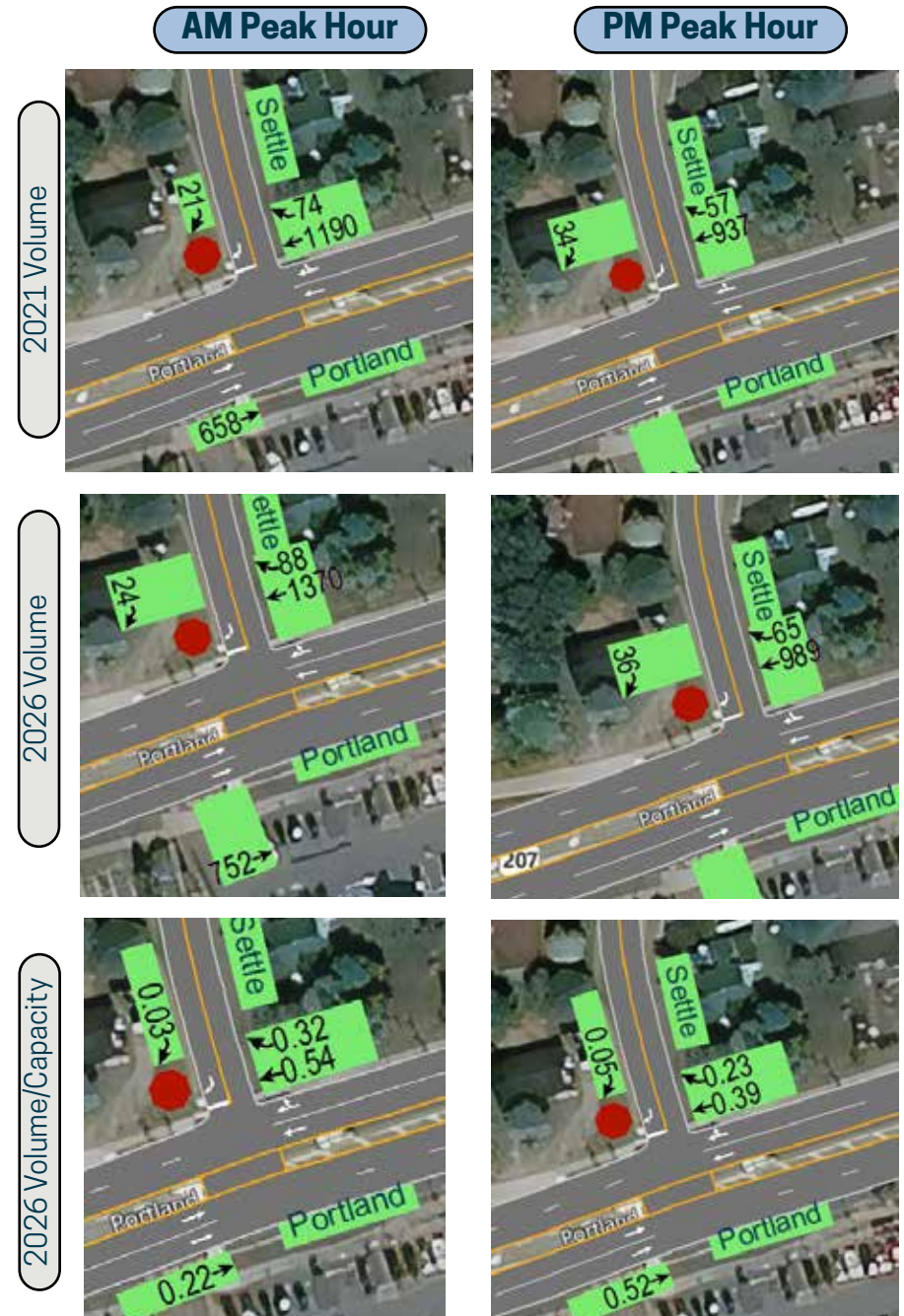
4.3 Main Street and Settle Street

The Settle Street intersection with Portland Street is a simple Tee-intersection with high through volumes on Portland Street, but very low volumes entering and exiting Settle Street. Portland Street has two through lanes in each direction with Settle configured as a basic stop controlled, right-in / right-out roadway.

As no left turn movements are permitted to and from Settle, performance parameters are very good for all movements at this intersection during both the AM and PM peak hours of traffic.

Due the availability of the right-in movement at Settle, combined with the gated restrictions within the development site, it is expected that most traffic approaching the development from the east will use the right turn onto Settle followed by right turns onto Elizabeth and then Carver to access the parkade entrances to the building. Alternatively, more direction access could be made from the Woodlawn Road side of the development.

Based on the trip generation estimates and large number of options available for trip distribution, it is expected that there will be less than 5 vehicles making these movements during the AM peak or PM peak hours.



4.4 Main Street, Carver Street and Development Driveways

Similar to the Settle intersection, the Carver Street intersection is characterized by heavy volumes in the east and westbound directions on Portland Street, with relatively low volumes on Eisener Boulevard and particularly Carver Street. With traffic signals present at this intersection, the analysis results show high levels of service for all movements. That said, the side street vehicles do get penalized to a certain degree due to the longer green times required to services the high volume of through traffic on Portland Street.

The south development driveway connecting to Portland Street is configured as a right-in / right-out access and is expected to see very low volumes during all periods of the day. Vehicles are restricted from accessing the buildings underground parking structure or northern parking spaces from this driveway.

As westbound movements at the Carver Street traffic signals operate with a reasonable volume to capacity ratio and significant green time is afforded to the westbound movement, it is expected that vehicle movements to and from this driveway will operate with little delay, queuing, or impact to traffic on Portland Street. Any impacts are further mitigated by the absence of left turn movements between Portland Street and the development.

It is noted that during the PM peak, traffic capacity utilization is nearing capacity. Such issues are anticipated to be addressed in the larger Portland Street corridor study and are not impacted by new volumes associated with the proposed development.

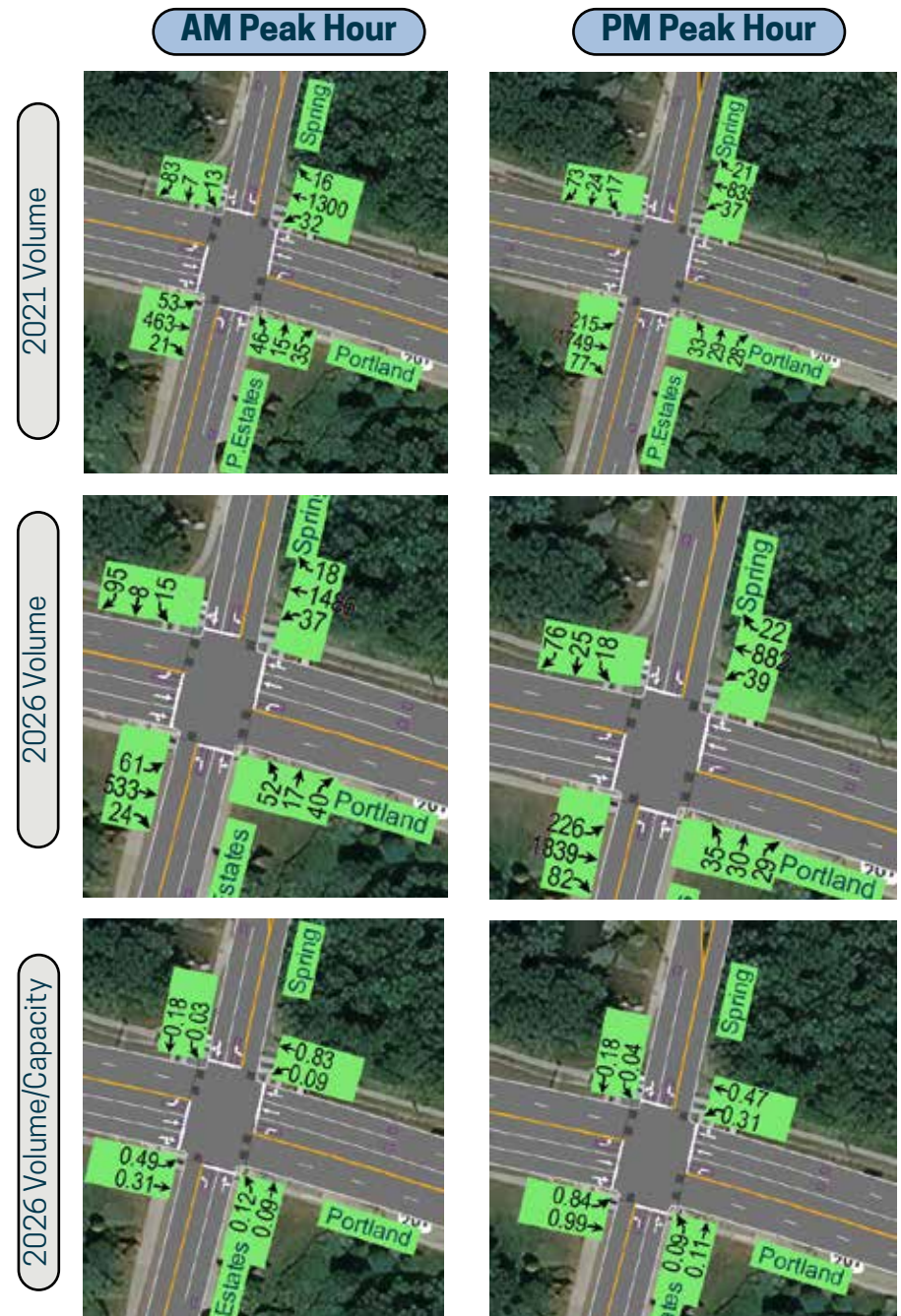


4.5 Portland Street, Portland Estates and Spring Avenue

The Portland Street intersection with Spring Avenue and Portland Estates Boulevard is a traditional 4-leg signalized intersection. Volumes on Portland Street are again relatively high and side street volumes are quite low. Due to the low side street volumes and the Portland Street cross section at the intersection (two through lanes and dedicated left turn lanes), the intersection operates with minimal delays and queues.

The highest volume to capacity ratios can be found in the peak hour through direction on Portland Street and hover around 80% capacity utilization during the AM peak hour with the westbound through movements operating closer to capacity during the PM peak hour.

Similar to the Woodlawn / Baker intersection with Portland Street, new volumes related to the development compose about 0.2% of the total traffic through this intersection. Given the distance from the development, it is suggested that there are no functional impacts to this intersection related to the development. The higher volume to capacity ratios for the westbound movements is expected to be addressed in greater detail in the Portland Street corridor study.





This Transportation Impact Study was prepared to evaluate the impacts of the proposed development at 663 Portland Street on the surrounding transportation network including roads, intersections and active transportation infrastructure. The development is expected to yield up to approximately 86 new residential units in a 7-story building and may include a small portion of ground floor retail space.

The development is located within an existing residential area to the north, east and west of the property and is complemented by significant commercial development to the south along Portland Street, Baker Drive and Woodlawn Road. The development also has direct access to the Portland Street transit and BRT corridor providing a high level of transit opportunity as well as abundant active transportation infrastructure near the development, through Portland Hills Estates and surrounding Russel and Morris Lakes.

Area traffic is characterized by heavy peak hour volumes on Portland Street during the AM (westbound / inbound) and PM (eastbound / outbound) peak hours. The majority of driveways and side roads to Portland Street have relatively low volumes and the higher volume access points are typically signalized. The signals provide for very good levels of service at this intersection, and also create many gaps in traffic along Portland Street which permits lower volume unsignalized driveways to operate at reasonable levels of service.

The busiest intersection in the corridor is the Portland Street intersection with Baker Drive and Woodlawn Road. A number of movements at this intersection operate at or near capacity during the peak hours of traffic with queue lengths and delays varying day-by-day depending on the demand on each leg of the intersection. It was noted in the analysis that the proposed development contributes about 0.3% of the volumes at this intersection (about 12 vehicles of 3500 in the AM peak for example) and therefore, effectively has no functional impact on this intersection. This

intersection should be considered in the context of the overall Portland Street planning initiatives currently underway and it is noted that this development has no impact on these planning exercises.

The development itself is expected to generate a low volume of new traffic to the road network (26 two-way trips in the AM peak and 31 in the PM peak). These volumes were used in the analysis, though could in fact be lower due to the direct access to higher order transit and active transportation infrastructure.

With respect to the development driveways, both operate at high levels of service under all analysis scenarios. The Portland Street driveway is a right-in / right-out only access and is expected to service a very low volume of traffic as it does not have direct access to the buildings underground parking structures.

The Carver Street driveway has somewhat higher volumes, but directly accesses a low volume residential street network and therefore does not create any noticeable operational changes or challenges. The volumes generated by the development are considered well within volumes guidelines suggested for residential streets and operational characteristics are expected to be consistent with residential traffic operations. Shortcutting has been recognized in the past as a potential issue in this area, and has been addressed through the various turn restrictions and intersection modifications surrounding the development. The gated restrictions in place within the development are expected to complement these traffic calming features.

Additional Portland Street Considerations

The ongoing transportation functional planning studies being completed for the Portland Street corridor suggest transit upgrades will be incorporated on Portland Street adjacent to the development. As both projects move forward, there will be a need to integrate the proposed right-in, right-out access with any planned transit facilities.

There are three fundamental considerations in this regard:

1. **Portland Street Cross Section** - As shown in the figure to the right, there is a significant amount of right-of-way available between the building and the existing Portland Street curbline. This space appears to be capable of accommodating either a retro-fit of the existing pavement area or the addition of a new transit lane closer to the proposed building. The proposed right-in, right-out access has adequate flexibility to shift to the north if required to accommodate a widened cross sections.
2. **Transit Stop Location** - A new transit stop is likely to be relocated from east of the site to a position in the general vicinity of where the proposed driveway is shown. It is our understanding through discussions with Halifax Transit that there is adequate flexibility in potential locations along Portland Street near the development to accommodate both the right-in, right-out access as well as a relocated transit stop.
3. **Operations and Geometrics** - Volumes to and from this right-in, right-out access are very low and will have no noticeable impact on vehicle or transit operations related to the two previous points. Geometrically, there are many locations throughout HRM where similar geometric arrangements have been successfully implemented.



We trust that this report satisfies the Halifax Regional Municipality's requirements for the preparation of a development Transportation Impact Study. Should there be any questions or comments regarding the content of the study, please do not hesitate to contact the undersigned.

Original Signed

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Original Signed

APPENDIX A

TRAFFIC COUNTS

MANUAL TRAFFIC COUNTS

INTERSECTION:

PORTLAND STREET AT PORTLAND ESTATES BOULEVARD AND SPRING AVENUE

WEATHER

RAIN

RECORDER

TV

DAY DATE MONTH YEAR

TUES. 26 JULY 2016

STREET:

| TIME: 15 MIN INTERVALS | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|---------------------------|-------------|---------------|-----|---|---------------|----|---|----------------|---|----|----------------|---|---|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 07:00:00 AM | 07:15:00 AM | 2 | 319 | 1 | 4 | 61 | 3 | 1 | 2 | 26 | 9 | 0 | 2 | 430 |
| 07:15:00 AM | 07:30:00 AM | 3 | 329 | 4 | 4 | 63 | 5 | 3 | 5 | 22 | 5 | 2 | 2 | 447 |
| 07:30:00 AM | 07:45:00 AM | 3 | 376 | 3 | 2 | 79 | 2 | 1 | 1 | 27 | 6 | 4 | 3 | 507 |
| 07:45:00 AM | 08:00:00 AM | 8 | 330 | 3 | 13 | 90 | 7 | 3 | 4 | 24 | 10 | 4 | 2 | 498 |

TOTAL

| | | | | | | | | | | | | | |
|------------------|----|------|----|----|------|----|---|------|----|----|------|---|--------|
| | 16 | 1354 | 11 | 23 | 293 | 17 | 8 | 12 | 99 | 30 | 10 | 9 | 1882 |
| PEAK | | 1381 | | | 333 | | | 119 | | | 49 | | |
| 15 MIN PEAK | | 1528 | | | 440 | | | 124 | | | 64 | | |
| PEAK HOUR FACTOR | | 0.9 | | | 0.76 | | | 0.96 | | | 0.77 | | |
| TWO WAY TOTALS | | 1691 | | | 1816 | | | 163 | | | 94 | | FACTOR |

1.03

1938

DAY DATE MONTH YEAR

TUES. 26 JULY 2016

| TIME: | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|------------------|-------------|---------------|-----|---|---------------|-----|---|----------------|---|----|----------------|---|----|-------|
| 15 MIN INTERVALS | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 08:00:00 AM | 08:15:00 AM | 2 | 307 | 2 | 13 | 91 | 4 | 1 | 0 | 22 | 7 | 2 | 6 | 457 |
| 08:15:00 AM | 08:30:00 AM | 6 | 339 | 2 | 10 | 89 | 5 | 1 | 1 | 18 | 11 | 6 | 5 | 493 |
| 08:30:00 AM | 08:45:00 AM | 7 | 306 | 3 | 7 | 123 | 3 | 4 | 1 | 23 | 11 | 3 | 10 | 501 |
| 08:45:00 AM | 09:00:00 AM | 15 | 285 | 8 | 20 | 138 | 8 | 6 | 5 | 16 | 15 | 3 | 12 | 531 |

TOTAL

| | | | | | | | | | | | | | |
|------------------|----|------|----|----|------|----|----|------|----|----|------|----|--------|
| | 30 | 1237 | 15 | 50 | 441 | 20 | 12 | 7 | 79 | 44 | 14 | 33 | 1982 |
| PEAK | | 1282 | | | 511 | | | 98 | | | 91 | | |
| 15 MIN PEAK | | 1388 | | | 664 | | | 112 | | | 120 | | |
| PEAK HOUR FACTOR | | 0.92 | | | 0.77 | | | 0.88 | | | 0.76 | | |
| TWO WAY TOTALS | | 1768 | | | 1871 | | | 177 | | | 148 | | FACTOR |

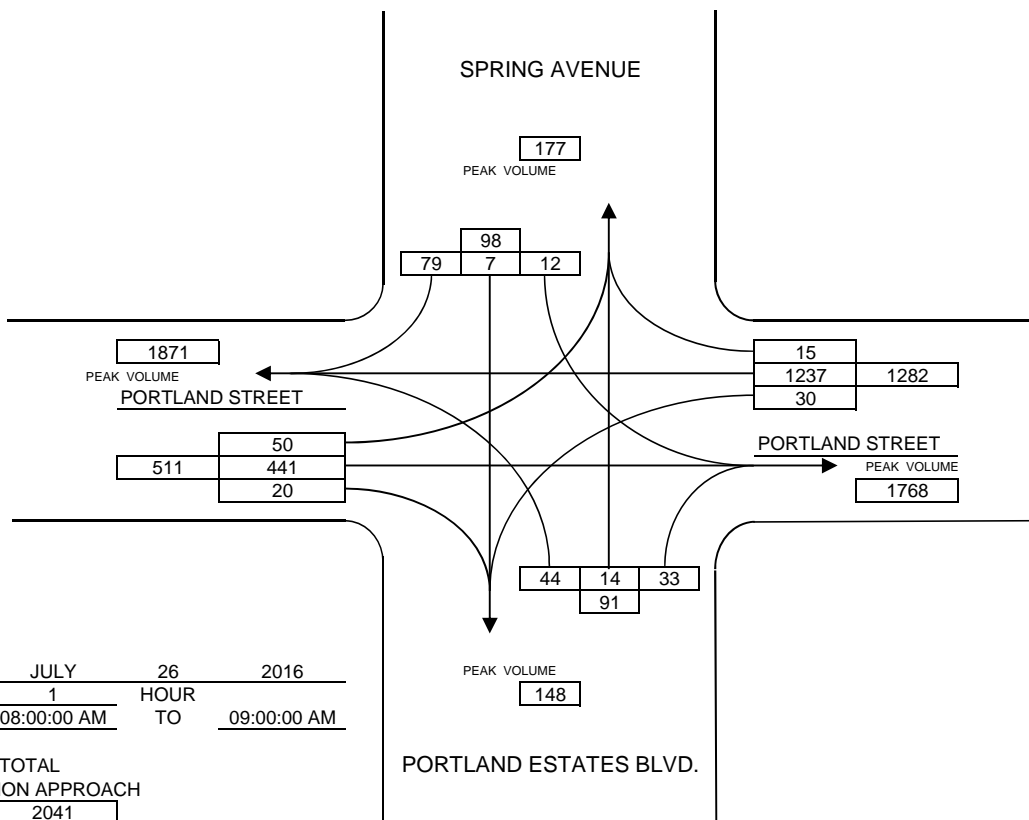
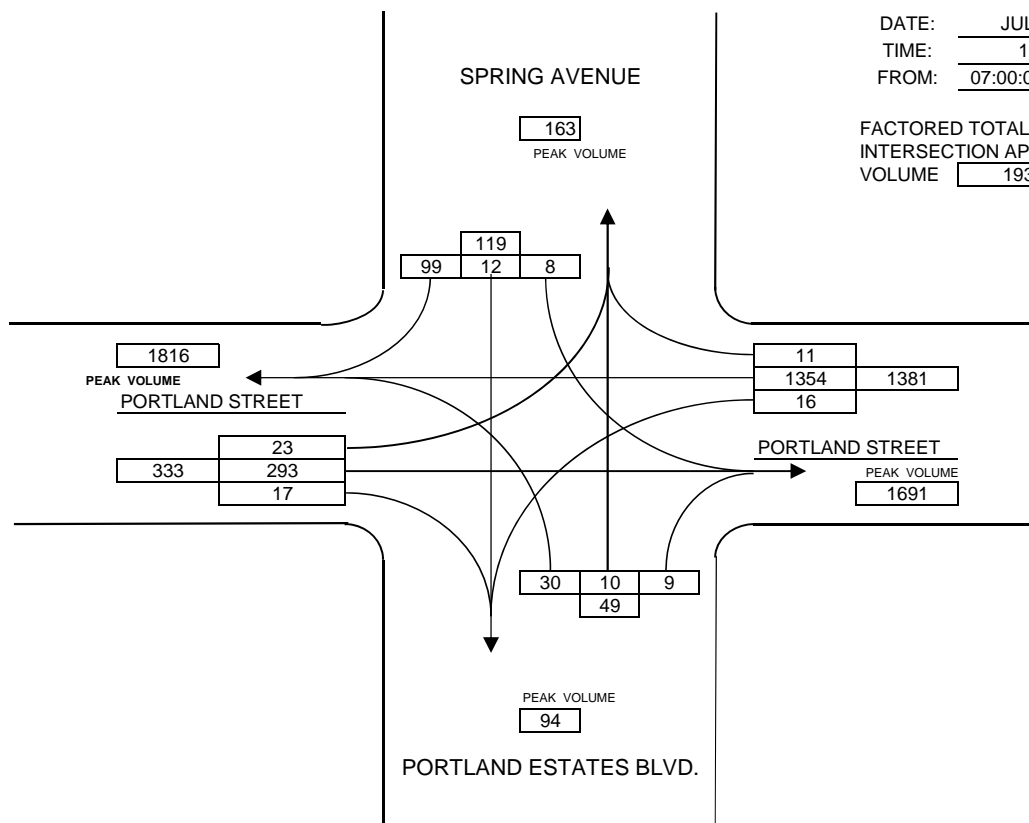
1.03

2041

VEHICULAR GRAPHIC SUMMARY SHEET

INTERSECTION :

PORTLAND STREET AT PORTLAND ESTATES BOULEVARD AND SPRING AVENUE



MANUAL TRAFFIC COUNTS

INTERSECTION:

PORTLAND STREET AT PORTLAND ESTATES BOULEVARD AND SPRING AVENUE

WEATHER

RAIN

RECORDER

TV

DAY DATE MONTH YEAR

TUES 26 JULY 2016

STREET:

| TIME: 15 MIN INTERVALS | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|---------------------------|-------------|---------------|-----|---|---------------|-----|----|----------------|----|----|----------------|---|---|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 04:00:00 PM | 04:15:00 PM | 8 | 213 | 9 | 40 | 399 | 14 | 2 | 4 | 19 | 4 | 7 | 7 | 726 |
| 04:15:00 PM | 04:30:00 PM | 5 | 176 | 2 | 36 | 371 | 11 | 6 | 4 | 17 | 5 | 8 | 5 | 646 |
| 04:30:00 PM | 04:45:00 PM | 10 | 163 | 1 | 59 | 399 | 16 | 2 | 1 | 17 | 7 | 4 | 7 | 686 |
| 04:45:00 PM | 05:00:00 PM | 9 | 179 | 6 | 53 | 362 | 27 | 5 | 12 | 11 | 13 | 7 | 6 | 690 |

TOTAL

| | | | | | |
|------------------|------|------|------|------|--------|
| PEAK | 781 | 1787 | 100 | 80 | FACTOR |
| 15 MIN PEAK | 920 | 1896 | 112 | 104 | |
| PEAK HOUR FACTOR | 0.85 | 0.94 | 0.89 | 0.77 | |
| TWO WAY TOTALS | 2352 | 2611 | 332 | 201 | |

1.03

2830

DAY DATE MONTH YEAR

TUES 26 JULY 2016

| TIME: | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|------------------|-------------|---------------|-----|---|---------------|-----|----|----------------|----|----|----------------|----|---|-------|
| 15 MIN INTERVALS | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 05:00:00 PM | 05:15:00 PM | 10 | 154 | 5 | 105 | 246 | 28 | 1 | 11 | 13 | 8 | 1 | 4 | 586 |
| 05:15:00 PM | 05:30:00 PM | 6 | 150 | 6 | 87 | 182 | 21 | 4 | 5 | 9 | 5 | 9 | 6 | 490 |
| 05:30:00 PM | 05:45:00 PM | 11 | 180 | 5 | 100 | 206 | 32 | 2 | 10 | 15 | 8 | 10 | 4 | 583 |
| 05:45:00 PM | 06:00:00 PM | 8 | 147 | 6 | 109 | 237 | 26 | 5 | 13 | 16 | 9 | 6 | 1 | 583 |

TOTAL

| | | | | | | | | | | | | | |
|------------------|------|-----|----|------|-----|-----|------|----|----|------|----|----|--------|
| | 35 | 631 | 22 | 401 | 871 | 107 | 12 | 39 | 53 | 30 | 26 | 15 | 2242 |
| PEAK | 688 | | | 1379 | | | 104 | | | 71 | | | FACTOR |
| 15 MIN PEAK | 784 | | | 1516 | | | 136 | | | 88 | | | |
| PEAK HOUR FACTOR | 0.88 | | | 0.91 | | | 0.76 | | | 0.81 | | | |
| TWO WAY TOTALS | 1586 | | | 2093 | | | 553 | | | 252 | | | |

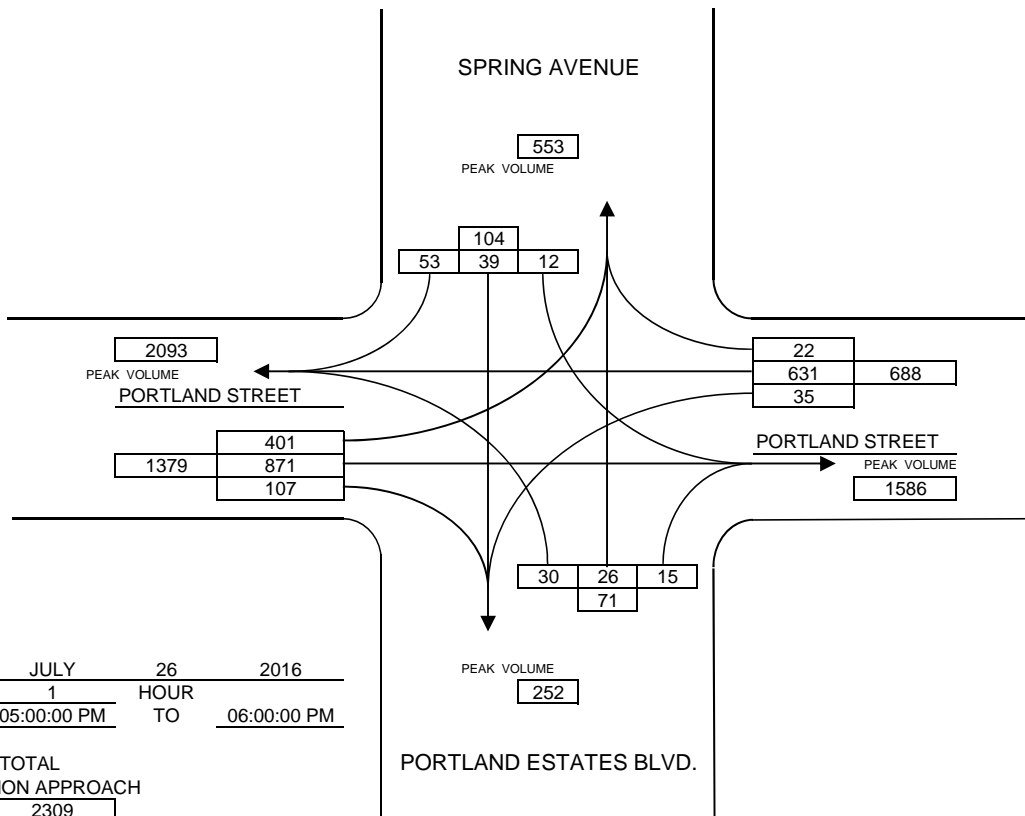
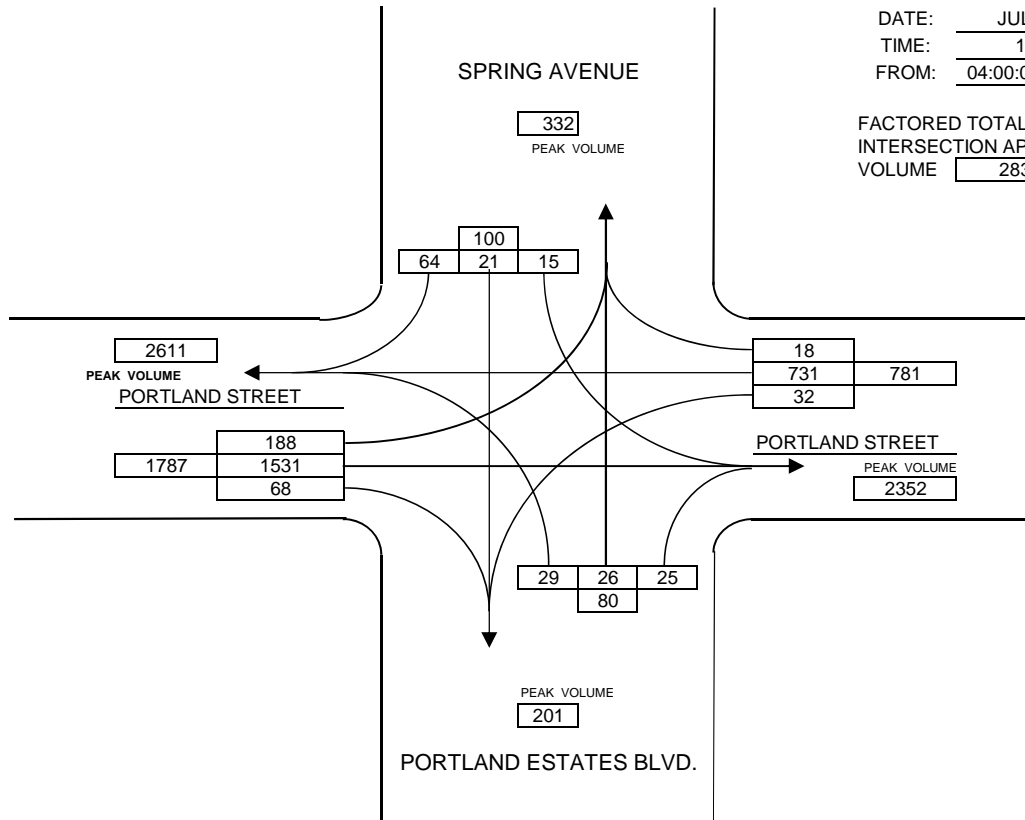
1.03

2309

VEHICULAR GRAPHIC SUMMARY SHEET

INTERSECTION :

PORTLAND STREET AT PORTLAND ESTATES BOULEVARD AND SPRING AVENUE



MANUAL TRAFFIC COUNTS

INTERSECTION:

SETTLE STREET AT VALLEYFIELD ROAD AT WOODLAWN ROAD

WEATHER
RECORDER

SUNNY & CLEAR
KS

DAY DATE MONTH YEAR
TUES 26 SEPT 2017

| TIME: 15 MIN INTERVALS | | WOODLAWN ROAD FROM THE EAST | | | WOODLAWN ROAD FROM THE WEST | | | VALLEYFIELD ROAD FROM THE NORTH | | | SETTLE STREET FROM THE SOUTH | | | TOTAL |
|---------------------------|-------------|--------------------------------|-----|----|--------------------------------|----|---|------------------------------------|---|----|---------------------------------|----|---|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 07:00:00 AM | 07:15:00 AM | 0 | 231 | 13 | 1 | 24 | 0 | 8 | 0 | 12 | 5 | 10 | 2 | 306 |
| 07:15:00 AM | 07:30:00 AM | 0 | 220 | 14 | 2 | 27 | 0 | 10 | 0 | 12 | 5 | 14 | 3 | 307 |
| 07:30:00 AM | 07:45:00 AM | 0 | 207 | 18 | 1 | 28 | 0 | 11 | 0 | 14 | 3 | 15 | 3 | 300 |
| 07:45:00 AM | 08:00:00 AM | 1 | 257 | 17 | 5 | 33 | 0 | 15 | 1 | 18 | 4 | 18 | 6 | 375 |

| | | | | | | | | | | | | | |
|------------------|------|-----|----|------|-----|---|------|---|----|------|----|----|--------|
| TOTAL | 1 | 915 | 62 | 9 | 112 | 0 | 44 | 1 | 56 | 17 | 57 | 14 | 1288 |
| PEAK | 978 | | | 121 | | | 101 | | | 88 | | | FACTOR |
| 15 MIN PEAK | 1100 | | | 152 | | | 136 | | | 112 | | | |
| PEAK HOUR FACTOR | 0.89 | | | 0.8 | | | 0.74 | | | 0.79 | | | |
| TWO WAY TOTALS | 1148 | | | 1109 | | | 229 | | | 90 | | | |
| | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |
| 1288 | | | | | | | | | | | | | |

DAY DATE MONTH YEAR
TUES 26 SEPT 2017

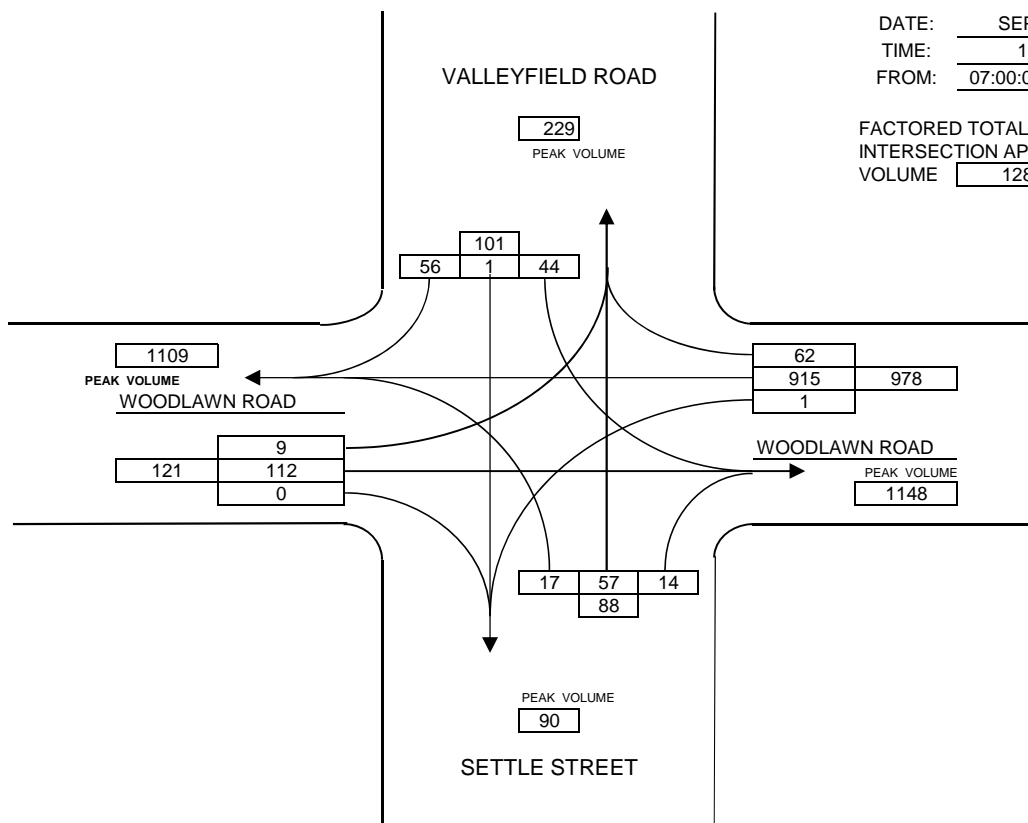
| TIME: 15 MIN INTERVALS | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|---------------------------|-------------|---------------|-----|----|---------------|----|---|----------------|---|----|----------------|----|---|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 08:00:00 AM | 08:15:00 AM | 1 | 200 | 20 | 7 | 28 | 0 | 14 | 2 | 17 | 4 | 3 | 2 | 298 |
| 08:15:00 AM | 08:30:00 AM | 3 | 244 | 18 | 4 | 36 | 1 | 17 | 1 | 23 | 6 | 9 | 7 | 369 |
| 08:30:00 AM | 08:45:00 AM | 1 | 253 | 22 | 3 | 39 | 0 | 13 | 2 | 20 | 9 | 12 | 4 | 378 |
| 08:45:00 AM | 09:00:00 AM | 3 | 237 | 26 | 5 | 32 | 0 | 14 | 3 | 19 | 5 | 6 | 5 | 355 |

| | | | | | | | | | | | | | |
|------------------|------|-----|----|------|-----|---|------|---|----|------|----|----|--------|
| TOTAL | 8 | 934 | 86 | 19 | 135 | 1 | 58 | 8 | 79 | 24 | 30 | 18 | 1400 |
| PEAK | 1028 | | | 155 | | | 145 | | | 72 | | | FACTOR |
| 15 MIN PEAK | 1104 | | | 168 | | | 164 | | | 100 | | | |
| PEAK HOUR FACTOR | 0.93 | | | 0.92 | | | 0.88 | | | 0.72 | | | |
| TWO WAY TOTALS | 1239 | | | 1192 | | | 280 | | | 89 | | | |
| | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |
| 1400 | | | | | | | | | | | | | |

VEHICULAR GRAPHIC SUMMARY SHEET

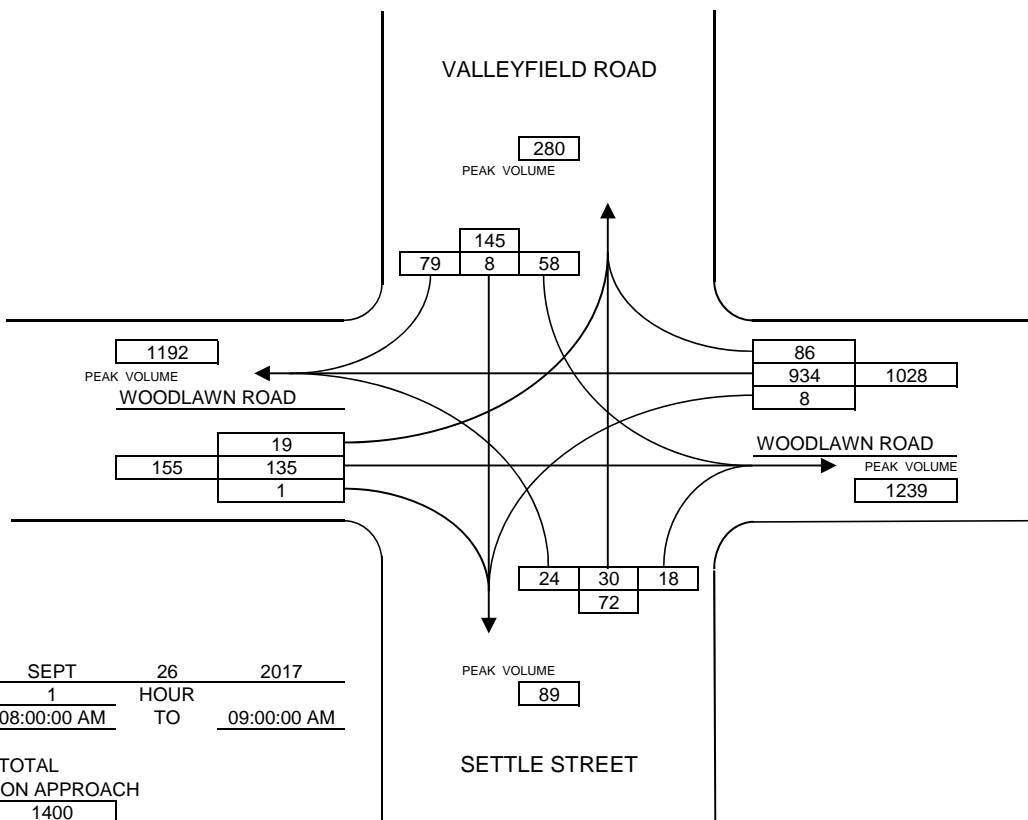
INTERSECTION :

SETTLE STREET AT VALLEYFIELD ROAD AT WOODLAWN ROAD



DATE: SEPT 26 2017
 TIME: 1 HOUR
 FROM: 07:00:00 AM TO 08:00:00 AM

FACTORED TOTAL
 INTERSECTION APPROACH
 VOLUME 1288



DATE: SEPT 26 2017
 TIME: 1 HOUR
 FROM: 08:00:00 AM TO 09:00:00 AM

FACTORED TOTAL
 INTERSECTION APPROACH
 VOLUME 1400

MANUAL TRAFFIC COUNTS

INTERSECTION:

SETTLE STREET AT VALLEYFIELD ROAD AT WOODLAWN ROAD

WEATHER
RECORDER

SUNNY & CLEAR
KS

DAY DATE MONTH YEAR
TUES 26 SEPT 2017

| STREET: TIME: 15 MIN INTERVALS | | WOODLAWN ROAD FROM THE EAST | | | WOODLAWN ROAD FROM THE WEST | | | VALLEYFIELD ROAD FROM THE NORTH | | | SETTLE STREET FROM THE SOUTH | | | TOTAL |
|--------------------------------------|-------------|--------------------------------|-----|----|--------------------------------|-----|---|------------------------------------|---|----|---------------------------------|---|---|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 04:00:00 PM | 04:15:00 PM | 0 | 80 | 17 | 30 | 124 | 0 | 5 | 5 | 7 | 2 | 6 | 1 | 277 |
| 04:15:00 PM | 04:30:00 PM | 3 | 64 | 19 | 18 | 155 | 4 | 5 | 4 | 7 | 6 | 4 | 3 | 292 |
| 04:30:00 PM | 04:45:00 PM | 2 | 92 | 22 | 23 | 181 | 4 | 6 | 4 | 15 | 3 | 7 | 2 | 361 |
| 04:45:00 PM | 05:00:00 PM | 0 | 112 | 14 | 27 | 173 | 6 | 10 | 2 | 12 | 2 | 5 | 3 | 366 |

| | | | | | | | | | | | | | |
|------------------|------|-----|----|------|-----|----|------|----|----|------|----|---|--------|
| TOTAL | 5 | 348 | 72 | 98 | 633 | 14 | 26 | 15 | 41 | 13 | 22 | 9 | 1296 |
| PEAK | 425 | | | 745 | | | 82 | | | 44 | | | FACTOR |
| 15 MIN PEAK | 504 | | | 832 | | | 100 | | | 52 | | | |
| PEAK HOUR FACTOR | 0.84 | | | 0.9 | | | 0.82 | | | 0.85 | | | |
| TWO WAY TOTALS | 1093 | | | 1147 | | | 274 | | | 78 | | | |
| | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | 1296 |

DAY DATE MONTH YEAR
TUES 26 SEPT 2017

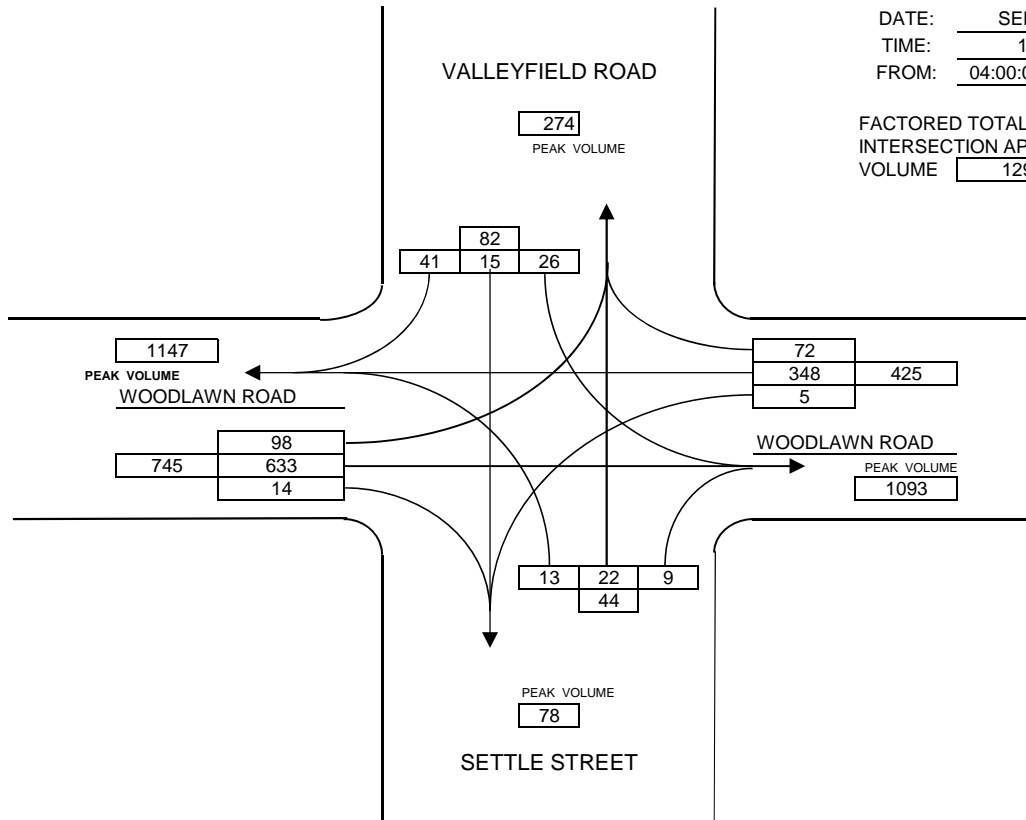
| TIME: 15 MIN INTERVALS | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|---------------------------|-------------|---------------|-----|----|---------------|-----|---|----------------|---|----|----------------|---|---|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 05:00:00 PM | 05:15:00 PM | 3 | 107 | 11 | 20 | 199 | 2 | 13 | 1 | 14 | 5 | 2 | 6 | 383 |
| 05:15:00 PM | 05:30:00 PM | 4 | 110 | 20 | 23 | 204 | 6 | 11 | 1 | 19 | 6 | 4 | 5 | 413 |
| 05:30:00 PM | 05:45:00 PM | 0 | 101 | 18 | 33 | 195 | 5 | 17 | 0 | 19 | 5 | 5 | 2 | 400 |
| 05:45:00 PM | 06:00:00 PM | 1 | 94 | 14 | 30 | 191 | 4 | 15 | 2 | 9 | 5 | 2 | 3 | 370 |

| | | | | | | | | | | | | | |
|------------------|------|-----|----|------|-----|----|------|---|----|------|----|----|--------|
| TOTAL | 8 | 412 | 63 | 106 | 789 | 17 | 56 | 4 | 61 | 21 | 13 | 16 | 1566 |
| PEAK | 483 | | | 912 | | | 121 | | | 50 | | | FACTOR |
| 15 MIN PEAK | 536 | | | 932 | | | 144 | | | 60 | | | |
| PEAK HOUR FACTOR | 0.9 | | | 0.98 | | | 0.84 | | | 0.83 | | | |
| TWO WAY TOTALS | 1344 | | | 1406 | | | 303 | | | 79 | | | |
| | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | 1566 |

VEHICULAR GRAPHIC SUMMARY SHEET

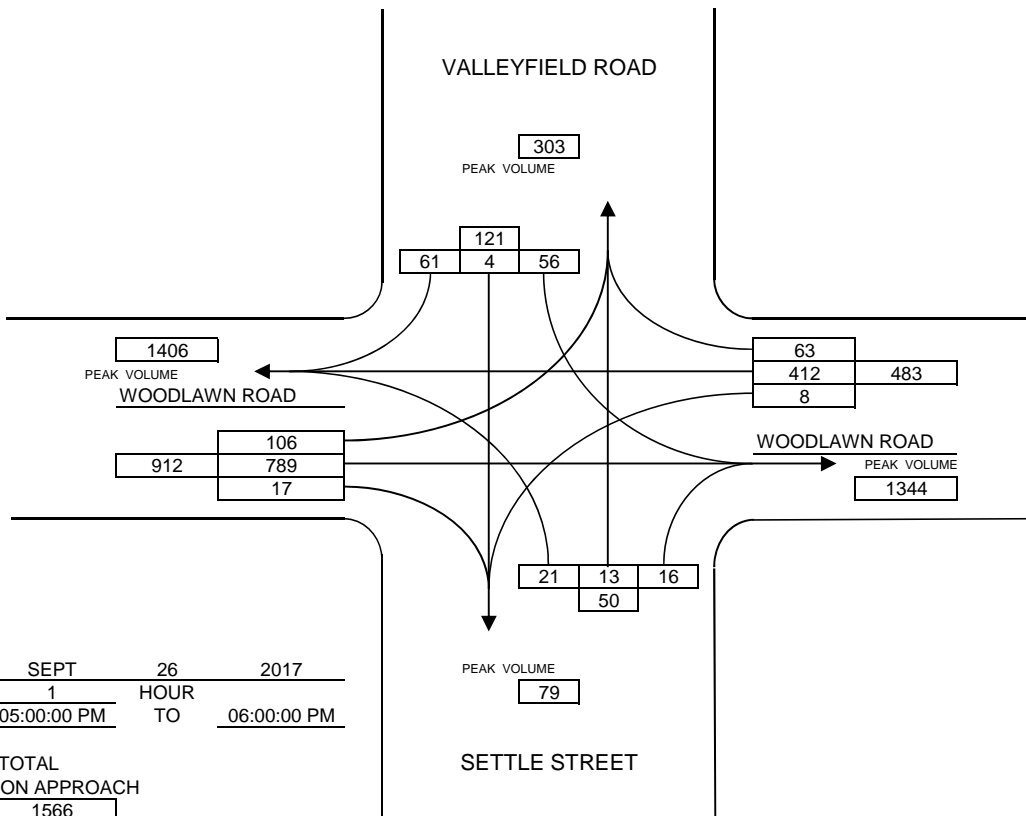
INTERSECTION :

SETTLE STREET AT VALLEYFIELD ROAD AT WOODLAWN ROAD



DATE: SEPT 26 2017
 TIME: 1 HOUR
 FROM: 04:00:00 PM TO 05:00:00 PM

FACTORED TOTAL
 INTERSECTION APPROACH
 VOLUME 1296



DATE: SEPT 26 2017
 TIME: 1 HOUR
 FROM: 05:00:00 PM TO 06:00:00 PM

FACTORED TOTAL
 INTERSECTION APPROACH
 VOLUME 1566

MANUAL TRAFFIC COUNTS

| | | | | | | | | | | | |
|---------------|------|-------|------|--------------------------------------------------|--|--|--|----------|--|--------|--|
| INTERSECTION: | | | | BAKER DRIVE AT PORTLAND STREET AND WOODLAWN ROAD | | | | WEATHER | | RAIN | |
| DAY | DATE | MONTH | YEAR | | | | | RECORDER | | MB, JS | |
| TUES. | 20 | NOV. | 2018 | | | | | | | | |

| STREET: | | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | TOTAL |
|------------------|-------------|-----------------|-----|---|-----------------|-----|----|----------------|----|-----|----------------|----|---|-------|
| TIME: | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | |
| 15 MIN INTERVALS | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 07:00:00 AM | 07:15:00 AM | 3 | 237 | 2 | 27 | 71 | 36 | 9 | 30 | 95 | 72 | 5 | 0 | 587 |
| 07:15:00 AM | 07:30:00 AM | 2 | 321 | 2 | 18 | 113 | 49 | 9 | 31 | 123 | 98 | 12 | 0 | 778 |
| 07:30:00 AM | 07:45:00 AM | 0 | 301 | 0 | 36 | 118 | 51 | 7 | 30 | 184 | 128 | 15 | 0 | 870 |
| 07:45:00 AM | 08:00:00 AM | 1 | 246 | 2 | 38 | 119 | 69 | 14 | 36 | 140 | 136 | 20 | 1 | 822 |

| | | | | | | | | | | | | | | |
|------------------|---|------|---|-----|------|-----|----|-----|-----|-----|------|---|------|--------|
| TOTAL | 6 | 1105 | 6 | 119 | 421 | 205 | 39 | 127 | 542 | 434 | 52 | 1 | 3057 | |
| PEAK | | 1117 | | | 745 | | | 708 | | | 487 | | | |
| 4(15 MIN PEAK) | | 1300 | | | 904 | | | 884 | | | 628 | | | |
| PEAK HOUR FACTOR | | 0.86 | | | 0.82 | | | 0.8 | | | 0.78 | | | AAWT |
| TWO WAY TOTALS | | 1578 | | | 2826 | | | 885 | | | 825 | | | FACTOR |
| | | | | | | | | | | | | | | 1.01 |
| | | | | | | | | | | | | | | 3088 |

| | | | |
|-------|------|-------|------|
| DAY | DATE | MONTH | YEAR |
| TUES. | 20 | NOV. | 2018 |

| | | | | | | | | | | | | | | |
|------------------|-------------|---------------|-----|---|---------------|-----|----|----------------|----|-----|----------------|----|---|-------|
| TIME: | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
| 15 MIN INTERVALS | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 08:00:00 AM | 08:15:00 AM | 1 | 296 | 1 | 37 | 115 | 67 | 18 | 29 | 171 | 124 | 12 | 1 | 872 |
| 08:15:00 AM | 08:30:00 AM | 2 | 264 | 1 | 56 | 144 | 72 | 9 | 37 | 128 | 106 | 18 | 3 | 840 |
| 08:30:00 AM | 08:45:00 AM | 0 | 245 | 3 | 48 | 144 | 63 | 19 | 57 | 156 | 87 | 21 | 2 | 845 |
| 08:45:00 AM | 09:00:00 AM | 1 | 260 | 4 | 51 | 151 | 70 | 31 | 47 | 118 | 118 | 28 | 2 | 881 |

| | | | | | | | | | | | | | | |
|------------------|---|------|---|-----|------|-----|----|------|-----|-----|------|---|------|--------|
| TOTAL | 4 | 1065 | 9 | 192 | 554 | 272 | 77 | 170 | 573 | 435 | 79 | 8 | 3438 | |
| PEAK | | 1078 | | | 1018 | | | 820 | | | 522 | | | |
| 4(15 MIN PEAK) | | 1192 | | | 1088 | | | 928 | | | 592 | | | |
| PEAK HOUR FACTOR | | 0.9 | | | 0.94 | | | 0.88 | | | 0.88 | | | AAWT |
| TWO WAY TOTALS | | 1717 | | | 3091 | | | 1100 | | | 968 | | | FACTOR |
| | | | | | | | | | | | | | | 1.01 |
| | | | | | | | | | | | | | | 3472 |

Intersection Peak Hour

| | | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|---------|
| | | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| N/A | Car | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Truck | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Bicycle | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Vehicle Total | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Approach Factor | N/A | | | N/A | | | N/A | | | N/A | | | FACTOR |
| | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | #VALUE! |

Peak Hour Pedestrians

| | | NE | | | NW | | | SW | | | SE | | | Total |
|-----|-------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| N/A | Pedestrians | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Car traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 7:00 | 3 | 233 | 2 | 24 | 64 | 33 | 9 | 30 | 93 | 72 | 5 | 0 | 568 |
| 7:15 | 2 | 315 | 2 | 16 | 103 | 47 | 9 | 30 | 116 | 96 | 11 | 0 | 747 |
| 7:30 | 0 | 296 | 0 | 33 | 113 | 50 | 7 | 30 | 182 | 126 | 15 | 0 | 852 |
| 7:45 | 1 | 237 | 2 | 37 | 112 | 66 | 14 | 36 | 132 | 134 | 19 | 1 | 791 |
| 8:00 | 1 | 292 | 1 | 33 | 107 | 64 | 15 | 28 | 166 | 123 | 11 | 1 | 842 |
| 8:15 | 2 | 257 | 1 | 54 | 137 | 71 | 8 | 36 | 124 | 105 | 17 | 2 | 814 |
| 8:30 | 0 | 237 | 3 | 47 | 135 | 62 | 17 | 57 | 154 | 86 | 19 | 2 | 819 |
| 8:45 | 1 | 254 | 3 | 48 | 139 | 67 | 31 | 47 | 112 | 116 | 28 | 2 | 848 |
| TOTAL | 10 | 2121 | 14 | 292 | 910 | 460 | 110 | 294 | 1079 | 858 | 125 | 8 | 6281 |

Truck traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 7:00 | 0 | 4 | 0 | 3 | 7 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 19 |
| 7:15 | 0 | 6 | 0 | 2 | 10 | 2 | 0 | 1 | 7 | 2 | 1 | 0 | 31 |
| 7:30 | 0 | 5 | 0 | 3 | 5 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 18 |
| 7:45 | 0 | 9 | 0 | 1 | 7 | 3 | 0 | 0 | 8 | 2 | 1 | 0 | 31 |
| 8:00 | 0 | 4 | 0 | 4 | 8 | 3 | 3 | 1 | 5 | 1 | 1 | 0 | 30 |
| 8:15 | 0 | 7 | 0 | 2 | 7 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 26 |
| 8:30 | 0 | 8 | 0 | 1 | 9 | 1 | 2 | 0 | 2 | 1 | 2 | 0 | 26 |
| 8:45 | 0 | 6 | 1 | 3 | 12 | 3 | 0 | 0 | 6 | 2 | 0 | 0 | 33 |
| TOTAL | 0 | 49 | 1 | 19 | 65 | 17 | 6 | 3 | 36 | 11 | 6 | 1 | 214 |

Bicycle traffic

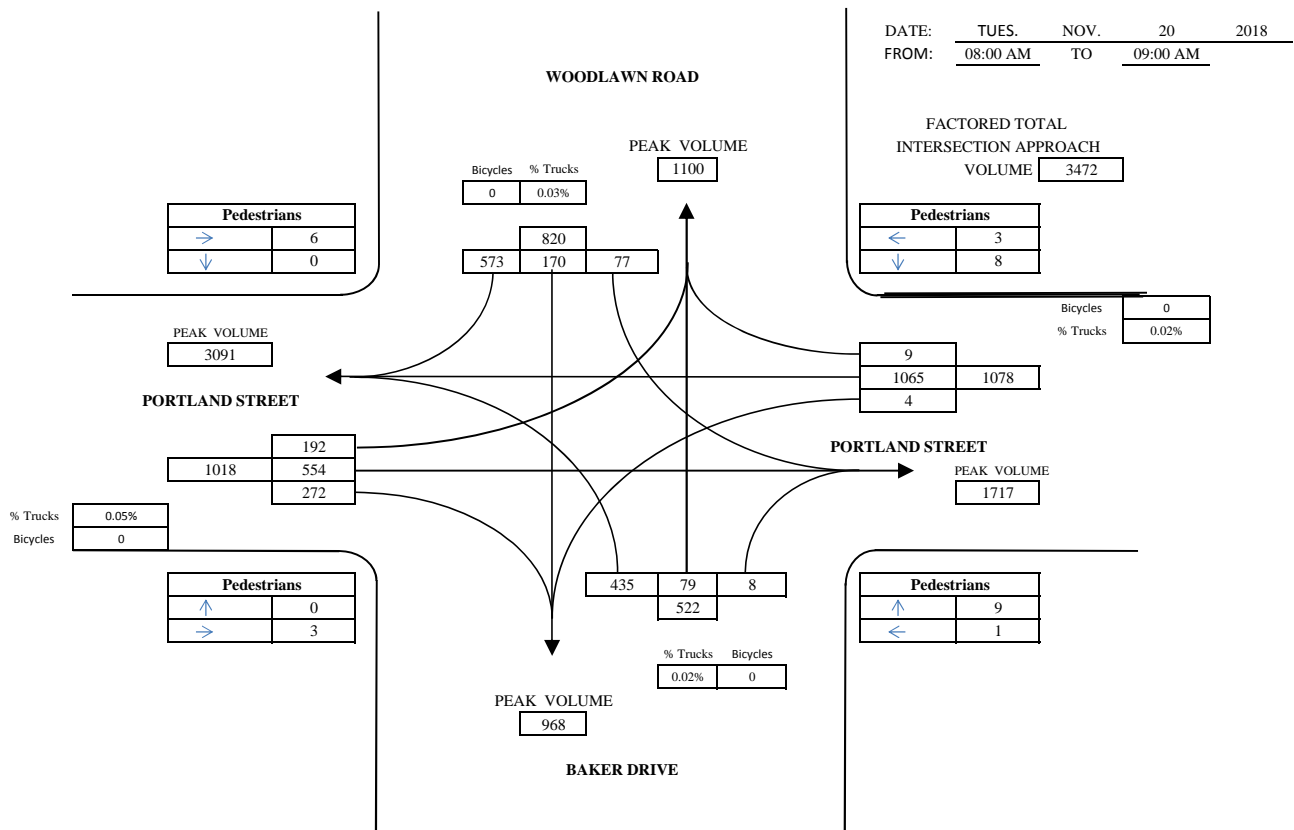
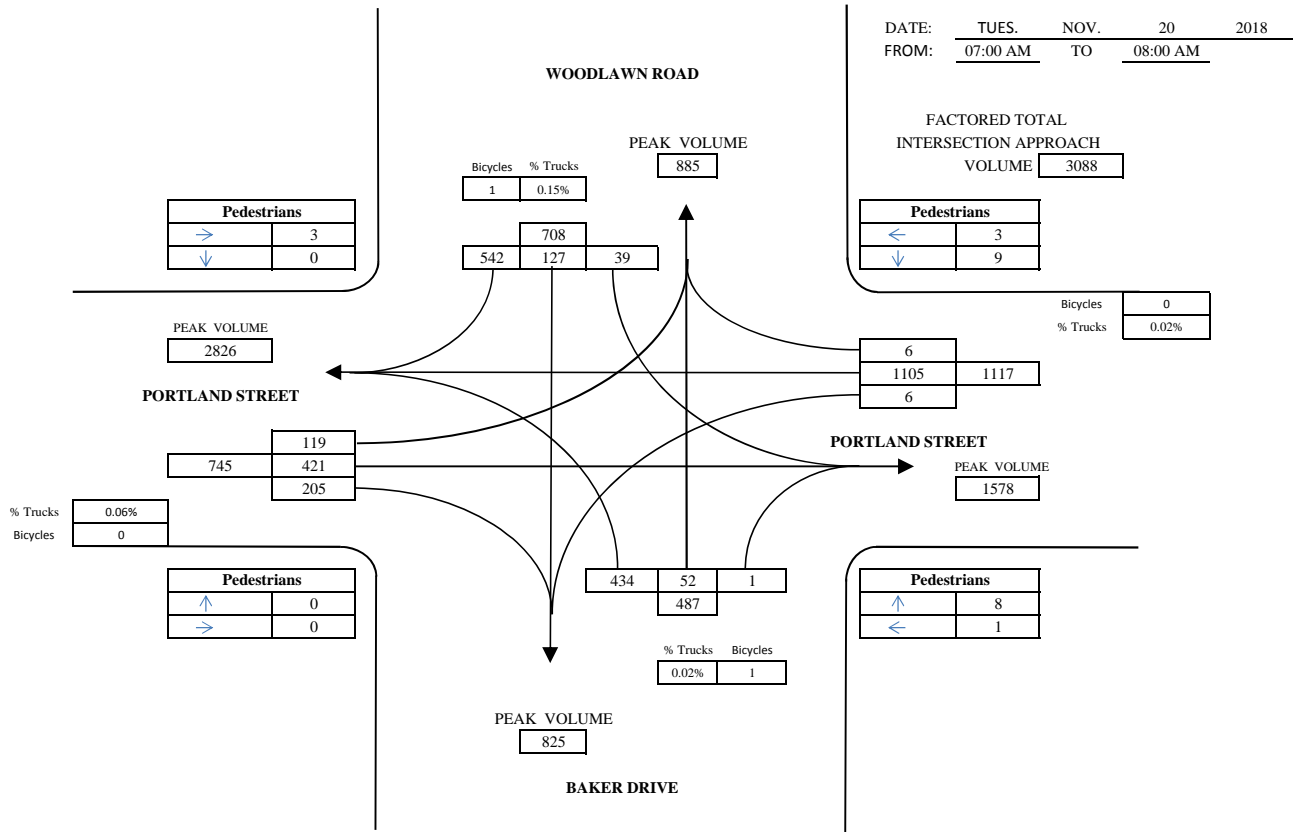
| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 7:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 |

Pedestrian volumes

| Interval starts | NE | | | NW | | | SW | | | SE | | | Total |
|-----------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| 7:00 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 |
| 7:15 | 3 | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 3 | 7 |
| 7:30 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:45 | 3 | 3 | 6 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 5 | 13 |
| 8:00 | 3 | 1 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| 8:15 | 2 | 1 | 3 | 2 | 0 | 2 | 0 | 1 | 1 | 1 | 3 | 4 | 10 |
| 8:30 | 2 | 0 | 2 | 3 | 0 | 3 | 0 | 2 | 2 | 0 | 3 | 3 | 10 |
| 8:45 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 4 |
| TOTAL | 17 | 6 | 23 | 9 | 0 | 9 | 0 | 3 | 3 | 2 | 17 | 19 | 54 |

VEHICULAR GRAPHIC SUMMARY SHEET

BAKER DRIVE AT PORTLAND STREET AND WOODLAWN ROAD



MANUAL TRAFFIC COUNTS

INTERSECTION:

BAKER DRIVE AT PORTLAND STREET AND WOODLAWN ROAD

DAY DATE MONTH YEAR
TUES. 20 NOV. 2018

WEATHER
RECORDER

RAIN
MB, JS

STREET:

TIME:

15 MIN INTERVALS

| STREET: | | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | TOTAL |
|-------------------|-------------|-----------------|-----|----|-----------------|-----|-----|----------------|----|----|----------------|----|---|-------|
| TIME: | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | |
| 15 MIN. INTERVALS | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 04:00:00 PM | 04:15:00 PM | 4 | 207 | 10 | 91 | 321 | 109 | 28 | 43 | 66 | 79 | 39 | 6 | 1003 |
| 04:15:00 PM | 04:30:00 PM | 2 | 190 | 10 | 92 | 330 | 141 | 42 | 33 | 87 | 59 | 51 | 8 | 1045 |
| 04:30:00 PM | 04:45:00 PM | 4 | 187 | 14 | 111 | 382 | 121 | 28 | 36 | 92 | 59 | 44 | 6 | 1084 |
| 04:45:00 PM | 05:00:00 PM | 8 | 219 | 12 | 95 | 342 | 116 | 27 | 30 | 78 | 73 | 37 | 4 | 1041 |

TOTAL

PEAK

4(15 MIN PEAK)

PEAK HOUR FACTOR

TWO WAY TOTALS

| | | | | | | | | | | | | |
|----|------|----|-----|------|-----|-----|------|-----|-----|------|----|--------|
| 18 | 803 | 46 | 389 | 1375 | 487 | 125 | 142 | 323 | 270 | 171 | 24 | 4173 |
| | 867 | | | 2251 | | | 590 | | | 465 | | |
| | 956 | | | 2456 | | | 648 | | | 496 | | |
| | 0.91 | | | 0.92 | | | 0.91 | | | 0.94 | | AAWT |
| | 2391 | | | 3647 | | | 1196 | | | 1112 | | FACTOR |
| | | | | | | | | | | | | 1.01 |
| | | | | | | | | | | | | 4215 |

DAY DATE MONTH YEAR
TUES. 20 NOV. 2018

TIME:

15 MIN INTERVALS

| TIME: | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|-------------------|-------------|---------------|-----|----|---------------|-----|-----|----------------|----|-----|----------------|----|---|-------|
| 15 MIN. INTERVALS | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 05:00:00 PM | 05:15:00 PM | 6 | 163 | 10 | 99 | 258 | 95 | 30 | 23 | 92 | 75 | 42 | 5 | 898 |
| 05:15:00 PM | 05:30:00 PM | 5 | 212 | 15 | 109 | 257 | 106 | 23 | 19 | 83 | 58 | 50 | 6 | 943 |
| 05:30:00 PM | 05:45:00 PM | 4 | 214 | 12 | 79 | 230 | 96 | 22 | 40 | 83 | 71 | 46 | 5 | 902 |
| 05:45:00 PM | 06:00:00 PM | 2 | 192 | 21 | 110 | 235 | 114 | 27 | 31 | 106 | 57 | 39 | 6 | 940 |

TOTAL

PEAK

4(15 MIN PEAK)

PEAK HOUR FACTOR

TWO WAY TOTALS

| | | | | | | | | | | | | |
|----|------|----|-----|------|-----|-----|------|-----|-----|------|----|--------|
| 17 | 781 | 58 | 397 | 980 | 411 | 102 | 113 | 364 | 261 | 177 | 22 | 3683 |
| | 856 | | | 1788 | | | 579 | | | 460 | | |
| | 928 | | | 1888 | | | 656 | | | 488 | | |
| | 0.92 | | | 0.95 | | | 0.88 | | | 0.94 | | AAWT |
| | 1960 | | | 3194 | | | 1211 | | | 1001 | | FACTOR |
| | | | | | | | | | | | | 1.01 |
| | | | | | | | | | | | | 3720 |

Intersection Peak Hour

| | | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|---------|
| | | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| N/A | Car | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Truck | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Bicycle | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Vehicle Total | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Approach Factor | N/A | | | N/A | | | N/A | | | N/A | | | FACTOR |
| | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | #VALUE! |

Peak Hour Pedestrians

| | | NE | | | NW | | | SW | | | SE | | | Total |
|-----|-------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| N/A | Pedestrians | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Car traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 16:00 | 4 | 199 | 10 | 89 | 317 | 108 | 28 | 42 | 63 | 77 | 39 | 6 | 982 |
| 16:15 | 2 | 183 | 10 | 88 | 325 | 136 | 41 | 32 | 83 | 57 | 51 | 8 | 1016 |
| 16:30 | 4 | 181 | 14 | 107 | 374 | 119 | 28 | 36 | 88 | 59 | 44 | 6 | 1060 |
| 16:45 | 8 | 212 | 12 | 92 | 338 | 114 | 27 | 30 | 76 | 70 | 37 | 4 | 1020 |
| 17:00 | 6 | 160 | 10 | 98 | 252 | 94 | 30 | 23 | 89 | 75 | 42 | 5 | 884 |
| 17:15 | 5 | 205 | 15 | 105 | 251 | 105 | 23 | 19 | 82 | 57 | 50 | 6 | 923 |
| 17:30 | 4 | 209 | 11 | 77 | 222 | 94 | 22 | 40 | 80 | 69 | 46 | 5 | 879 |
| 17:45 | 2 | 187 | 20 | 106 | 228 | 113 | 27 | 31 | 102 | 54 | 39 | 6 | 915 |
| TOTAL | 35 | 1536 | 102 | 762 | 2307 | 883 | 226 | 253 | 663 | 518 | 348 | 46 | 7679 |

Truck traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 16:00 | 0 | 8 | 0 | 2 | 4 | 1 | 0 | 1 | 3 | 2 | 0 | 0 | 21 |
| 16:15 | 0 | 7 | 0 | 4 | 5 | 5 | 1 | 0 | 4 | 2 | 0 | 0 | 29 |
| 16:30 | 0 | 6 | 0 | 4 | 8 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 24 |
| 16:45 | 0 | 7 | 0 | 3 | 4 | 2 | 0 | 0 | 2 | 3 | 0 | 0 | 21 |
| 17:00 | 0 | 3 | 0 | 1 | 6 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 14 |
| 17:15 | 0 | 7 | 0 | 4 | 6 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 20 |
| 17:30 | 0 | 5 | 1 | 2 | 8 | 2 | 0 | 0 | 3 | 2 | 0 | 0 | 23 |
| 17:45 | 0 | 5 | 1 | 4 | 7 | 1 | 0 | 0 | 4 | 3 | 0 | 0 | 25 |
| TOTAL | 0 | 48 | 2 | 24 | 48 | 15 | 1 | 2 | 24 | 13 | 0 | 0 | 177 |

Bicycle traffic

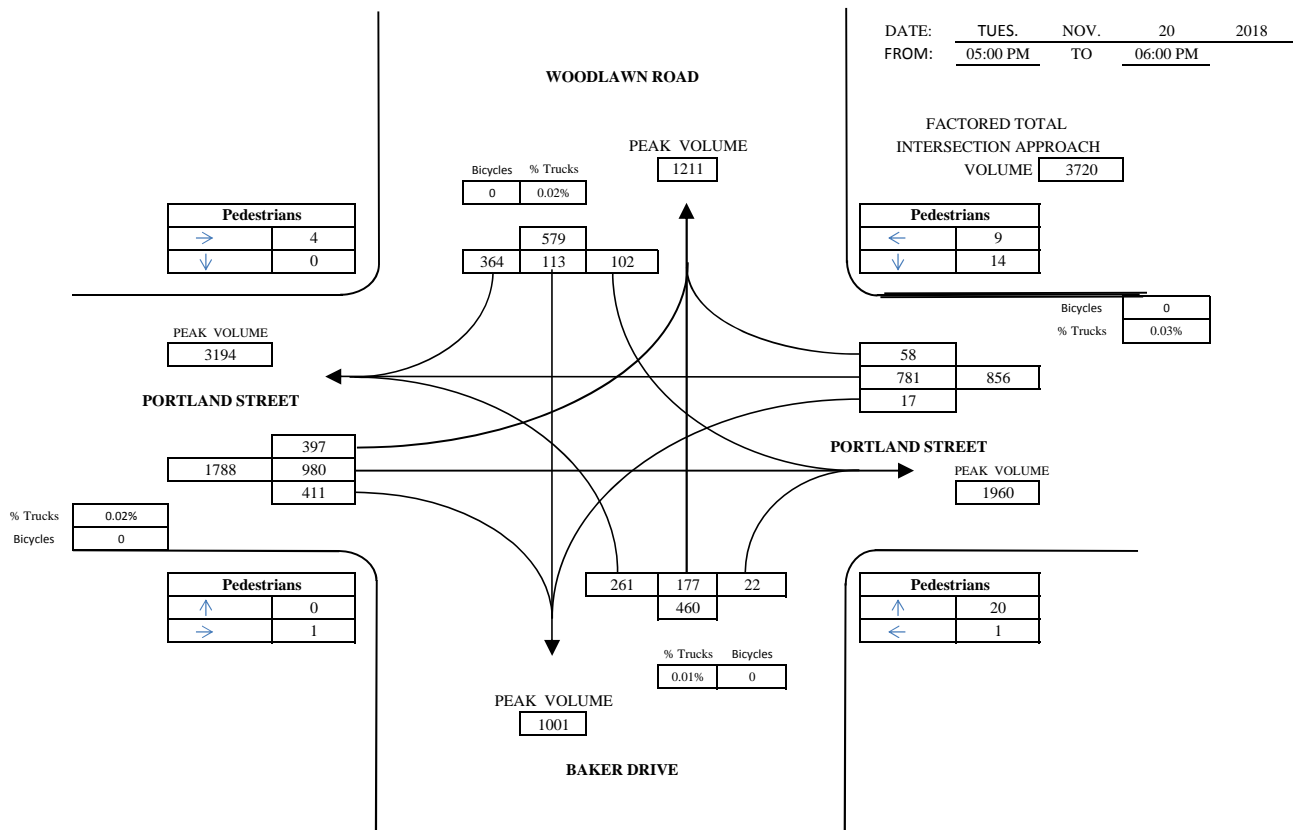
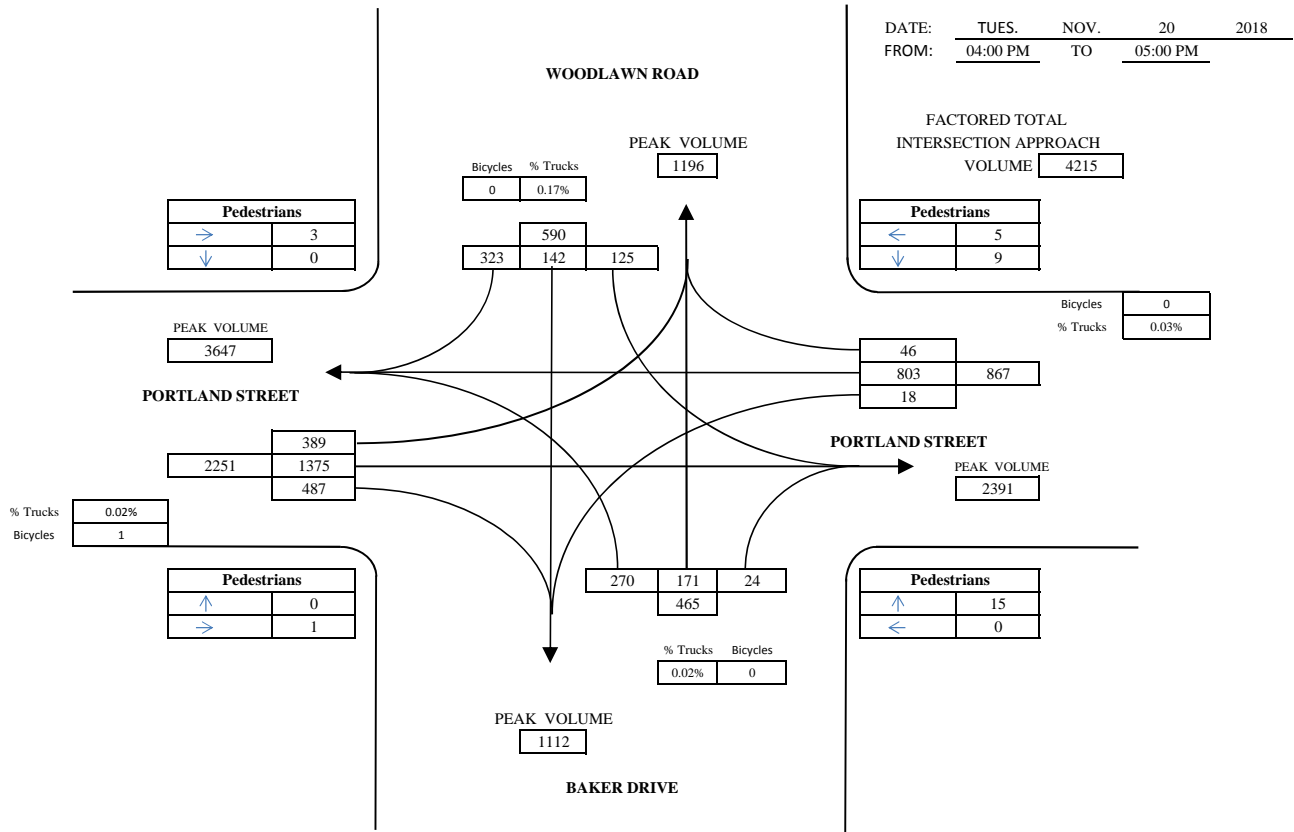
| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | WOODLAWN ROAD | | | BAKER DRIVE | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 16:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 16:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

Pedestrian volumes

| Interval starts | NE | | | NW | | | SW | | | SE | | | Total |
|-----------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| 16:00 | 4 | 1 | 5 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 5 | 12 |
| 16:15 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 6 |
| 16:30 | 1 | 3 | 4 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 6 | 6 | 12 |
| 16:45 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 |
| 17:00 | 1 | 2 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 4 | 5 | 9 |
| 17:15 | 5 | 2 | 7 | 2 | 0 | 2 | 0 | 1 | 1 | 0 | 5 | 5 | 15 |
| 17:30 | 5 | 1 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 8 |
| 17:45 | 3 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 17 |
| TOTAL | 23 | 14 | 37 | 7 | 0 | 7 | 0 | 2 | 2 | 1 | 35 | 36 | 82 |

VEHICULAR GRAPHIC SUMMARY SHEET

BAKER DRIVE AT PORTLAND STREET AND WOODLAWN ROAD



MANUAL TRAFFIC COUNTS

INTERSECTION:

CARVER STREET AT EISENER BOULEVARD AND PORTLAND STREET

WEATHER
RECORDER

CLOUDY
MBJS

DAY DATE MONTH YEAR
THURS. 22 NOV. 2018

STREET:

| TIME: 15 MIN INTERVALS | | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | TOTAL |
|---------------------------|-------------|-----------------|-----|---|-----------------|----|----|----------------|----|---|-------------------|---|----|-------|
| | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | |
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 07:00:00 AM | 07:15:00 AM | 81 | 337 | 0 | 0 | 48 | 13 | 3 | 10 | 1 | 11 | 0 | 15 | 519 |
| 07:15:00 AM | 07:30:00 AM | 74 | 375 | 0 | 0 | 79 | 17 | 6 | 17 | 1 | 21 | 0 | 18 | 608 |
| 07:30:00 AM | 07:45:00 AM | 109 | 335 | 0 | 0 | 47 | 5 | 5 | 19 | 1 | 18 | 0 | 17 | 556 |
| 07:45:00 AM | 08:00:00 AM | 98 | 271 | 0 | 0 | 50 | 6 | 7 | 10 | 2 | 22 | 0 | 24 | 490 |

| | | | | | | | | | | | | | |
|------------------|------|------|---|---|------|----|----|------|---|----|------|----|--------|
| TOTAL | 362 | 1318 | 0 | 0 | 224 | 41 | 21 | 56 | 5 | 72 | 0 | 74 | 2173 |
| PEAK | 1680 | | | | 265 | | | 82 | | | 146 | | |
| 4(15 MIN PEAK) | 1796 | | | | 384 | | | 100 | | | 184 | | |
| PEAK HOUR FACTOR | 0.94 | | | | 0.69 | | | 0.82 | | | 0.79 | | AAWT |
| TWO WAY TOTALS | 1999 | | | | 1660 | | | 82 | | | 605 | | FACTOR |
| | | | | | | | | | | | | | 0.97 |
| | | | | | | | | | | | | | 2108 |

DAY DATE MONTH YEAR
THURS. 22 NOV. 2018

| TIME: | 15 MIN INTERVALS | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|-------------|------------------|---------------|-----|---|---------------|-----|----|----------------|----|---|----------------|---|----|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 08:00:00 AM | 08:15:00 AM | 92 | 267 | 0 | 0 | 67 | 6 | 3 | 11 | 1 | 43 | 0 | 34 | 524 |
| 08:15:00 AM | 08:30:00 AM | 74 | 281 | 0 | 0 | 91 | 10 | 9 | 12 | 4 | 36 | 0 | 30 | 547 |
| 08:30:00 AM | 08:45:00 AM | 87 | 330 | 0 | 0 | 61 | 17 | 9 | 19 | 2 | 22 | 0 | 30 | 577 |
| 08:45:00 AM | 09:00:00 AM | 81 | 284 | 0 | 0 | 108 | 11 | 7 | 20 | 0 | 40 | 0 | 34 | 585 |

| | | | | | | | | | | | | | |
|------------------|------|------|---|---|------|----|----|------|---|-----|------|-----|--------|
| TOTAL | 334 | 1162 | 0 | 0 | 327 | 44 | 28 | 62 | 7 | 141 | 0 | 128 | 2233 |
| PEAK | 1496 | | | | 371 | | | 97 | | | 269 | | |
| 4(15 MIN PEAK) | 1668 | | | | 476 | | | 120 | | | 308 | | |
| PEAK HOUR FACTOR | 0.9 | | | | 0.78 | | | 0.81 | | | 0.87 | | AAWT |
| TWO WAY TOTALS | 1979 | | | | 1681 | | | 97 | | | 709 | | FACTOR |
| | | | | | | | | | | | | | 0.97 |
| | | | | | | | | | | | | | 2166 |

Intersection Peak Hour

| NA | | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|----|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|--------|
| | | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| | Car | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Truck | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Bicycle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Vehicle Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Approach Factor | 0 | | | 0 | | | 0 | | | 0 | | | FACTOR |
| | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | 0 |

Peak Hour Pedestrians

| NA | | NE | | | NW | | | SW | | | SE | | | Total |
|----|-------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| | Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Car traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 7:00 | 79 | 331 | 0 | 0 | 41 | 13 | 3 | 9 | 1 | 10 | 0 | 15 | 502 |
| 7:15 | 73 | 370 | 0 | 0 | 76 | 15 | 6 | 17 | 1 | 20 | 0 | 18 | 596 |
| 7:30 | 109 | 331 | 0 | 0 | 45 | 5 | 5 | 17 | 1 | 17 | 0 | 17 | 547 |
| 7:45 | 98 | 264 | 0 | 0 | 49 | 6 | 6 | 10 | 2 | 20 | 0 | 23 | 478 |
| 8:00 | 90 | 261 | 0 | 0 | 64 | 6 | 3 | 11 | 1 | 41 | 0 | 33 | 510 |
| 8:15 | 74 | 275 | 0 | 0 | 86 | 8 | 8 | 12 | 4 | 34 | 0 | 30 | 531 |
| 8:30 | 86 | 325 | 0 | 0 | 54 | 17 | 9 | 19 | 2 | 20 | 0 | 28 | 560 |
| 8:45 | 80 | 277 | 0 | 0 | 101 | 11 | 7 | 20 | 0 | 40 | 0 | 33 | 569 |
| TOTAL | 689 | 2434 | 0 | 0 | 516 | 81 | 47 | 115 | 12 | 202 | 0 | 197 | 4293 |

Truck traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 7:00 | 2 | 6 | 0 | 0 | 7 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 17 |
| 7:15 | 1 | 5 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 12 |
| 7:30 | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 9 |
| 7:45 | 0 | 7 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 12 |
| 8:00 | 2 | 6 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 14 |
| 8:15 | 0 | 6 | 0 | 0 | 5 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 16 |
| 8:30 | 1 | 5 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 17 |
| 8:45 | 1 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 16 |
| TOTAL | 7 | 46 | 0 | 0 | 35 | 4 | 2 | 3 | 0 | 11 | 0 | 5 | 113 |

Bicycle traffic

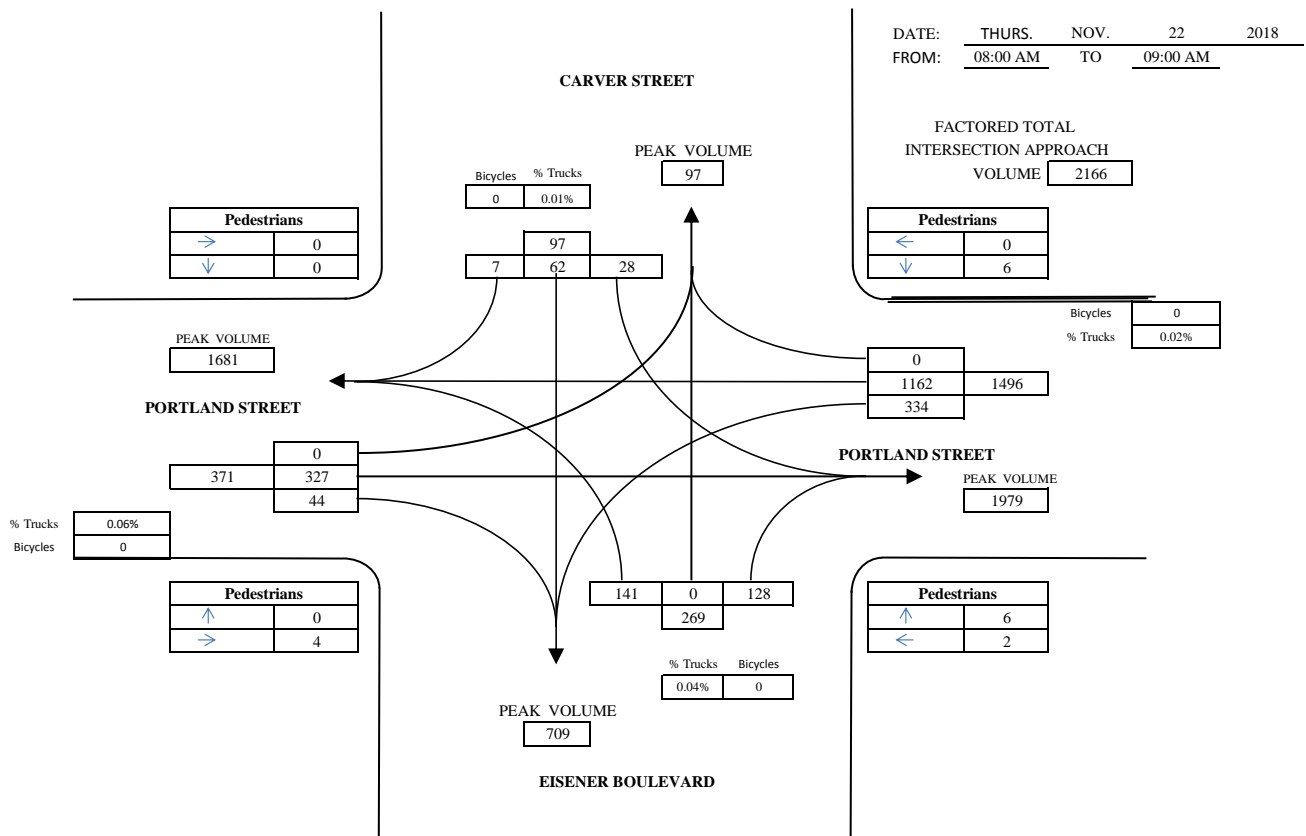
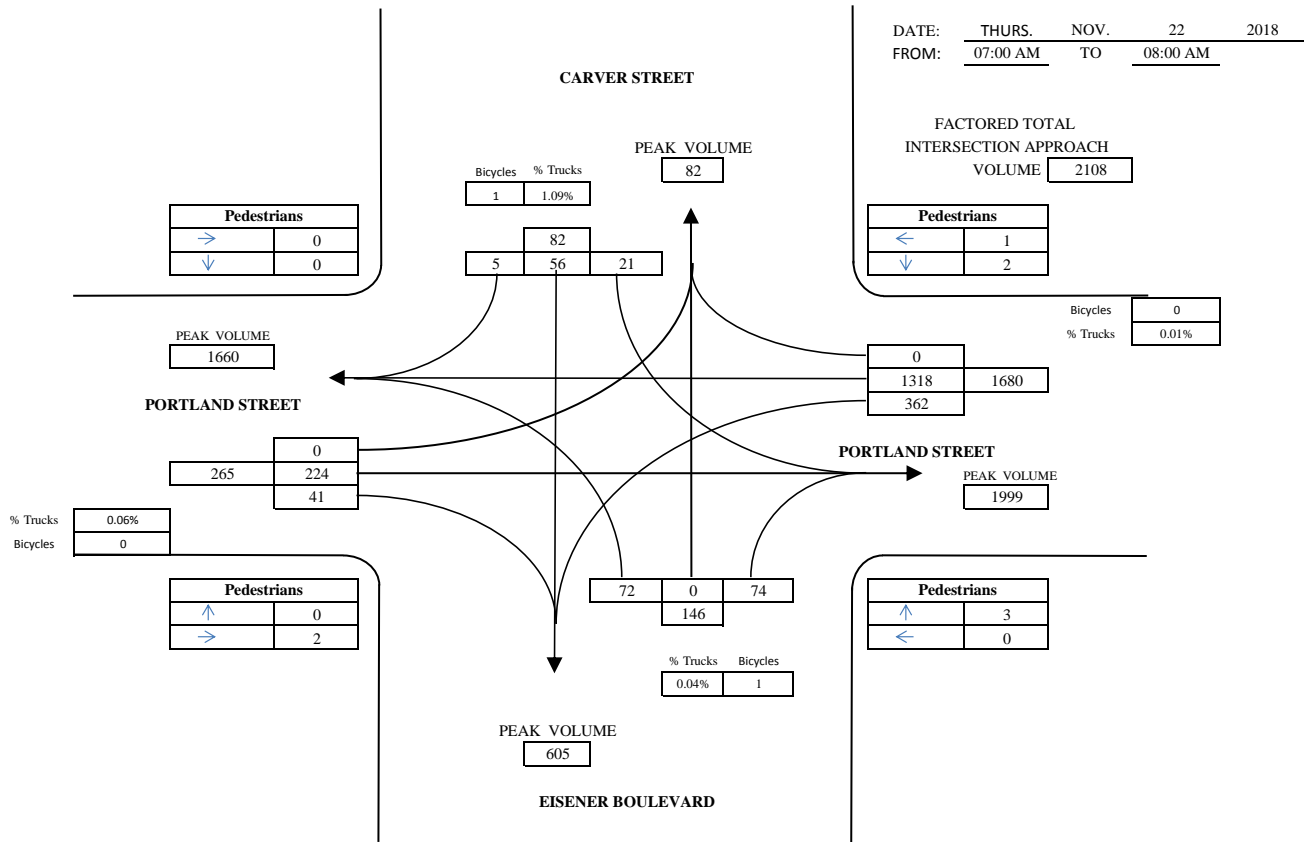
| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 |

Pedestrian volumes

| Interval starts | NE | | | NW | | | SW | | | SE | | | Total |
|-----------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| 7:00 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:15 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| 7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 2 | 2 | 4 |
| 7:45 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 1 | 3 |
| 8:15 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 7 |
| 8:30 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 3 |
| 8:45 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 5 |
| TOTAL | 8 | 1 | 9 | 0 | 0 | 0 | 0 | 6 | 6 | 2 | 9 | 11 | 26 |

VEHICULAR GRAPHIC SUMMARY SHEET

CARVER STREET AT EISENER BOULEVARD AND PORTLAND STREET



MANUAL TRAFFIC COUNTS

INTERSECTION:

CARVER STREET AT EISENER BOULEVARD AND PORTLAND STREET

WEATHER
RECORDER

CLOUDY
MBJS

DAY DATE MONTH YEAR
THURS. 22 NOV. 2018

STREET:

| TIME: 15 MIN INTERVALS | | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|---------------------------|-------------|---------------|-----|---|---------------|-----|----|----------------|----|---|----------------|---|-----|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 04:00:00 PM | 04:15:00 PM | 37 | 183 | 0 | 0 | 232 | 24 | 18 | 24 | 0 | 72 | 0 | 110 | 700 |
| 04:15:00 PM | 04:30:00 PM | 44 | 175 | 0 | 0 | 243 | 16 | 26 | 28 | 1 | 74 | 0 | 101 | 708 |
| 04:30:00 PM | 04:45:00 PM | 35 | 185 | 0 | 0 | 273 | 11 | 10 | 18 | 1 | 75 | 0 | 110 | 718 |
| 04:45:00 PM | 05:00:00 PM | 43 | 190 | 0 | 0 | 262 | 23 | 16 | 22 | 0 | 65 | 0 | 92 | 713 |

| | | | | | | | | | | | | | |
|------------------|------|-----|---|---|------|----|----|------|---|-----|------|-----|--------|
| TOTAL | 159 | 733 | 0 | 0 | 1010 | 74 | 70 | 92 | 2 | 286 | 0 | 413 | 2839 |
| PEAK | 892 | | | | 1084 | | | 164 | | | 699 | | |
| 4(15 MIN PEAK) | 932 | | | | 1140 | | | 220 | | | 740 | | |
| PEAK HOUR FACTOR | 0.96 | | | | 0.95 | | | 0.75 | | | 0.94 | | AAWT |
| TWO WAY TOTALS | 2385 | | | | 2105 | | | 164 | | | 1024 | | FACTOR |
| | | | | | | | | | | | | | 0.97 |
| | | | | | | | | | | | | | 2754 |

DAY DATE MONTH YEAR
THURS. 22 NOV. 2018

| TIME: | 15 MIN INTERVALS | FROM THE EAST | | | FROM THE WEST | | | FROM THE NORTH | | | FROM THE SOUTH | | | TOTAL |
|-------------|------------------|---------------|-----|---|---------------|-----|----|----------------|----|---|----------------|---|-----|-------|
| | | L | S | R | L | S | R | L | S | R | L | S | R | |
| 05:00:00 PM | 05:15:00 PM | 43 | 171 | 0 | 0 | 252 | 31 | 19 | 33 | 2 | 73 | 0 | 105 | 729 |
| 05:15:00 PM | 05:30:00 PM | 34 | 196 | 0 | 0 | 303 | 33 | 18 | 26 | 3 | 63 | 0 | 88 | 764 |
| 05:30:00 PM | 05:45:00 PM | 39 | 172 | 0 | 0 | 257 | 6 | 18 | 22 | 1 | 63 | 0 | 87 | 665 |
| 05:45:00 PM | 06:00:00 PM | 44 | 193 | 0 | 0 | 285 | 21 | 20 | 21 | 1 | 82 | 0 | 82 | 749 |

| | | | | | | | | | | | | | |
|------------------|------|-----|---|---|------|----|----|------|---|-----|-----|--------|------|
| TOTAL | 160 | 732 | 0 | 0 | 1097 | 91 | 75 | 102 | 7 | 281 | 0 | 362 | 2907 |
| PEAK | 892 | | | | 1188 | | | 184 | | | 643 | | |
| 4(15 MIN PEAK) | 948 | | | | 1344 | | | 216 | | | 712 | | |
| PEAK HOUR FACTOR | 0.94 | | | | 0.88 | | | 0.85 | | | 0.9 | AAWT | |
| TWO WAY TOTALS | 2426 | | | | 2208 | | | 184 | | | 996 | FACTOR | |
| | | | | | | | | | | | | | 0.97 |
| | | | | | | | | | | | | | 2820 |

Intersection Peak Hour

| 16:30 - 17:30 | | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|---------------|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|--------|
| | | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| | Car | 158 | 710 | 0 | 0 | 1082 | 89 | 75 | 101 | 7 | 284 | 0 | 411 | 2917 |
| | Truck | 1 | 23 | 0 | 0 | 15 | 2 | 0 | 1 | 0 | 2 | 0 | 2 | 46 |
| | Bicycle | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Vehicle Total | 159 | 734 | 0 | 0 | 1097 | 91 | 75 | 102 | 7 | 286 | 0 | 413 | 2964 |
| | Approach Factor | 0.96 | | | 0.88 | | | 0.85 | | | 0.94 | | | FACTOR |
| | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | 2964 |

Peak Hour Pedestrians

| 16:30 - 17:30 | | NE | | | NW | | | SW | | | SE | | | Total |
|---------------|-------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| | Pedestrians | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 6 | 10 | 18 |

Car traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 16:00 | 36 | 177 | 0 | 0 | 228 | 24 | 18 | 23 | 0 | 72 | 0 | 108 | 686 |
| 16:15 | 44 | 168 | 0 | 0 | 240 | 16 | 26 | 28 | 1 | 73 | 0 | 101 | 697 |
| 16:30 | 35 | 180 | 0 | 0 | 269 | 11 | 10 | 18 | 1 | 75 | 0 | 110 | 709 |
| 16:45 | 43 | 185 | 0 | 0 | 253 | 22 | 15 | 22 | 0 | 64 | 0 | 92 | 696 |
| 17:00 | 43 | 163 | 0 | 0 | 249 | 31 | 19 | 33 | 2 | 73 | 0 | 104 | 717 |
| 17:15 | 34 | 191 | 0 | 0 | 299 | 32 | 18 | 25 | 3 | 62 | 0 | 88 | 752 |
| 17:30 | 39 | 165 | 0 | 0 | 253 | 6 | 18 | 22 | 1 | 62 | 0 | 87 | 653 |
| 17:45 | 44 | 187 | 0 | 0 | 281 | 20 | 20 | 21 | 1 | 81 | 0 | 82 | 737 |
| TOTAL | 318 | 1416 | 0 | 0 | 2072 | 162 | 144 | 192 | 9 | 562 | 0 | 772 | 5647 |

Truck traffic

| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 16:00 | 1 | 6 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 14 |
| 16:15 | 0 | 7 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 11 |
| 16:30 | 0 | 5 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 16:45 | 0 | 5 | 0 | 0 | 9 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 17 |
| 17:00 | 0 | 8 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 |
| 17:15 | 0 | 5 | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 12 |
| 17:30 | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 12 |
| 17:45 | 0 | 6 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 12 |
| TOTAL | 1 | 49 | 0 | 0 | 35 | 3 | 1 | 2 | 0 | 5 | 0 | 3 | 99 |

Bicycle traffic

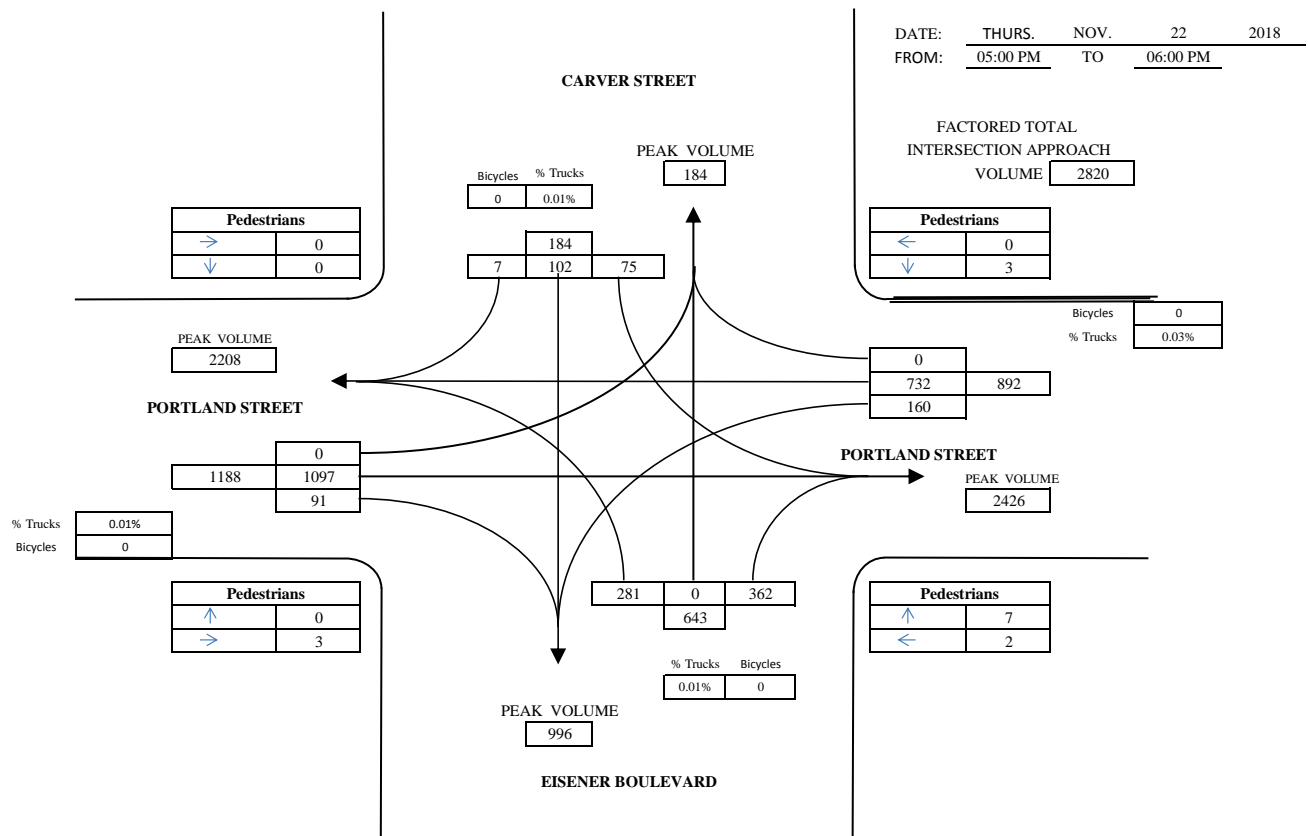
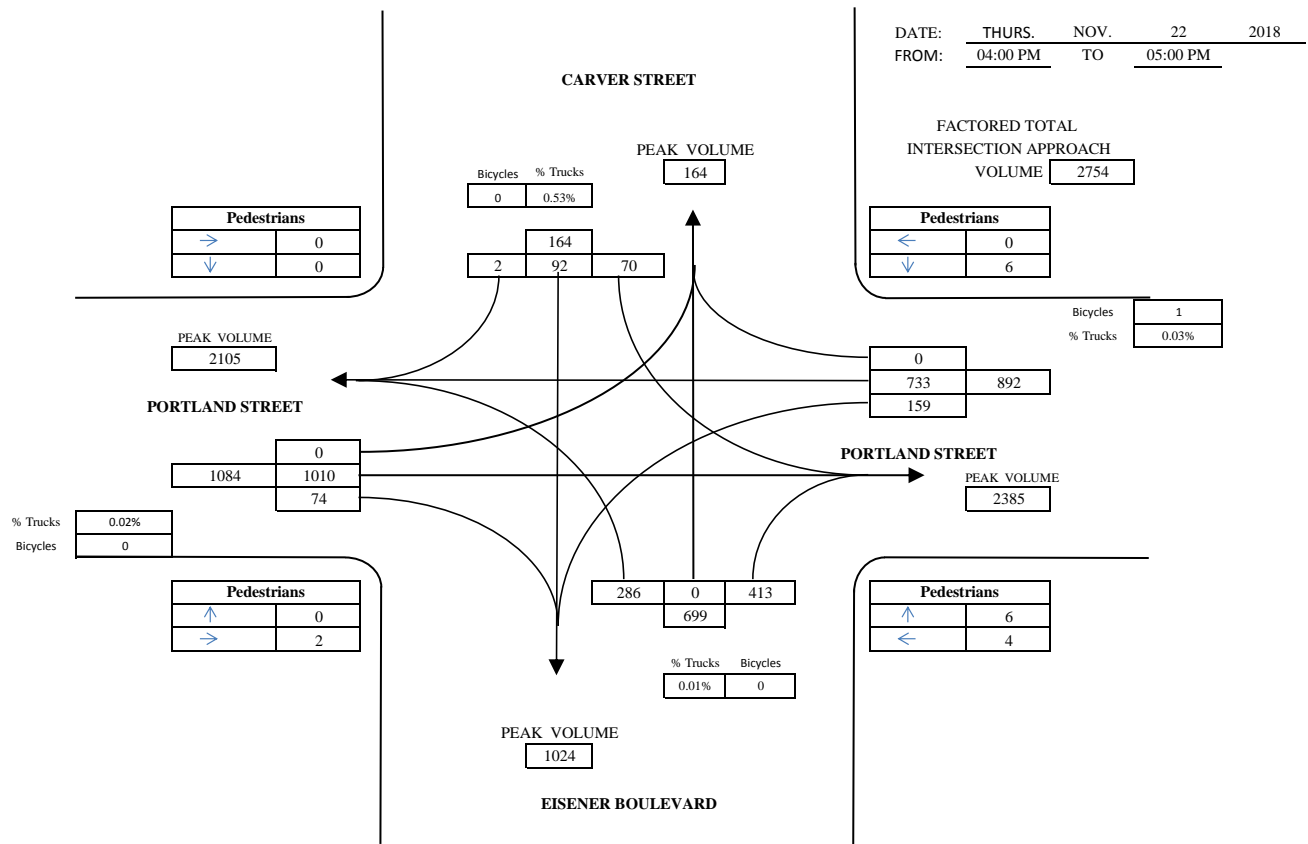
| Interval starts | PORTLAND STREET | | | PORTLAND STREET | | | CARVER STREET | | | EISENER BOULEVARD | | | Total |
|-----------------|-----------------|------|-------|-----------------|------|-------|---------------|------|-------|-------------------|------|-------|-------|
| | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | |
| 16:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

Pedestrian volumes

| Interval starts | NE | | | NW | | | SW | | | SE | | | Total |
|-----------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| | Left | Right | Total | Left | Right | Total | Left | Right | Total | Left | Right | Total | |
| 16:00 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 |
| 16:15 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 2 | 4 |
| 16:30 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 6 |
| 16:45 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 4 |
| 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 |
| 17:15 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 5 | 7 |
| 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 1 | 1 | 4 |
| 17:45 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| TOTAL | 9 | 0 | 9 | 0 | 0 | 0 | 0 | 5 | 5 | 6 | 13 | 19 | 33 |

VEHICULAR GRAPHIC SUMMARY SHEET

CARVER STREET AT EISENER BOULEVARD AND PORTLAND STREET



APPENDIX B

TRIP GENERATION

Trip Generation Summary

Alternative: Alternative 1

Phase:

Open Date: 7/1/2021

Project: Portland Street Development

Analysis Date: 7/4/2021

| ITE | Land Use | Weekday Average Daily Trips | | | | Weekday AM Peak Hour of Adjacent Street Traffic | | | | Weekday PM Peak Hour of Adjacent Street Traffic | | | |
|----------------------------------|-------------------------------------------------------|-----------------------------|-------|------|-------|-------------------------------------------------|-------|------|-------|-------------------------------------------------|-------|------|-------|
| | | * | Enter | Exit | Total | * | Enter | Exit | Total | * | Enter | Exit | Total |
| 231 | Mid-Rise Residential Development 86 Dwelling Units | | 148 | 148 | 296 | | 7 | 19 | 26 | | 22 | 9 | 31 |
| Unadjusted Volume | | | 148 | 148 | 296 | | 7 | 19 | 26 | | 22 | 9 | 31 |
| Internal Capture Trips | | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Pass-By Trips | | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Volume Added to Adjacent Streets | | | 148 | 148 | 296 | | 7 | 19 | 26 | | 22 | 9 | 31 |

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

TRIP GENERATION 10, TRAFFICWARE, LLC

P. 1

APPENDIX C

TRIP ASSIGNMENT

Development: Portland Street Development**Driveway: 1 Carver Driveway**

| Origin # | Route | To | | From | |
|----------|-------------------------------------------|----------------|-------|----------------|-------|
| | | Distribution % | Trips | Distribution % | Trips |
| 1 | Carver Driveway to Portland West | 35.00 | 2 | 30.00 | 6 |
| 3 | Carver Driveway to Baker South | 10.00 | 1 | 8.00 | 2 |
| 4 | Carver Driveway to Eisener South | 5.00 | 0 | 4.00 | 1 |
| 6 | Carver Driveway to Carver North | 5.00 | 0 | 8.00 | 2 |
| 7 | Carver Driveway to Spring North | 1.00 | 0 | 2.00 | 0 |
| 8 | Carver Driveway to Portland East | 15.00 | 1 | 15.00 | 3 |
| 9 | Carver Driveway to Portland Estates South | 2.00 | 0 | 2.00 | 0 |
| 10 | Carver Driveway to Settle North | 20.00 | 1 | 10.00 | 2 |

Development: Portland Street Development**Driveway: 2 Portland Driveway**

| Origin # | Route | To | | From | |
|----------|---------------------------------------------|----------------|-------|----------------|-------|
| | | Distribution % | Trips | Distribution % | Trips |
| 1 | Portland Driveway to Portland West | 0.00 | --- | 5.00 | 1 |
| 3 | Portland Driveway to Baker South | 0.00 | --- | 2.00 | 0 |
| 4 | Portland Driveway to Eisener South | 0.00 | --- | 1.00 | 0 |
| 6 | Portland Driveway to Carver North | 0.00 | --- | 0.00 | 0 |
| 7 | Portland Driveway to Spring North | 1.00 | 0 | 1.00 | 0 |
| 8 | Portland Driveway to Portland East | 5.00 | 0 | 1.00 | 0 |
| 9 | Portland Driveway to Portland Estates South | 1.00 | 0 | 1.00 | 0 |
| 10 | Portland Driveway to Settle North | 0.00 | --- | 10.00 | 2 |

Development: Portland Street Development**Driveway: 1 Carver Driveway**

| Origin # | Route | To | | From | |
|----------|-------------------------------------------|----------------|-------|----------------|-------|
| | | Distribution % | Trips | Distribution % | Trips |
| 1 | Carver Driveway to Portland West | 35.00 | 8 | 30.00 | 3 |
| 3 | Carver Driveway to Baker South | 10.00 | 2 | 8.00 | 1 |
| 4 | Carver Driveway to Eisener South | 5.00 | 1 | 4.00 | 0 |
| 6 | Carver Driveway to Carver North | 5.00 | 1 | 8.00 | 1 |
| 7 | Carver Driveway to Spring North | 1.00 | 0 | 2.00 | 0 |
| 8 | Carver Driveway to Portland East | 15.00 | 3 | 15.00 | 1 |
| 9 | Carver Driveway to Portland Estates South | 2.00 | 0 | 2.00 | 0 |
| 10 | Carver Driveway to Settle North | 20.00 | 4 | 10.00 | 1 |

Development: Portland Street Development**Driveway: 2 Portland Driveway**

| Origin # | Route | To | | From | |
|----------|---------------------------------------------|----------------|-------|----------------|-------|
| | | Distribution % | Trips | Distribution % | Trips |
| 1 | Portland Driveway to Portland West | 0.00 | --- | 5.00 | 0 |
| 3 | Portland Driveway to Baker South | 0.00 | --- | 2.00 | 0 |
| 4 | Portland Driveway to Eisener South | 0.00 | --- | 1.00 | 0 |
| 6 | Portland Driveway to Carver North | 0.00 | --- | 0.00 | 0 |
| 7 | Portland Driveway to Spring North | 1.00 | 0 | 1.00 | 0 |
| 8 | Portland Driveway to Portland East | 5.00 | 1 | 1.00 | 0 |
| 9 | Portland Driveway to Portland Estates South | 1.00 | 0 | 1.00 | 0 |
| 10 | Portland Driveway to Settle North | 0.00 | --- | 10.00 | 1 |

APPENDIX D

SYNCHRO REPORTS

Portland Street Development
1: Portland & Carver

2021 Existing
Timing Plan: AM Peak

| | → | ↖ | ← | ↗ | ↘ | ↓ | |
|------------------------|-------|-------|--------|-------|-------|-------|-------|
| Lane Group | EBT | WBL | WBT | NBL | NBR | SBL | SBT |
| Lane Configurations | ↑↑ | ↖ | ↑↑ | ↗↘ | ↗ | ↖ | ↓ |
| Traffic Volume (vph) | 337 | 344 | 1197 | 145 | 132 | 29 | 64 |
| Future Volume (vph) | 337 | 344 | 1197 | 145 | 132 | 29 | 64 |
| Lane Group Flow (vph) | 436 | 393 | 1367 | 165 | 151 | 33 | 81 |
| Turn Type | NA | Perm | NA | Perm | Perm | Perm | NA |
| Protected Phases | 4 | | 8 | | | | 6 |
| Permitted Phases | | 8 | | 2 | 2 | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 23.0 | 23.0 | 23.0 | 23.0 |
| Total Split (%) | 61.7% | 61.7% | 61.7% | 38.3% | 38.3% | 38.3% | 38.3% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| v/c Ratio | 0.23 | 0.77 | 0.71 | 0.21 | 0.25 | 0.06 | 0.14 |
| Control Delay | 6.9 | 22.8 | 13.6 | 16.2 | 4.5 | 15.1 | 14.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 6.9 | 22.8 | 13.6 | 16.2 | 4.5 | 15.1 | 14.7 |
| Queue Length 50th (m) | 10.7 | 45.6 | 82.0 | 6.8 | 0.0 | 2.5 | 5.7 |
| Queue Length 95th (m) | 17.0 | m61.0 | m100.7 | 12.8 | 10.3 | 7.5 | 13.9 |
| Internal Link Dist (m) | 238.6 | | 40.6 | | | | 48.2 |
| Turn Bay Length (m) | | | | 50.0 | | | |
| Base Capacity (vph) | 1920 | 509 | 1938 | 793 | 598 | 551 | 577 |
| 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 | 0.23 | 0.77 | 0.71 | 0.21 | 0.25 | 0.06 | 0.14 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

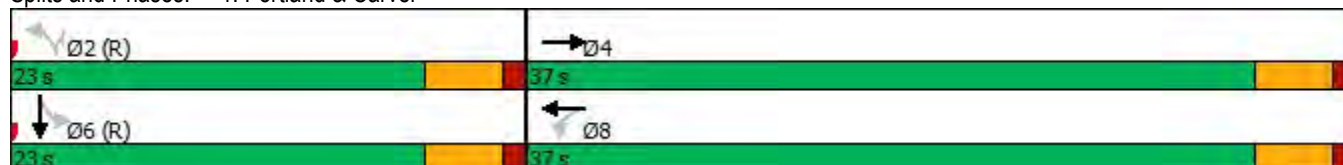
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

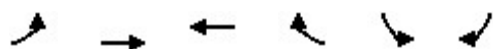
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Portland & Carver



Portland Street Development
2: Portland & Settle

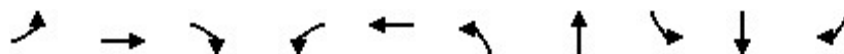
2021 Existing
Timing Plan: AM Peak



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 658 | 1190 | 74 | 0 | 21 |
| Future Volume (Veh/h) | 0 | 658 | 1190 | 74 | 0 | 21 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 752 | 1360 | 85 | 0 | 24 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 277 | 263 | | | |
| pX, platoon unblocked | 0.71 | | | | 0.77 | 0.71 |
| vC, conflicting volume | 1445 | | | | 1778 | 722 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 809 | | | | 739 | 0 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 97 |
| cM capacity (veh/h) | 577 | | | | 270 | 769 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | SB 1 | |
| Volume Total | 376 | 376 | 907 | 538 | 24 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 0 | 0 | 85 | 24 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 769 | |
| Volume to Capacity | 0.22 | 0.22 | 0.53 | 0.32 | 0.03 | |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 9.8 | |
| Lane LOS | | | | | A | |
| Approach Delay (s) | 0.0 | | 0.0 | | 9.8 | |
| Approach LOS | | | | | A | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 45.2% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
3: Baker/Woodlawn & Portland

2021 Existing
Timing Plan: AM Peak



| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
|------------------------|-------|-------|-------|-------|--------|--------|-------|-------|--------|--------|
| Lane Configurations | | | | | | | | | | |
| Traffic Volume (vph) | 198 | 571 | 280 | 4 | 1097 | 448 | 81 | 79 | 175 | 590 |
| Future Volume (vph) | 198 | 571 | 280 | 4 | 1097 | 448 | 81 | 79 | 175 | 590 |
| Lane Group Flow (vph) | 226 | 652 | 320 | 4 | 1263 | 512 | 92 | 90 | 449 | 425 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | pm+pt | NA | pm+pt | NA | Prot |
| Protected Phases | 7 | 4 | | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Permitted Phases | | | 4 | 8 | | 2 | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 22.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 22.5 |
| Total Split (s) | 14.0 | 45.0 | 45.0 | 14.0 | 45.0 | 29.0 | 33.0 | 8.0 | 12.0 | 12.0 |
| Total Split (%) | 14.0% | 45.0% | 45.0% | 14.0% | 45.0% | 29.0% | 33.0% | 8.0% | 12.0% | 12.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | None | None | None | Max | None | Max | Max |
| v/c Ratio | 0.77 | 0.39 | 0.35 | 0.01 | 0.97 | 1.10 | 0.13 | 0.33 | 1.45 | 1.06 |
| Control Delay | 67.0 | 20.2 | 3.4 | 14.8 | 53.8 | 102.7 | 24.8 | 29.5 | 252.8 | 88.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 67.0 | 20.2 | 3.4 | 14.8 | 53.8 | 102.7 | 24.8 | 29.5 | 252.8 | 88.6 |
| Queue Length 50th (m) | 25.0 | 44.3 | 0.0 | 0.4 | 138.9 | ~111.5 | 13.4 | 11.5 | ~131.1 | ~69.7 |
| Queue Length 95th (m) | #41.9 | 69.7 | 16.5 | 2.3 | #185.5 | #175.6 | 24.8 | 21.5 | #195.7 | #133.3 |
| Internal Link Dist (m) | | 150.3 | | | 253.1 | | 110.2 | | 152.8 | |
| Turn Bay Length (m) | 125.0 | | | 30.0 | | | | 30.0 | | |
| Base Capacity (vph) | 300 | 1684 | 922 | 417 | 1319 | 465 | 697 | 272 | 309 | 400 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.75 | 0.39 | 0.35 | 0.01 | 0.96 | 1.10 | 0.13 | 0.33 | 1.45 | 1.06 |

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 109.8

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

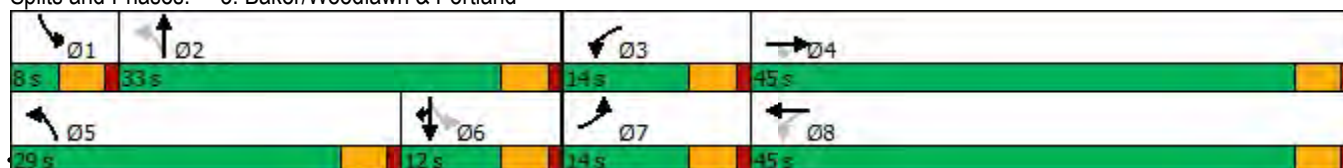
~ Volume exceeds capacity, queue is theoretically infinite.

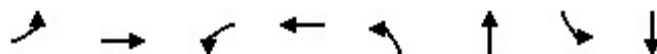
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Baker/Woodlawn & Portland





| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 53 | 463 | 32 | 1300 | 46 | 15 | 13 | 7 |
| Future Volume (vph) | 53 | 463 | 32 | 1300 | 46 | 15 | 13 | 7 |
| Lane Group Flow (vph) | 61 | 553 | 37 | 1503 | 52 | 57 | 15 | 103 |
| Turn Type | Perm | NA | Perm | NA | Perm | NA | Perm | NA |
| Protected Phases | | 4 | | 8 | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 2 | | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| Total Split (%) | 58.3% | 58.3% | 58.3% | 58.3% | 41.7% | 41.7% | 41.7% | 41.7% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | |
| v/c Ratio | 0.49 | 0.31 | 0.09 | 0.83 | 0.12 | 0.09 | 0.03 | 0.18 |
| Control Delay | 30.1 | 11.3 | 8.4 | 17.7 | 14.5 | 7.3 | 13.5 | 12.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 30.1 | 11.3 | 8.4 | 17.7 | 14.5 | 7.3 | 13.5 | 12.6 |
| Queue Length 50th (m) | 5.5 | 22.8 | 1.9 | 67.6 | 3.9 | 1.2 | 1.1 | 6.2 |
| Queue Length 95th (m) | #20.6 | 31.6 | 5.9 | 94.4 | 10.2 | 7.4 | 4.3 | 15.2 |
| Internal Link Dist (m) | | 342.2 | | 163.2 | | 135.7 | | 172.7 |
| Turn Bay Length (m) | 200.0 | | 80.0 | | | | 30.0 | |
| Base Capacity (vph) | 125 | 1811 | 409 | 1816 | 444 | 602 | 463 | 568 |
| 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 | 0.49 | 0.31 | 0.09 | 0.83 | 0.12 | 0.09 | 0.03 | 0.18 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

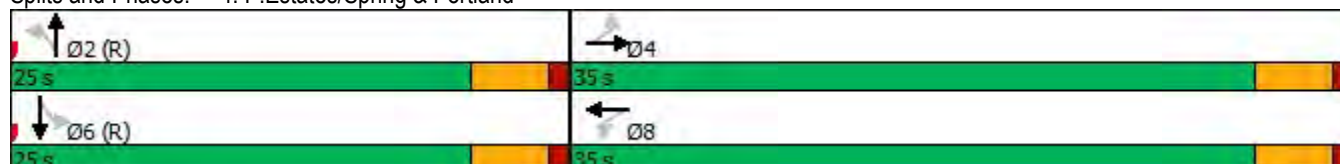
Natural Cycle: 55

Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.









Queue shown is maximum after two cycles.

Splits and Phases: 4: P.Estates/Spring & Portland



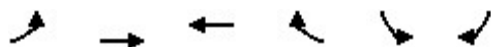
Portland Street Development
5: Carver & W.Driveway

2021 Existing
Timing Plan: AM Peak

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | | | | |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 0 | 0 | 100 |
| Future Volume (Veh/h) | 0 | 0 | 0 | 0 | 0 | 100 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 0 | 0 | 114 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | 72 | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 114 | 0 | | | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 114 | 0 | | | 0 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 100 | 100 | | | 100 | |
| cM capacity (veh/h) | 882 | 1085 | | | 1623 | |
| Direction, Lane # | WB 1 | SB 1 | | | | |
| Volume Total | 0 | 114 | | | | |
| Volume Left | 0 | 0 | | | | |
| Volume Right | 0 | 0 | | | | |
| cSH | 1700 | 1623 | | | | |
| Volume to Capacity | 0.02 | 0.00 | | | | |
| Queue Length 95th (m) | 0.0 | 0.0 | | | | |
| Control Delay (s) | 0.0 | 0.0 | | | | |
| Lane LOS | A | | | | | |
| Approach Delay (s) | 0.0 | 0.0 | | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 8.6% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |




Portland Street Development
8: Portland & S_Driveway










2021 Existing
Timing Plan: AM Peak



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 498 | 1541 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 498 | 1541 | 0 | 0 | 0 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 568 | 1761 | 0 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 65 | | | | |
| pX, platoon unblocked | | | | | 0.95 | |
| vC, conflicting volume | 1761 | | | | 2045 | 587 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1761 | | | | 1998 | 587 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 351 | | | | 50 | 453 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | SB 1 |
| Volume Total | 284 | 284 | 704 | 704 | 352 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.17 | 0.17 | 0.41 | 0.41 | 0.21 | 0.01 |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | | | | A |
| Approach Delay (s) | 0.0 | | 0.0 | | | 0.0 |
| Approach LOS | | | | | | A |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 33.1% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |



| Movement | EBL | EBR | NBL | SER | SER2 |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Lane Configurations |  | |  |  | |
| Traffic Volume (veh/h) | 10 | 50 | 0 | 50 | 10 |
| Future Volume (Veh/h) | 10 | 50 | 0 | 50 | 10 |
| Sign Control | Stop | | Free | Free | |
| Grade | 0% | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 58 | 0 | 58 | 12 |
| Pedestrians | | | | | |
| Lane Width (m) | | | | | |
| Walking Speed (m/s) | | | | | |
| Percent Blockage | | | | | |
| Right turn flare (veh) | | | | | |
| Median type | | | None | None | |
| Median storage veh | | | | | |
| Upstream signal (m) | 109 | | | | |
| pX, platoon unblocked | | | | | |
| vC, conflicting volume | 64 | 64 | | | |
| vC1, stage 1 conf vol | | | | | |
| vC2, stage 2 conf vol | | | | | |
| vCu, unblocked vol | 64 | 64 | | | |
| tC, single (s) | 6.4 | 6.2 | | | |
| tC, 2 stage (s) | | | | | |
| tF (s) | 3.5 | 3.3 | | | |
| p0 queue free % | 99 | 94 | | | |
| cM capacity (veh/h) | 942 | 1000 | | | |
| Direction, Lane # | EB 1 | NB 1 | SE 1 | | |
| Volume Total | 70 | 0 | 70 | | |
| Volume Left | 12 | 0 | 0 | | |
| Volume Right | 58 | 0 | 12 | | |
| cSH | 990 | 1700 | 1700 | | |
| Volume to Capacity | 0.07 | 0.00 | 0.04 | | |
| Queue Length 95th (m) | 1.7 | 0.0 | 0.0 | | |
| Control Delay (s) | 8.9 | 0.0 | 0.0 | | |
| Lane LOS | A | | | | |
| Approach Delay (s) | 8.9 | 0.0 | 0.0 | | |
| Approach LOS | A | | | | |
| Intersection Summary | | | | | |
| Average Delay | | | 4.5 | | |
| Intersection Capacity Utilization | | | 7.0% | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

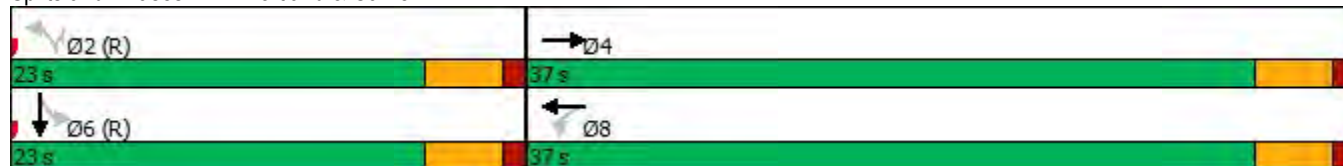
| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  | | |  |
| Traffic Volume (veh/h) | 5 | 5 | 69 | 5 | 55 | 16 |
| Future Volume (Veh/h) | 5 | 5 | 69 | 5 | 55 | 16 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 5 | 5 | 79 | 5 | 63 | 18 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 226 | 82 | | | 84 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 226 | 82 | | | 84 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 99 | 99 | | | 96 | |
| cM capacity (veh/h) | 731 | 978 | | | 1513 | |
| Direction, Lane # | WB 1 | NB 1 | SB 1 | | | |
| Volume Total | 10 | 84 | 81 | | | |
| Volume Left | 5 | 0 | 63 | | | |
| Volume Right | 5 | 5 | 0 | | | |
| cSH | 837 | 1700 | 1513 | | | |
| Volume to Capacity | 0.01 | 0.05 | 0.04 | | | |
| Queue Length 95th (m) | 0.3 | 0.0 | 1.0 | | | |
| Control Delay (s) | 9.4 | 0.0 | 5.9 | | | |
| Lane LOS | A | | A | | | |
| Approach Delay (s) | 9.4 | 0.0 | 5.9 | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 3.3 | | | |
| Intersection Capacity Utilization | | | 20.6% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

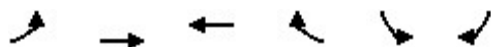
Portland Street Development
1: Portland & Carver

2026 Background Only
Timing Plan: AM Peak

| | → | ↖ | ← | ↙ | ↗ | ↘ | ↓ |
|----------------------------------------------------------------------|-------|-------|--------|-------|-------|-------|-------|
| Lane Group | EBT | WBL | WBT | NBL | NBR | SBL | SBT |
| Lane Configurations | ↑↑ | ↖ | ↑↑ | ↖ | ↗ | ↖ | ↑ |
| Traffic Volume (vph) | 337 | 344 | 1197 | 145 | 132 | 29 | 64 |
| Future Volume (vph) | 354 | 362 | 1258 | 152 | 139 | 30 | 67 |
| Lane Group Flow (vph) | 436 | 393 | 1367 | 165 | 151 | 33 | 81 |
| Turn Type | NA | Perm | NA | Perm | Perm | Perm | NA |
| Protected Phases | 4 | | 8 | | | | 6 |
| Permitted Phases | | 8 | | 2 | 2 | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 23.0 | 23.0 | 23.0 | 23.0 |
| Total Split (%) | 61.7% | 61.7% | 61.7% | 38.3% | 38.3% | 38.3% | 38.3% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| v/c Ratio | 0.23 | 0.77 | 0.71 | 0.21 | 0.25 | 0.06 | 0.14 |
| Control Delay | 6.9 | 22.8 | 13.6 | 16.2 | 4.5 | 15.1 | 14.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 6.9 | 22.8 | 13.6 | 16.2 | 4.5 | 15.1 | 14.7 |
| Queue Length 50th (m) | 10.7 | 45.6 | 82.0 | 6.8 | 0.0 | 2.5 | 5.7 |
| Queue Length 95th (m) | 17.0 | m61.0 | m100.7 | 12.8 | 10.3 | 7.5 | 13.9 |
| Internal Link Dist (m) | 238.6 | | 40.6 | | | | 48.2 |
| Turn Bay Length (m) | | | | 50.0 | | | |
| Base Capacity (vph) | 1920 | 509 | 1938 | 793 | 598 | 551 | 577 |
| 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 | 0.23 | 0.77 | 0.71 | 0.21 | 0.25 | 0.06 | 0.14 |
| Intersection Summary | | | | | | | |
| Cycle Length: 60 | | | | | | | |
| Actuated Cycle Length: 60 | | | | | | | |
| Offset: 0 (0%), Referenced to phase 2:NBL and 6:SBTL, Start of Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | |
| Control Type: Pretimed | | | | | | | |
| m Volume for 95th percentile queue is metered by upstream signal. | | | | | | | |

Splits and Phases: 1: Portland & Carver




























| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 658 | 1190 | 74 | 0 | 21 |
| Future Volume (Veh/h) | 0 | 692 | 1251 | 78 | 0 | 22 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 752 | 1360 | 85 | 0 | 24 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 277 | 263 | | | |
| pX, platoon unblocked | 0.71 | | | | 0.77 | 0.71 |
| vC, conflicting volume | 1445 | | | | 1778 | 722 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 809 | | | | 739 | 0 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 97 |
| cM capacity (veh/h) | 577 | | | | 270 | 769 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | SB 1 | |
| Volume Total | 376 | 376 | 907 | 538 | 24 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 0 | 0 | 85 | 24 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 769 | |
| Volume to Capacity | 0.22 | 0.22 | 0.53 | 0.32 | 0.03 | |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 9.8 | |
| Lane LOS | | | | | A | |
| Approach Delay (s) | 0.0 | | 0.0 | | 9.8 | |
| Approach LOS | | | | | A | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 45.2% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
3: Baker/Woodlawn & Portland

2026 Background Only
Timing Plan: AM Peak

| |  |  |  |  |  |  |  |  |  |  |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
| Lane Configurations |   |   |  |  |   |  |  |  |  |  |
| Traffic Volume (vph) | 198 | 571 | 280 | 4 | 1097 | 448 | 81 | 79 | 175 | 590 |
| Future Volume (vph) | 208 | 600 | 294 | 4 | 1153 | 471 | 85 | 83 | 184 | 620 |
| Lane Group Flow (vph) | 226 | 652 | 320 | 4 | 1263 | 512 | 92 | 90 | 449 | 425 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | pm+pt | NA | pm+pt | NA | Prot |
| Protected Phases | 7 | 4 | | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Permitted Phases | | | 4 | 8 | | 2 | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 22.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 22.5 |
| Total Split (s) | 14.0 | 45.0 | 45.0 | 14.0 | 45.0 | 29.0 | 33.0 | 8.0 | 12.0 | 12.0 |
| Total Split (%) | 14.0% | 45.0% | 45.0% | 14.0% | 45.0% | 29.0% | 33.0% | 8.0% | 12.0% | 12.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | None | None | None | Max | None | Max | Max |
| v/c Ratio | 0.77 | 0.39 | 0.35 | 0.01 | 0.97 | 1.10 | 0.13 | 0.33 | 1.45 | 1.06 |
| Control Delay | 67.0 | 20.2 | 3.4 | 14.8 | 53.8 | 102.7 | 24.8 | 29.5 | 252.8 | 88.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 67.0 | 20.2 | 3.4 | 14.8 | 53.8 | 102.7 | 24.8 | 29.5 | 252.8 | 88.6 |
| Queue Length 50th (m) | 25.0 | 44.3 | 0.0 | 0.4 | 138.9 | ~111.5 | 13.4 | 11.5 | ~131.1 | ~69.7 |
| Queue Length 95th (m) | #41.9 | 69.7 | 16.5 | 2.3 | #185.5 | #175.6 | 24.8 | 21.5 | #195.7 | #133.3 |
| Internal Link Dist (m) | | 150.3 | | | 253.1 | | 110.2 | | 152.8 | |
| Turn Bay Length (m) | 125.0 | | | 30.0 | | | | 30.0 | | |
| Base Capacity (vph) | 300 | 1684 | 922 | 417 | 1319 | 465 | 697 | 272 | 309 | 400 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.75 | 0.39 | 0.35 | 0.01 | 0.96 | 1.10 | 0.13 | 0.33 | 1.45 | 1.06 |

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 109.8

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

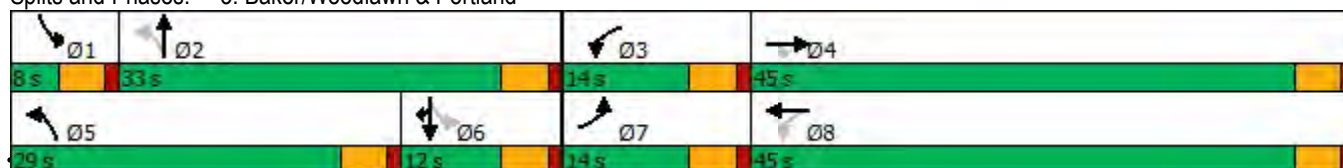
~ Volume exceeds capacity, queue is theoretically infinite.

















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: Baker/Woodlawn & Portland



| |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
| Lane Configurations |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 53 | 463 | 32 | 1300 | 46 | 15 | 13 | 7 |
| Future Volume (vph) | 56 | 487 | 34 | 1366 | 48 | 16 | 14 | 7 |
| Lane Group Flow (vph) | 61 | 553 | 37 | 1503 | 52 | 57 | 15 | 103 |
| Turn Type | Perm | NA | Perm | NA | Perm | NA | Perm | NA |
| Protected Phases | | 4 | | 8 | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 2 | | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| Total Split (%) | 58.3% | 58.3% | 58.3% | 58.3% | 41.7% | 41.7% | 41.7% | 41.7% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | |
| v/c Ratio | 0.49 | 0.31 | 0.09 | 0.83 | 0.12 | 0.09 | 0.03 | 0.18 |
| Control Delay | 30.1 | 11.3 | 8.4 | 17.7 | 14.5 | 7.3 | 13.5 | 12.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 30.1 | 11.3 | 8.4 | 17.7 | 14.5 | 7.3 | 13.5 | 12.6 |
| Queue Length 50th (m) | 5.5 | 22.8 | 1.9 | 67.6 | 3.9 | 1.2 | 1.1 | 6.2 |
| Queue Length 95th (m) | #20.6 | 31.6 | 5.9 | 94.4 | 10.2 | 7.4 | 4.3 | 15.2 |
| Internal Link Dist (m) | | 342.2 | | 163.2 | | 135.7 | | 172.7 |
| Turn Bay Length (m) | 200.0 | | 80.0 | | | | 30.0 | |
| Base Capacity (vph) | 125 | 1811 | 409 | 1816 | 444 | 602 | 463 | 568 |
| 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 | 0.49 | 0.31 | 0.09 | 0.83 | 0.12 | 0.09 | 0.03 | 0.18 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

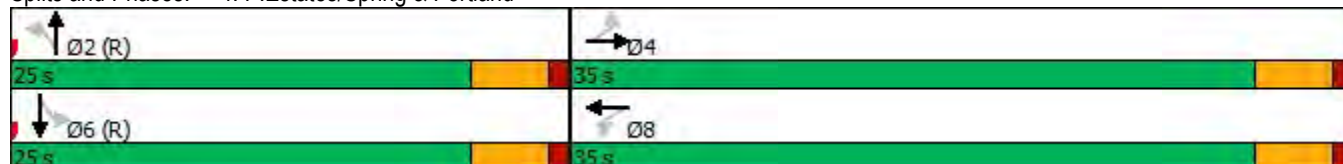
Natural Cycle: 55









Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

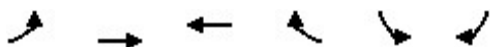
Splits and Phases: 4: P.Estates/Spring & Portland



| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | | | | |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 0 | 0 | 100 |
| Future Volume (Veh/h) | 0 | 0 | 0 | 0 | 0 | 105 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 0 | 0 | 114 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | 72 | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 114 | 0 | | | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 114 | 0 | | | 0 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 100 | 100 | | | 100 | |
| cM capacity (veh/h) | 882 | 1085 | | | 1623 | |
| Direction, Lane # | WB 1 | SB 1 | | | | |
| Volume Total | 0 | 114 | | | | |
| Volume Left | 0 | 0 | | | | |
| Volume Right | 0 | 0 | | | | |
| cSH | 1700 | 1623 | | | | |
| Volume to Capacity | 0.02 | 0.00 | | | | |
| Queue Length 95th (m) | 0.0 | 0.0 | | | | |
| Control Delay (s) | 0.0 | 0.0 | | | | |
| Lane LOS | A | | | | | |
| Approach Delay (s) | 0.0 | 0.0 | | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 8.6% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
8: Portland & S_Driveway










2026 Background Only
Timing Plan: AM Peak



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 498 | 1541 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 523 | 1620 | 0 | 0 | 0 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 568 | 1761 | 0 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 65 | | | | |
| pX, platoon unblocked | | | | | 0.95 | |
| vC, conflicting volume | 1761 | | | | 2045 | 587 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1761 | | | | 1998 | 587 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 351 | | | | 50 | 453 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | SB 1 |
| Volume Total | 284 | 284 | 704 | 704 | 352 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.17 | 0.17 | 0.41 | 0.41 | 0.21 | 0.01 |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | | | | A |
| Approach Delay (s) | 0.0 | | 0.0 | | | 0.0 |
| Approach LOS | | | | | | A |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 33.1% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |



| Movement | EBL | EBR | NBL | SER | SER2 |
|-----------------------------------|------|------|------|----------------------|------|
| Lane Configurations | W | | W | W | |
| Traffic Volume (veh/h) | 10 | 50 | 0 | 50 | 10 |
| Future Volume (Veh/h) | 11 | 53 | 0 | 53 | 11 |
| Sign Control | Stop | | Free | Free | |
| Grade | 0% | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 58 | 0 | 58 | 12 |
| Pedestrians | | | | | |
| Lane Width (m) | | | | | |
| Walking Speed (m/s) | | | | | |
| Percent Blockage | | | | | |
| Right turn flare (veh) | | | | | |
| Median type | | | None | None | |
| Median storage veh | | | | | |
| Upstream signal (m) | | | 109 | | |
| pX, platoon unblocked | | | | | |
| vC, conflicting volume | 64 | 64 | | | |
| vC1, stage 1 conf vol | | | | | |
| vC2, stage 2 conf vol | | | | | |
| vCu, unblocked vol | 64 | 64 | | | |
| tC, single (s) | 6.4 | 6.2 | | | |
| tC, 2 stage (s) | | | | | |
| tF (s) | 3.5 | 3.3 | | | |
| p0 queue free % | 99 | 94 | | | |
| cM capacity (veh/h) | 942 | 1000 | | | |
| Direction, Lane # | EB 1 | NB 1 | SE 1 | | |
| Volume Total | 70 | 0 | 70 | | |
| Volume Left | 12 | 0 | 0 | | |
| Volume Right | 58 | 0 | 12 | | |
| cSH | 990 | 1700 | 1700 | | |
| Volume to Capacity | 0.07 | 0.00 | 0.04 | | |
| Queue Length 95th (m) | 1.7 | 0.0 | 0.0 | | |
| Control Delay (s) | 8.9 | 0.0 | 0.0 | | |
| Lane LOS | A | | | | |
| Approach Delay (s) | 8.9 | 0.0 | 0.0 | | |
| Approach LOS | A | | | | |
| Intersection Summary | | | | | |
| Average Delay | | | 4.5 | | |
| Intersection Capacity Utilization | | 7.0% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  | | |  |
| Traffic Volume (veh/h) | 5 | 5 | 69 | 5 | 55 | 16 |
| Future Volume (Veh/h) | 5 | 5 | 73 | 5 | 58 | 17 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 5 | 5 | 79 | 5 | 63 | 18 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 226 | 82 | | | 84 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 226 | 82 | | | 84 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 99 | 99 | | | 96 | |
| cM capacity (veh/h) | 731 | 978 | | | 1513 | |
| Direction, Lane # | WB 1 | NB 1 | SB 1 | | | |
| Volume Total | 10 | 84 | 81 | | | |
| Volume Left | 5 | 0 | 63 | | | |
| Volume Right | 5 | 5 | 0 | | | |
| cSH | 837 | 1700 | 1513 | | | |
| Volume to Capacity | 0.01 | 0.05 | 0.04 | | | |
| Queue Length 95th (m) | 0.3 | 0.0 | 1.0 | | | |
| Control Delay (s) | 9.4 | 0.0 | 5.9 | | | |
| Lane LOS | A | | A | | | |
| Approach Delay (s) | 9.4 | 0.0 | 5.9 | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 3.3 | | | |
| Intersection Capacity Utilization | | 20.6% | | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

| | → | ↖ | ← | ↙ | ↗ | ↘ | ↓ |
|------------------------|-------|-------|--------|-------|-------|-------|-------|
| Lane Group | EBT | WBL | WBT | NBL | NBR | SBL | SBT |
| Lane Configurations | ↑↑ | ↖ | ↑↑ | ↖ | ↗ | ↘ | ↓ |
| Traffic Volume (vph) | 337 | 344 | 1197 | 145 | 132 | 29 | 64 |
| Future Volume (vph) | 354 | 362 | 1262 | 152 | 139 | 34 | 68 |
| Lane Group Flow (vph) | 436 | 393 | 1372 | 165 | 151 | 37 | 91 |
| Turn Type | NA | Perm | NA | Perm | Perm | Perm | NA |
| Protected Phases | 4 | | 8 | | | | 6 |
| Permitted Phases | | 8 | | 2 | 2 | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 23.0 | 23.0 | 23.0 | 23.0 |
| Total Split (%) | 61.7% | 61.7% | 61.7% | 38.3% | 38.3% | 38.3% | 38.3% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| v/c Ratio | 0.23 | 0.77 | 0.71 | 0.21 | 0.25 | 0.07 | 0.16 |
| Control Delay | 6.9 | 22.8 | 13.7 | 16.2 | 4.5 | 15.1 | 13.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 6.9 | 22.8 | 13.7 | 16.2 | 4.5 | 15.1 | 13.7 |
| Queue Length 50th (m) | 10.7 | 45.5 | 82.3 | 6.8 | 0.0 | 2.8 | 5.8 |
| Queue Length 95th (m) | 17.0 | m60.9 | m101.1 | 12.9 | 10.3 | 8.3 | 14.5 |
| Internal Link Dist (m) | 238.6 | | 40.6 | | | | 48.2 |
| Turn Bay Length (m) | | | | 50.0 | | | |
| Base Capacity (vph) | 1920 | 509 | 1938 | 786 | 598 | 551 | 576 |
| 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 | 0.23 | 0.77 | 0.71 | 0.21 | 0.25 | 0.07 | 0.16 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

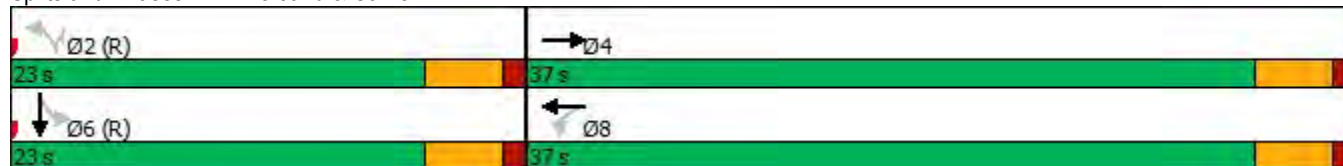
Offset: 0 (0%), Referenced to phase 2:NBL and 6:SBTL, Start of Green

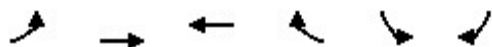
Natural Cycle: 60

Control Type: Pretimed

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

Splits and Phases: 1: Portland & Carver

























| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 658 | 1190 | 74 | 0 | 21 |
| Future Volume (Veh/h) | 0 | 692 | 1260 | 81 | 0 | 22 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 752 | 1370 | 88 | 0 | 24 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 277 | 263 | | | |
| pX, platoon unblocked | 0.71 | | | | 0.76 | 0.71 |
| vC, conflicting volume | 1458 | | | | 1790 | 729 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 820 | | | | 747 | 0 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 97 |
| cM capacity (veh/h) | 569 | | | | 266 | 767 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | SB 1 | |
| Volume Total | 376 | 376 | 913 | 545 | 24 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 0 | 0 | 88 | 24 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 767 | |
| Volume to Capacity | 0.22 | 0.22 | 0.54 | 0.32 | 0.03 | |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 9.8 | |
| Lane LOS | | | | | A | |
| Approach Delay (s) | 0.0 | | 0.0 | | 9.8 | |
| Approach LOS | | | | | A | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 45.2% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
3: Baker/Woodlawn & Portland

2026 Background and Development

Timing Plan: AM Peak

| |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 198 | 571 | 280 | 4 | 1097 | 448 | 81 | 79 | 175 | 590 |
| Future Volume (vph) | 210 | 600 | 294 | 6 | 1160 | 471 | 86 | 83 | 184 | 620 |
| Lane Group Flow (vph) | 228 | 652 | 320 | 7 | 1271 | 512 | 93 | 90 | 449 | 425 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | pm+pt | NA | pm+pt | NA | Prot |
| Protected Phases | 7 | 4 | | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Permitted Phases | | | 4 | 8 | | 2 | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 22.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 22.5 |
| Total Split (s) | 14.0 | 45.0 | 45.0 | 14.0 | 45.0 | 29.0 | 33.0 | 8.0 | 12.0 | 12.0 |
| Total Split (%) | 14.0% | 45.0% | 45.0% | 14.0% | 45.0% | 29.0% | 33.0% | 8.0% | 12.0% | 12.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | None | None | None | Max | None | Max | Max |
| v/c Ratio | 0.77 | 0.39 | 0.35 | 0.02 | 0.98 | 1.10 | 0.13 | 0.33 | 1.46 | 1.06 |
| Control Delay | 67.5 | 20.3 | 3.4 | 14.7 | 54.9 | 103.0 | 24.8 | 29.5 | 253.6 | 88.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 67.5 | 20.3 | 3.4 | 14.7 | 54.9 | 103.0 | 24.8 | 29.5 | 253.6 | 88.7 |
| Queue Length 50th (m) | 25.2 | 44.3 | 0.0 | 0.7 | 140.1 | ~111.5 | 13.5 | 11.5 | ~131.1 | ~69.7 |
| Queue Length 95th (m) | #42.6 | 70.0 | 16.5 | 3.1 | #187.4 | #175.6 | 25.2 | 21.5 | #195.7 | #133.3 |
| Internal Link Dist (m) | | 150.3 | | | 253.1 | | 110.2 | | 152.8 | |
| Turn Bay Length (m) | 125.0 | | | 30.0 | | | | 30.0 | | |
| Base Capacity (vph) | 300 | 1684 | 922 | 417 | 1318 | 465 | 696 | 272 | 308 | 400 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.76 | 0.39 | 0.35 | 0.02 | 0.96 | 1.10 | 0.13 | 0.33 | 1.46 | 1.06 |

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 109.9

Natural Cycle: 140

Control Type: Actuated-Uncoordinated

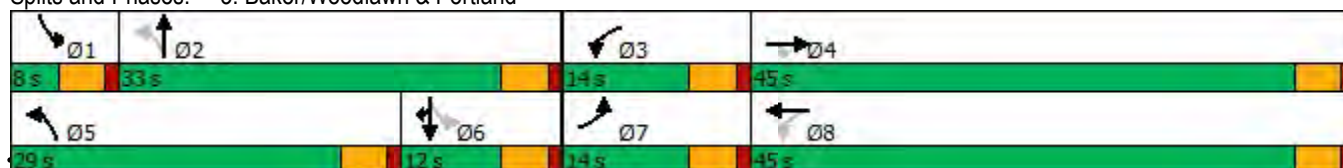
~ Volume exceeds capacity, queue is theoretically infinite.

















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: Baker/Woodlawn & Portland



| |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
| Lane Configurations |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 53 | 463 | 32 | 1300 | 46 | 15 | 13 | 7 |
| Future Volume (vph) | 56 | 490 | 34 | 1367 | 48 | 16 | 14 | 7 |
| Lane Group Flow (vph) | 61 | 557 | 37 | 1504 | 52 | 57 | 15 | 103 |
| Turn Type | Perm | NA | Perm | NA | Perm | NA | Perm | NA |
| Protected Phases | | 4 | | 8 | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 2 | | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| Total Split (%) | 58.3% | 58.3% | 58.3% | 58.3% | 41.7% | 41.7% | 41.7% | 41.7% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | |
| v/c Ratio | 0.49 | 0.31 | 0.09 | 0.83 | 0.12 | 0.09 | 0.03 | 0.18 |
| Control Delay | 30.1 | 11.3 | 8.4 | 17.8 | 14.5 | 7.3 | 13.5 | 12.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 30.1 | 11.3 | 8.4 | 17.8 | 14.5 | 7.3 | 13.5 | 12.6 |
| Queue Length 50th (m) | 5.3 | 22.8 | 1.9 | 67.8 | 3.9 | 1.2 | 1.1 | 6.2 |
| Queue Length 95th (m) | #20.5 | 31.4 | 5.9 | 94.5 | 10.2 | 7.4 | 4.3 | 15.2 |
| Internal Link Dist (m) | | 342.2 | | 163.2 | | 135.7 | | 172.7 |
| Turn Bay Length (m) | 200.0 | | 80.0 | | | | 30.0 | |
| Base Capacity (vph) | 125 | 1813 | 406 | 1816 | 444 | 602 | 463 | 568 |
| 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 | 0.49 | 0.31 | 0.09 | 0.83 | 0.12 | 0.09 | 0.03 | 0.18 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

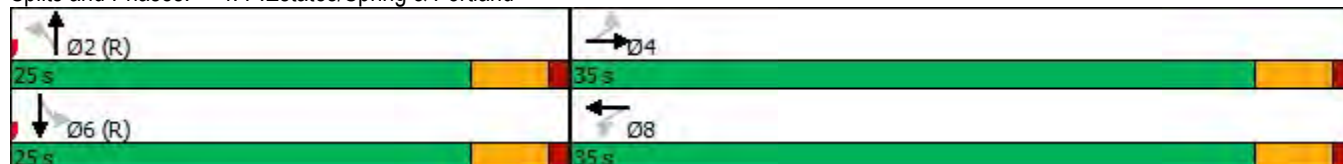
Natural Cycle: 55









Control Type: Pretimed

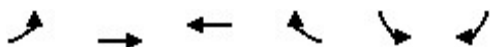
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: P.Estates/Spring & Portland















| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | | | | |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 0 | 0 | 100 |
| Future Volume (Veh/h) | 13 | 4 | 0 | 0 | 5 | 105 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 14 | 4 | 0 | 0 | 5 | 114 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | 72 | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 124 | 0 | | | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 124 | 0 | | | 0 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 98 | 100 | | | 100 | |
| cM capacity (veh/h) | 868 | 1085 | | | 1623 | |
| Direction, Lane # | WB 1 | SB 1 | | | | |
| Volume Total | 18 | 119 | | | | |
| Volume Left | 14 | 5 | | | | |
| Volume Right | 4 | 0 | | | | |
| cSH | 909 | 1623 | | | | |
| Volume to Capacity | 0.02 | 0.00 | | | | |
| Queue Length 95th (m) | 0.5 | 0.1 | | | | |
| Control Delay (s) | 9.0 | 0.3 | | | | |
| Lane LOS | A | A | | | | |
| Approach Delay (s) | 9.0 | 0.3 | | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.5 | | | |
| Intersection Capacity Utilization | | | 8.6% | ICU Level of Service | A | |
| Analysis Period (min) | | | 15 | | | |



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 498 | 1541 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 527 | 1621 | 0 | 0 | 3 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 573 | 1762 | 0 | 0 | 3 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 65 | | | | |
| pX, platoon unblocked | | | | | 0.95 | |
| vC, conflicting volume | 1762 | | | | 2048 | 587 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1762 | | | | 2002 | 587 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 99 |
| cM capacity (veh/h) | 351 | | | | 50 | 453 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | SB 1 |
| Volume Total | 286 | 286 | 705 | 705 | 352 | 3 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 3 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 453 |
| Volume to Capacity | 0.17 | 0.17 | 0.41 | 0.41 | 0.21 | 0.01 |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0 |
| Lane LOS | | | | | | B |
| Approach Delay (s) | 0.0 | | 0.0 | | | 13.0 |
| Approach LOS | | | | | | B |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 33.1% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |



| Movement | EBL | EBR | NBL | SER | SER2 |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Lane Configurations |  | |  |  | |
| Traffic Volume (veh/h) | 10 | 50 | 0 | 50 | 10 |
| Future Volume (Veh/h) | 11 | 58 | 2 | 53 | 11 |
| Sign Control | Stop | | Free | Free | |
| Grade | 0% | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 63 | 2 | 58 | 12 |
| Pedestrians | | | | | |
| Lane Width (m) | | | | | |
| Walking Speed (m/s) | | | | | |
| Percent Blockage | | | | | |
| Right turn flare (veh) | | | | | |
| Median type | | | None | None | |
| Median storage veh | | | | | |
| Upstream signal (m) | 109 | | | | |
| pX, platoon unblocked | | | | | |
| vC, conflicting volume | 70 | 64 | | | |
| vC1, stage 1 conf vol | | | | | |
| vC2, stage 2 conf vol | | | | | |
| vCu, unblocked vol | 70 | 64 | | | |
| tC, single (s) | 6.4 | 6.2 | | | |
| tC, 2 stage (s) | | | | | |
| tF (s) | 3.5 | 3.3 | | | |
| p0 queue free % | 99 | 94 | | | |
| cM capacity (veh/h) | 933 | 1000 | | | |
| Direction, Lane # | EB 1 | NB 1 | SE 1 | | |
| Volume Total | 75 | 4 | 70 | | |
| Volume Left | 12 | 2 | 0 | | |
| Volume Right | 63 | 0 | 12 | | |
| cSH | 989 | 1531 | 1700 | | |
| Volume to Capacity | 0.08 | 0.00 | 0.04 | | |
| Queue Length 95th (m) | 1.9 | 0.0 | 0.0 | | |
| Control Delay (s) | 8.9 | 3.7 | 0.0 | | |
| Lane LOS | A | A | | | |
| Approach Delay (s) | 8.9 | 3.7 | 0.0 | | |
| Approach LOS | A | | | | |
| Intersection Summary | | | | | |
| Average Delay | | | 4.6 | | |
| Intersection Capacity Utilization | | | 7.0% | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  | | |  |
| Traffic Volume (veh/h) | 5 | 5 | 69 | 5 | 55 | 16 |
| Future Volume (Veh/h) | 5 | 7 | 75 | 6 | 62 | 17 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 5 | 8 | 82 | 7 | 67 | 18 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 238 | 86 | | | 89 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 238 | 86 | | | 89 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 99 | 99 | | | 96 | |
| cM capacity (veh/h) | 717 | 973 | | | 1506 | |
| Direction, Lane # | WB 1 | NB 1 | SB 1 | | | |
| Volume Total | 13 | 89 | 85 | | | |
| Volume Left | 5 | 0 | 67 | | | |
| Volume Right | 8 | 7 | 0 | | | |
| cSH | 856 | 1700 | 1506 | | | |
| Volume to Capacity | 0.02 | 0.05 | 0.04 | | | |
| Queue Length 95th (m) | 0.4 | 0.0 | 1.1 | | | |
| Control Delay (s) | 9.3 | 0.0 | 6.0 | | | |
| Lane LOS | A | | A | | | |
| Approach Delay (s) | 9.3 | 0.0 | 6.0 | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 3.4 | | | |
| Intersection Capacity Utilization | | 20.6% | | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
1: Portland & Carver

2021 Existing
Timing Plan: PM Peak

| | → | ↖ | ← | ↗ | ↘ | ↓ | |
|------------------------|--------|-------|-------|-------|-------|-------|-------|
| Lane Group | EBT | WBL | WBT | NBL | NBR | SBL | SBT |
| Lane Configurations | ↑↑ | ↑ | ↑↑ | ↑↑ | ↑ | ↑ | ↑ |
| Traffic Volume (vph) | 1428 | 165 | 700 | 290 | 373 | 77 | 105 |
| Future Volume (vph) | 1428 | 165 | 700 | 290 | 373 | 77 | 105 |
| Lane Group Flow (vph) | 1740 | 188 | 800 | 332 | 426 | 88 | 128 |
| Turn Type | NA | pm+pt | NA | Perm | Perm | Perm | NA |
| Protected Phases | 4 | 3 | 8 | | | | 6 |
| Permitted Phases | | 8 | | 2 | 2 | 6 | |
| Minimum Split (s) | 22.5 | 9.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 50.0 | 12.4 | 62.4 | 27.6 | 27.6 | 27.6 | 27.6 |
| Total Split (%) | 55.6% | 13.8% | 69.3% | 30.7% | 30.7% | 30.7% | 30.7% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lag | Lead | | | | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | |
| v/c Ratio | 0.97 | 0.78 | 0.35 | 0.54 | 0.79 | 0.19 | 0.27 |
| Control Delay | 37.3 | 39.7 | 7.9 | 32.7 | 30.5 | 27.6 | 27.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 37.3 | 39.7 | 7.9 | 32.7 | 30.5 | 27.6 | 27.6 |
| Queue Length 50th (m) | 145.1 | 15.9 | 29.8 | 25.5 | 41.4 | 11.9 | 17.1 |
| Queue Length 95th (m) | #202.4 | #49.1 | 39.4 | 38.7 | #87.5 | 23.7 | 31.6 |
| Internal Link Dist (m) | 238.6 | | 40.6 | | | | 48.2 |
| Turn Bay Length (m) | | | | 50.0 | | | |
| Base Capacity (vph) | 1798 | 240 | 2302 | 616 | 539 | 459 | 481 |
| 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 | 0.97 | 0.78 | 0.35 | 0.54 | 0.79 | 0.19 | 0.27 |

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBL and 6:SBTL, Start of Green

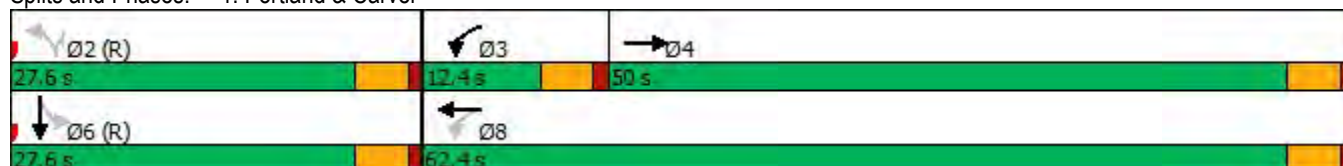
Natural Cycle: 90

Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.

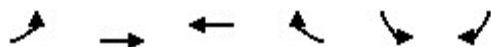
Queue shown is maximum after two cycles.

Splits and Phases: 1: Portland & Carver



Portland Street Development
2: Portland & Settle





















2021 Existing
Timing Plan: PM Peak



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 1546 | 862 | 52 | 0 | 31 |
| Future Volume (Veh/h) | 0 | 1546 | 862 | 52 | 0 | 31 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 1766 | 985 | 60 | 0 | 36 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 277 | 263 | | | |
| pX, platoon unblocked | 0.90 | | | | 0.61 | 0.90 |
| vC, conflicting volume | 1045 | | | | 1898 | 522 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 836 | | | | 472 | 257 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 95 |
| cM capacity (veh/h) | 717 | | | | 317 | 670 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | SB 1 | |
| Volume Total | 883 | 883 | 657 | 388 | 36 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 0 | 0 | 60 | 36 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 670 | |
| Volume to Capacity | 0.52 | 0.52 | 0.39 | 0.23 | 0.05 | |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 | |
| Lane LOS | | | | | B | |
| Approach Delay (s) | 0.0 | | 0.0 | | 10.7 | |
| Approach LOS | | | | | B | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 46.1% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
3: Baker/Woodlawn & Portland

2021 Existing
Timing Plan: PM Peak

| |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 401 | 1417 | 502 | 19 | 827 | 278 | 176 | 129 | 146 | 333 |
| Future Volume (vph) | 401 | 1417 | 502 | 19 | 827 | 278 | 176 | 129 | 146 | 333 |
| Lane Group Flow (vph) | 458 | 1618 | 574 | 22 | 998 | 317 | 201 | 148 | 284 | 262 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | pm+pt | NA | pm+pt | NA | Prot |
| Protected Phases | 7 | 4 | | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Permitted Phases | | | 4 | 8 | | 2 | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 22.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 22.5 |
| Total Split (s) | 21.0 | 48.0 | 48.0 | 9.0 | 36.0 | 19.0 | 29.0 | 14.0 | 24.0 | 24.0 |
| Total Split (%) | 21.0% | 48.0% | 48.0% | 9.0% | 36.0% | 19.0% | 29.0% | 14.0% | 24.0% | 24.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | None | None | None | Max | None | Max | Max |
| v/c Ratio | 0.82 | 0.94 | 0.57 | 0.15 | 0.90 | 0.91 | 0.42 | 0.37 | 0.80 | 0.51 |
| Control Delay | 53.3 | 37.3 | 6.1 | 15.2 | 44.9 | 55.5 | 34.7 | 24.0 | 51.4 | 8.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 53.3 | 37.3 | 6.1 | 15.2 | 44.9 | 55.5 | 34.7 | 24.0 | 51.4 | 8.4 |
| Queue Length 50th (m) | 44.4 | 136.2 | 9.6 | 2.0 | 95.8 | 45.2 | 33.0 | 18.9 | 49.6 | 0.0 |
| Queue Length 95th (m) | #65.9 | #221.0 | 39.4 | 5.5 | #131.6 | #93.5 | 53.8 | 32.6 | #92.3 | 21.3 |
| Internal Link Dist (m) | | 150.3 | | | 253.1 | | 110.2 | | 152.8 | |
| Turn Bay Length (m) | 125.0 | | | 30.0 | | | | 30.0 | | |
| Base Capacity (vph) | 582 | 1721 | 1015 | 151 | 1141 | 349 | 478 | 409 | 357 | 511 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.79 | 0.94 | 0.57 | 0.15 | 0.87 | 0.91 | 0.42 | 0.36 | 0.80 | 0.51 |

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 98.5

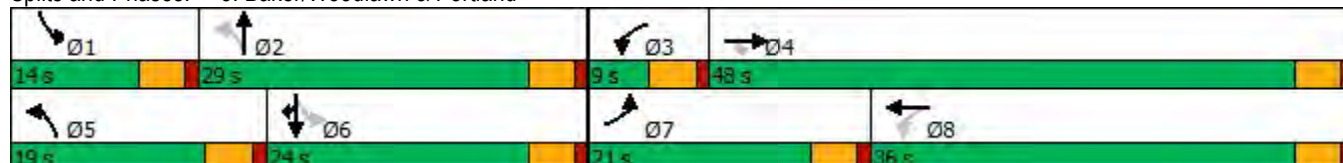
Natural Cycle: 100

Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.

















Queue shown is maximum after two cycles.

Splits and Phases: 3: Baker/Woodlawn & Portland



Portland Street Development
4: P.Estates/Spring & Portland

2021 Existing
Timing Plan: PM Peak

| |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
| Lane Configurations |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 198 | 1609 | 34 | 768 | 30 | 27 | 16 | 22 |
| Future Volume (vph) | 198 | 1609 | 34 | 768 | 30 | 27 | 16 | 22 |
| Lane Group Flow (vph) | 226 | 1920 | 39 | 899 | 35 | 59 | 18 | 101 |
| Turn Type | Perm | NA | Perm | NA | Perm | NA | Perm | NA |
| Protected Phases | | 4 | | 8 | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 2 | | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 23.0 | 23.0 | 23.0 | 23.0 |
| Total Split (%) | 61.7% | 61.7% | 61.7% | 61.7% | 38.3% | 38.3% | 38.3% | 38.3% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | |
| v/c Ratio | 0.84 | 0.99 | 0.31 | 0.47 | 0.09 | 0.11 | 0.04 | 0.18 |
| Control Delay | 42.6 | 34.8 | 15.9 | 9.4 | 15.6 | 13.6 | 15.1 | 7.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 42.6 | 34.8 | 15.9 | 9.4 | 15.6 | 13.6 | 15.1 | 7.2 |
| Queue Length 50th (m) | 18.8 | 98.9 | 2.1 | 28.5 | 2.7 | 3.8 | 1.4 | 1.9 |
| Queue Length 95th (m) | #57.0 | #158.3 | 9.0 | 40.5 | 8.1 | 10.6 | 5.1 | 10.6 |
| Internal Link Dist (m) | | 342.2 | | 163.2 | | 135.7 | | 172.7 |
| Turn Bay Length (m) | 200.0 | | 80.0 | | | | 30.0 | |
| Base Capacity (vph) | 270 | 1932 | 125 | 1933 | 401 | 544 | 417 | 567 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.84 | 0.99 | 0.31 | 0.47 | 0.09 | 0.11 | 0.04 | 0.18 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

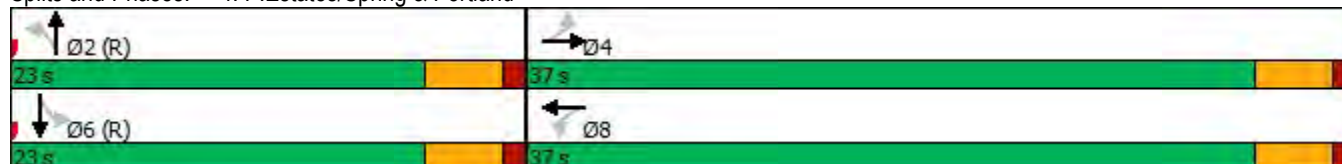
Natural Cycle: 65

Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.









Queue shown is maximum after two cycles.

Splits and Phases: 4: P.Estates/Spring & Portland



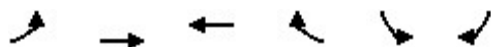
Portland Street Development
5: Carver & W.Driveway

2021 Existing
Timing Plan: PM Peak

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | | | | |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 0 | 0 | 189 |
| Future Volume (Veh/h) | 0 | 0 | 0 | 0 | 0 | 189 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 0 | 0 | 216 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | 72 | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 216 | 0 | | | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 216 | 0 | | | 0 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 100 | 100 | | | 100 | |
| cM capacity (veh/h) | 772 | 1085 | | | 1623 | |
| Direction, Lane # | WB 1 | SB 1 | | | | |
| Volume Total | 0 | 216 | | | | |
| Volume Left | 0 | 0 | | | | |
| Volume Right | 0 | 0 | | | | |
| cSH | 1700 | 1623 | | | | |
| Volume to Capacity | 0.01 | 0.00 | | | | |
| Queue Length 95th (m) | 0.0 | 0.0 | | | | |
| Control Delay (s) | 0.0 | 0.0 | | | | |
| Lane LOS | 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 | | | |

Portland Street Development
8: Portland & S_Driveway

2021 Existing
Timing Plan: PM Peak






| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 1878 | 865 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 1878 | 865 | 0 | 0 | 0 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 2146 | 988 | 0 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 65 | | | | |
| pX, platoon unblocked | | | | | 0.51 | |
| vC, conflicting volume | 988 | | | | 2061 | 329 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 988 | | | | 1167 | 329 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 695 | | | | 96 | 666 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | SB 1 |
| Volume Total | 1073 | 1073 | 395 | 395 | 198 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.63 | 0.63 | 0.23 | 0.23 | 0.12 | 0.00 |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | | | | A |
| Approach Delay (s) | 0.0 | | 0.0 | | | 0.0 |
| Approach LOS | | | | | | A |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 55.2% | | ICU Level of Service | B |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
11: Elizabeth & Carver










2021 Existing
Timing Plan: PM Peak



| Movement | EBL | EBR | NBL | SER | SER2 |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Lane Configurations |  | |  |  | |
| Traffic Volume (veh/h) | 10 | 45 | 0 | 144 | 20 |
| Future Volume (Veh/h) | 10 | 45 | 0 | 144 | 20 |
| Sign Control | Stop | | Free | Free | |
| Grade | 0% | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 51 | 0 | 164 | 23 |
| Pedestrians | | | | | |
| Lane Width (m) | | | | | |
| Walking Speed (m/s) | | | | | |
| Percent Blockage | | | | | |
| Right turn flare (veh) | | | | | |
| Median type | | | None | None | |
| Median storage veh | | | | | |
| Upstream signal (m) | 109 | | | | |
| pX, platoon unblocked | | | | | |
| vC, conflicting volume | 176 | 176 | | | |
| vC1, stage 1 conf vol | | | | | |
| vC2, stage 2 conf vol | | | | | |
| vCu, unblocked vol | 176 | 176 | | | |
| tC, single (s) | 6.4 | 6.2 | | | |
| tC, 2 stage (s) | | | | | |
| tF (s) | 3.5 | 3.3 | | | |
| p0 queue free % | 99 | 94 | | | |
| cM capacity (veh/h) | 814 | 868 | | | |
| Direction, Lane # | EB 1 | NB 1 | SE 1 | | |
| Volume Total | 63 | 0 | 187 | | |
| Volume Left | 12 | 0 | 0 | | |
| Volume Right | 51 | 0 | 23 | | |
| cSH | 857 | 1700 | 1700 | | |
| Volume to Capacity | 0.07 | 0.00 | 0.11 | | |
| Queue Length 95th (m) | 1.8 | 0.0 | 0.0 | | |
| Control Delay (s) | 9.5 | 0.0 | 0.0 | | |
| Lane LOS | A | | | | |
| Approach Delay (s) | 9.5 | 0.0 | 0.0 | | |
| Approach LOS | A | | | | |
| Intersection Summary | | | | | |
| Average Delay | | | 2.4 | | |
| Intersection Capacity Utilization | | | 13.5% | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

Portland Street Development
21: Settle & Elizabeth

2021 Existing
Timing Plan: PM Peak

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  | | |  |
| Traffic Volume (veh/h) | 10 | 10 | 27 | 25 | 30 | 21 |
| Future Volume (Veh/h) | 10 | 10 | 27 | 25 | 30 | 21 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 12 | 30 | 28 | 35 | 24 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 138 | 44 | | | 58 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 138 | 44 | | | 58 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 99 | 99 | | | 98 | |
| cM capacity (veh/h) | 836 | 1026 | | | 1546 | |
| Direction, Lane # | WB 1 | NB 1 | SB 1 | | | |
| Volume Total | 24 | 58 | 59 | | | |
| Volume Left | 12 | 0 | 35 | | | |
| Volume Right | 12 | 28 | 0 | | | |
| cSH | 921 | 1700 | 1546 | | | |
| Volume to Capacity | 0.03 | 0.03 | 0.02 | | | |
| Queue Length 95th (m) | 0.6 | 0.0 | 0.5 | | | |
| Control Delay (s) | 9.0 | 0.0 | 4.4 | | | |
| Lane LOS | A | | A | | | |
| Approach Delay (s) | 9.0 | 0.0 | 4.4 | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 3.4 | | | |
| Intersection Capacity Utilization | | | 19.4% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

| | → | ↖ | ← | ↙ | ↗ | ↘ | ↓ |
|------------------------|--------|-------|-------|-------|-------|-------|-------|
| Lane Group | EBT | WBL | WBT | NBL | NBR | SBL | SBT |
| Lane Configurations | ↑↑ | ↑ | ↑↑ | ↑↑ | ↑ | ↑ | ↑ |
| Traffic Volume (vph) | 1428 | 165 | 700 | 290 | 373 | 77 | 105 |
| Future Volume (vph) | 1501 | 173 | 736 | 305 | 392 | 81 | 110 |
| Lane Group Flow (vph) | 1740 | 188 | 800 | 332 | 426 | 88 | 128 |
| Turn Type | NA | pm+pt | NA | Perm | Perm | Perm | NA |
| Protected Phases | 4 | 3 | 8 | | | | 6 |
| Permitted Phases | | 8 | | 2 | 2 | 6 | |
| Minimum Split (s) | 22.5 | 9.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 50.0 | 12.4 | 62.4 | 27.6 | 27.6 | 27.6 | 27.6 |
| Total Split (%) | 55.6% | 13.8% | 69.3% | 30.7% | 30.7% | 30.7% | 30.7% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lag | Lead | | | | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | |
| v/c Ratio | 0.97 | 0.78 | 0.35 | 0.54 | 0.79 | 0.19 | 0.27 |
| Control Delay | 37.3 | 39.7 | 7.9 | 32.7 | 30.5 | 27.6 | 27.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 37.3 | 39.7 | 7.9 | 32.7 | 30.5 | 27.6 | 27.6 |
| Queue Length 50th (m) | 145.1 | 15.9 | 29.8 | 25.5 | 41.4 | 11.9 | 17.1 |
| Queue Length 95th (m) | #202.4 | #49.1 | 39.4 | 38.7 | #87.5 | 23.7 | 31.6 |
| Internal Link Dist (m) | 238.6 | | 40.6 | | | | 48.2 |
| Turn Bay Length (m) | | | | 50.0 | | | |
| Base Capacity (vph) | 1798 | 240 | 2302 | 616 | 539 | 459 | 481 |
| 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 | 0.97 | 0.78 | 0.35 | 0.54 | 0.79 | 0.19 | 0.27 |

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBL and 6:SBTL, Start of Green

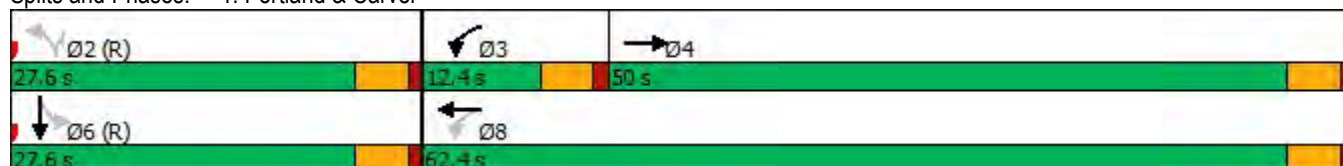
Natural Cycle: 90

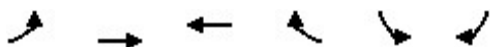
Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Portland & Carver





























| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 1546 | 862 | 52 | 0 | 31 |
| Future Volume (Veh/h) | 0 | 1625 | 906 | 55 | 0 | 33 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 1766 | 985 | 60 | 0 | 36 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 277 | 263 | | | |
| pX, platoon unblocked | 0.90 | | | | 0.61 | 0.90 |
| vC, conflicting volume | 1045 | | | | 1898 | 522 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 836 | | | | 472 | 257 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 95 |
| cM capacity (veh/h) | 717 | | | | 317 | 670 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | SB 1 | |
| Volume Total | 883 | 883 | 657 | 388 | 36 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 0 | 0 | 60 | 36 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 670 | |
| Volume to Capacity | 0.52 | 0.52 | 0.39 | 0.23 | 0.05 | |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 | |
| Lane LOS | | | | | B | |
| Approach Delay (s) | 0.0 | | 0.0 | | 10.7 | |
| Approach LOS | | | | | B | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 46.1% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
3: Baker/Woodlawn & Portland

2026 Background
Timing Plan: PM Peak

| |  |  |  |  |  |  |  |  |  |  |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
| Lane Configurations |   |   |  |  |   |  |  |   |  |  |
| Traffic Volume (vph) | 401 | 1417 | 502 | 19 | 827 | 278 | 176 | 129 | 146 | 333 |
| Future Volume (vph) | 421 | 1489 | 528 | 20 | 869 | 292 | 185 | 136 | 153 | 350 |
| Lane Group Flow (vph) | 458 | 1618 | 574 | 22 | 998 | 317 | 201 | 148 | 284 | 262 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | pm+pt | NA | pm+pt | NA | Prot |
| Protected Phases | 7 | 4 | | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Permitted Phases | | | 4 | 8 | | 2 | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 22.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 22.5 |
| Total Split (s) | 21.0 | 48.0 | 48.0 | 9.0 | 36.0 | 19.0 | 29.0 | 14.0 | 24.0 | 24.0 |
| Total Split (%) | 21.0% | 48.0% | 48.0% | 9.0% | 36.0% | 19.0% | 29.0% | 14.0% | 24.0% | 24.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | None | None | None | Max | None | Max | Max |
| v/c Ratio | 0.82 | 0.94 | 0.57 | 0.15 | 0.90 | 0.91 | 0.42 | 0.37 | 0.80 | 0.51 |
| Control Delay | 53.3 | 37.3 | 6.1 | 15.2 | 44.9 | 55.5 | 34.7 | 24.0 | 51.4 | 8.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 53.3 | 37.3 | 6.1 | 15.2 | 44.9 | 55.5 | 34.7 | 24.0 | 51.4 | 8.4 |
| Queue Length 50th (m) | 44.4 | 136.2 | 9.6 | 2.0 | 95.8 | 45.2 | 33.0 | 18.9 | 49.6 | 0.0 |
| Queue Length 95th (m) | #65.9 | #221.0 | 39.4 | 5.5 | #131.6 | #93.5 | 53.8 | 32.6 | #92.3 | 21.3 |
| Internal Link Dist (m) | | 150.3 | | | 253.1 | | 110.2 | | 152.8 | |
| Turn Bay Length (m) | 125.0 | | | 30.0 | | | | 30.0 | | |
| Base Capacity (vph) | 582 | 1721 | 1015 | 151 | 1141 | 349 | 478 | 409 | 357 | 511 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.79 | 0.94 | 0.57 | 0.15 | 0.87 | 0.91 | 0.42 | 0.36 | 0.80 | 0.51 |

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 98.5

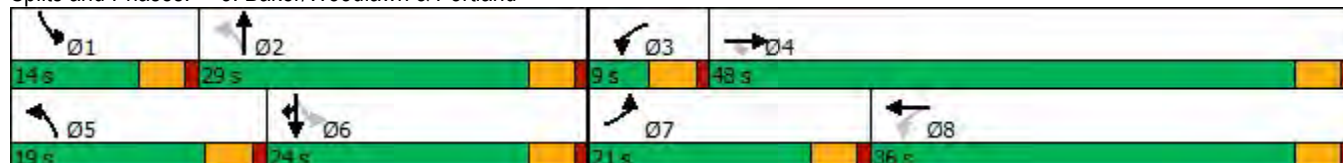
Natural Cycle: 100

















Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Baker/Woodlawn & Portland



| |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
| Lane Configurations |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 198 | 1609 | 34 | 768 | 30 | 27 | 16 | 22 |
| Future Volume (vph) | 208 | 1691 | 36 | 807 | 32 | 28 | 17 | 23 |
| Lane Group Flow (vph) | 226 | 1920 | 39 | 899 | 35 | 59 | 18 | 101 |
| Turn Type | Perm | NA | Perm | NA | Perm | NA | Perm | NA |
| Protected Phases | | 4 | | 8 | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 2 | | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 23.0 | 23.0 | 23.0 | 23.0 |
| Total Split (%) | 61.7% | 61.7% | 61.7% | 61.7% | 38.3% | 38.3% | 38.3% | 38.3% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | |
| v/c Ratio | 0.84 | 0.99 | 0.31 | 0.47 | 0.09 | 0.11 | 0.04 | 0.18 |
| Control Delay | 42.6 | 34.8 | 15.9 | 9.4 | 15.6 | 13.6 | 15.1 | 7.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 42.6 | 34.8 | 15.9 | 9.4 | 15.6 | 13.6 | 15.1 | 7.2 |
| Queue Length 50th (m) | 18.8 | 98.9 | 2.1 | 28.5 | 2.7 | 3.8 | 1.4 | 1.9 |
| Queue Length 95th (m) | #57.0 | #158.3 | 9.0 | 40.5 | 8.1 | 10.6 | 5.1 | 10.6 |
| Internal Link Dist (m) | | 342.2 | | 163.2 | | 135.7 | | 172.7 |
| Turn Bay Length (m) | 200.0 | | 80.0 | | | | 30.0 | |
| Base Capacity (vph) | 270 | 1932 | 125 | 1933 | 401 | 544 | 417 | 567 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.84 | 0.99 | 0.31 | 0.47 | 0.09 | 0.11 | 0.04 | 0.18 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

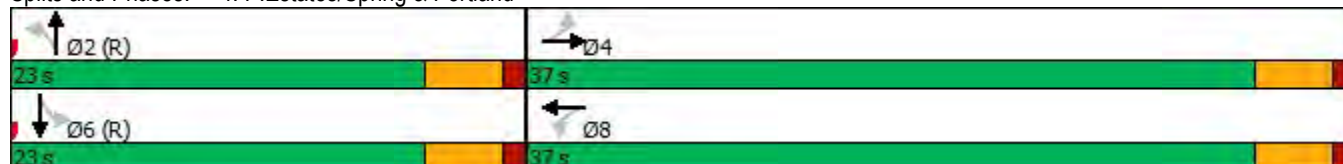
Natural Cycle: 65









Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

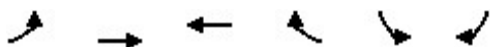
Splits and Phases: 4: P.Estates/Spring & Portland



| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | | | | |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 0 | 0 | 189 |
| Future Volume (Veh/h) | 0 | 0 | 0 | 0 | 0 | 199 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 0 | 0 | 0 | 0 | 216 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | 72 | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 216 | 0 | | | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 216 | 0 | | | 0 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 100 | 100 | | | 100 | |
| cM capacity (veh/h) | 772 | 1085 | | | 1623 | |
| Direction, Lane # | WB 1 | SB 1 | | | | |
| Volume Total | 0 | 216 | | | | |
| Volume Left | 0 | 0 | | | | |
| Volume Right | 0 | 0 | | | | |
| cSH | 1700 | 1623 | | | | |
| Volume to Capacity | 0.01 | 0.00 | | | | |
| Queue Length 95th (m) | 0.0 | 0.0 | | | | |
| Control Delay (s) | 0.0 | 0.0 | | | | |
| Lane LOS | 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 | | | |




Portland Street Development
8: Portland & S_Driveway










2026 Background
Timing Plan: PM Peak



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 1878 | 865 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 1974 | 909 | 0 | 0 | 0 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 2146 | 988 | 0 | 0 | 0 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 65 | | | | |
| pX, platoon unblocked | | | | | 0.51 | |
| vC, conflicting volume | 988 | | | | 2061 | 329 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 988 | | | | 1167 | 329 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 695 | | | | 96 | 666 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | SB 1 |
| Volume Total | 1073 | 1073 | 395 | 395 | 198 | 0 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 0 | 0 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 1700 |
| Volume to Capacity | 0.63 | 0.63 | 0.23 | 0.23 | 0.12 | 0.00 |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lane LOS | | | | | | A |
| Approach Delay (s) | 0.0 | | 0.0 | | | 0.0 |
| Approach LOS | | | | | | A |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 55.2% | | ICU Level of Service | B |
| Analysis Period (min) | | | 15 | | | |



| Movement | EBL | EBR | NBL | SER | SER2 |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Lane Configurations |  | |  |  | |
| Traffic Volume (veh/h) | 10 | 45 | 0 | 144 | 20 |
| Future Volume (Veh/h) | 11 | 47 | 0 | 151 | 21 |
| Sign Control | Stop | | Free | Free | |
| Grade | 0% | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 51 | 0 | 164 | 23 |
| Pedestrians | | | | | |
| Lane Width (m) | | | | | |
| Walking Speed (m/s) | | | | | |
| Percent Blockage | | | | | |
| Right turn flare (veh) | | | | | |
| Median type | | | None | None | |
| Median storage veh | | | | | |
| Upstream signal (m) | | | 109 | | |
| pX, platoon unblocked | | | | | |
| vC, conflicting volume | 176 | 176 | | | |
| vC1, stage 1 conf vol | | | | | |
| vC2, stage 2 conf vol | | | | | |
| vCu, unblocked vol | 176 | 176 | | | |
| tC, single (s) | 6.4 | 6.2 | | | |
| tC, 2 stage (s) | | | | | |
| tF (s) | 3.5 | 3.3 | | | |
| p0 queue free % | 99 | 94 | | | |
| cM capacity (veh/h) | 814 | 868 | | | |
| Direction, Lane # | EB 1 | NB 1 | SE 1 | | |
| Volume Total | 63 | 0 | 187 | | |
| Volume Left | 12 | 0 | 0 | | |
| Volume Right | 51 | 0 | 23 | | |
| cSH | 857 | 1700 | 1700 | | |
| Volume to Capacity | 0.07 | 0.00 | 0.11 | | |
| Queue Length 95th (m) | 1.8 | 0.0 | 0.0 | | |
| Control Delay (s) | 9.5 | 0.0 | 0.0 | | |
| Lane LOS | A | | | | |
| Approach Delay (s) | 9.5 | 0.0 | 0.0 | | |
| Approach LOS | A | | | | |
| Intersection Summary | | | | | |
| Average Delay | | | 2.4 | | |
| Intersection Capacity Utilization | | | 13.5% | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | |

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  | | |  |
| Traffic Volume (veh/h) | 10 | 10 | 27 | 25 | 30 | 21 |
| Future Volume (Veh/h) | 11 | 11 | 28 | 26 | 32 | 22 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 12 | 30 | 28 | 35 | 24 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 138 | 44 | | | 58 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 138 | 44 | | | 58 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 99 | 99 | | | 98 | |
| cM capacity (veh/h) | 836 | 1026 | | | 1546 | |
| Direction, Lane # | WB 1 | NB 1 | SB 1 | | | |
| Volume Total | 24 | 58 | 59 | | | |
| Volume Left | 12 | 0 | 35 | | | |
| Volume Right | 12 | 28 | 0 | | | |
| cSH | 921 | 1700 | 1546 | | | |
| Volume to Capacity | 0.03 | 0.03 | 0.02 | | | |
| Queue Length 95th (m) | 0.6 | 0.0 | 0.5 | | | |
| Control Delay (s) | 9.0 | 0.0 | 4.4 | | | |
| Lane LOS | A | | A | | | |
| Approach Delay (s) | 9.0 | 0.0 | 4.4 | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 3.4 | | | |
| Intersection Capacity Utilization | | 19.4% | | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

| | → | ↖ | ← | ↙ | ↗ | ↘ | ↓ |
|------------------------|--------|-------|-------|-------|-------|-------|-------|
| Lane Group | EBT | WBL | WBT | NBL | NBR | SBL | SBT |
| Lane Configurations | ↑↑ | ↖ | ↑↑ | ↖ | ↗ | ↖ | ↑ |
| Traffic Volume (vph) | 1428 | 165 | 700 | 290 | 373 | 77 | 105 |
| Future Volume (vph) | 1501 | 173 | 740 | 306 | 392 | 82 | 110 |
| Lane Group Flow (vph) | 1740 | 188 | 804 | 333 | 426 | 89 | 133 |
| Turn Type | NA | pm+pt | NA | Perm | Perm | Perm | NA |
| Protected Phases | 4 | 3 | 8 | | | | 6 |
| Permitted Phases | | 8 | | 2 | 2 | 6 | |
| Minimum Split (s) | 22.5 | 9.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 50.0 | 12.4 | 62.4 | 27.6 | 27.6 | 27.6 | 27.6 |
| Total Split (%) | 55.6% | 13.8% | 69.3% | 30.7% | 30.7% | 30.7% | 30.7% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lag | Lead | | | | | |
| Lead-Lag Optimize? | Yes | Yes | | | | | |
| v/c Ratio | 0.97 | 0.78 | 0.35 | 0.55 | 0.79 | 0.19 | 0.28 |
| Control Delay | 37.3 | 39.7 | 7.9 | 33.0 | 30.5 | 27.6 | 27.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 37.3 | 39.7 | 7.9 | 33.0 | 30.5 | 27.6 | 27.4 |
| Queue Length 50th (m) | 145.1 | 15.9 | 30.1 | 25.6 | 41.4 | 12.1 | 17.6 |
| Queue Length 95th (m) | #202.4 | #49.1 | 39.6 | 38.9 | #87.5 | 23.9 | 32.5 |
| Internal Link Dist (m) | 238.6 | | 40.6 | | | | 48.2 |
| Turn Bay Length (m) | | | | 50.0 | | | |
| Base Capacity (vph) | 1798 | 240 | 2302 | 607 | 539 | 459 | 480 |
| 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 | 0.97 | 0.78 | 0.35 | 0.55 | 0.79 | 0.19 | 0.28 |

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBL and 6:SBTL, Start of Green

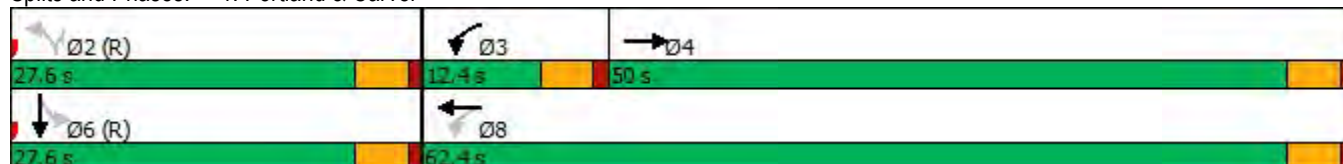
Natural Cycle: 90

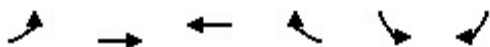
Control Type: Pretimed

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Portland & Carver

























| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 1546 | 862 | 52 | 0 | 31 |
| Future Volume (Veh/h) | 0 | 1625 | 910 | 60 | 0 | 33 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 1766 | 989 | 65 | 0 | 36 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 277 | 263 | | | |
| pX, platoon unblocked | 0.90 | | | | 0.61 | 0.90 |
| vC, conflicting volume | 1054 | | | | 1904 | 527 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 843 | | | | 475 | 258 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 95 |
| cM capacity (veh/h) | 712 | | | | 315 | 668 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | SB 1 | |
| Volume Total | 883 | 883 | 659 | 395 | 36 | |
| Volume Left | 0 | 0 | 0 | 0 | 0 | |
| Volume Right | 0 | 0 | 0 | 65 | 36 | |
| cSH | 1700 | 1700 | 1700 | 1700 | 668 | |
| Volume to Capacity | 0.52 | 0.52 | 0.39 | 0.23 | 0.05 | |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 | |
| Lane LOS | | | | | B | |
| Approach Delay (s) | 0.0 | | 0.0 | | 10.7 | |
| Approach LOS | | | | | B | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.1 | | | |
| Intersection Capacity Utilization | | | 46.1% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

Portland Street Development
3: Baker/Woodlawn & Portland

2026 Background and Development
Timing Plan: PM Peak

| |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 401 | 1417 | 502 | 19 | 827 | 278 | 176 | 129 | 146 | 333 |
| Future Volume (vph) | 430 | 1489 | 528 | 21 | 872 | 292 | 187 | 136 | 153 | 350 |
| Lane Group Flow (vph) | 467 | 1618 | 574 | 23 | 1001 | 317 | 203 | 148 | 284 | 262 |
| Turn Type | Prot | NA | Perm | pm+pt | NA | pm+pt | NA | pm+pt | NA | Prot |
| Protected Phases | 7 | 4 | | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Permitted Phases | | | 4 | 8 | | 2 | | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 5 | 2 | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 22.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 9.5 | 22.5 | 22.5 |
| Total Split (s) | 21.0 | 48.0 | 48.0 | 9.0 | 36.0 | 19.0 | 29.0 | 14.0 | 24.0 | 24.0 |
| Total Split (%) | 21.0% | 48.0% | 48.0% | 9.0% | 36.0% | 19.0% | 29.0% | 14.0% | 24.0% | 24.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lead | Lag | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | None | None | None | None | Max | None | Max | Max |
| v/c Ratio | 0.83 | 0.94 | 0.57 | 0.15 | 0.91 | 0.91 | 0.43 | 0.37 | 0.80 | 0.51 |
| Control Delay | 54.4 | 37.2 | 6.1 | 15.4 | 45.2 | 55.7 | 34.8 | 24.0 | 51.5 | 8.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 54.4 | 37.2 | 6.1 | 15.4 | 45.2 | 55.7 | 34.8 | 24.0 | 51.5 | 8.4 |
| Queue Length 50th (m) | 45.5 | 136.2 | 9.6 | 2.1 | 96.2 | 45.2 | 33.4 | 18.9 | 49.6 | 0.0 |
| Queue Length 95th (m) | #68.0 | #221.0 | 39.4 | 5.7 | #132.3 | #93.5 | 54.4 | 32.6 | #92.3 | 21.3 |
| Internal Link Dist (m) | | 150.3 | | | 253.1 | | 110.2 | | 152.8 | |
| Turn Bay Length (m) | 125.0 | | | 30.0 | | | | 30.0 | | |
| Base Capacity (vph) | 581 | 1723 | 1015 | 151 | 1139 | 348 | 477 | 407 | 357 | 511 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.80 | 0.94 | 0.57 | 0.15 | 0.88 | 0.91 | 0.43 | 0.36 | 0.80 | 0.51 |

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 98.6

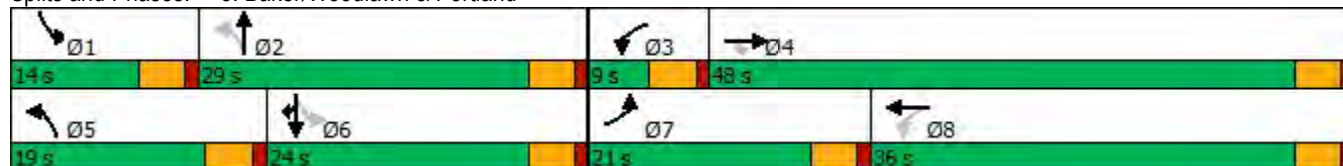
Natural Cycle: 100

















Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Baker/Woodlawn & Portland



| |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
| Lane Configurations |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 198 | 1609 | 34 | 768 | 30 | 27 | 16 | 22 |
| Future Volume (vph) | 208 | 1692 | 36 | 811 | 32 | 28 | 17 | 23 |
| Lane Group Flow (vph) | 226 | 1921 | 39 | 904 | 35 | 59 | 18 | 101 |
| Turn Type | Perm | NA | Perm | NA | Perm | NA | Perm | NA |
| Protected Phases | | 4 | | 8 | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 2 | | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 23.0 | 23.0 | 23.0 | 23.0 |
| Total Split (%) | 61.7% | 61.7% | 61.7% | 61.7% | 38.3% | 38.3% | 38.3% | 38.3% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | |
| v/c Ratio | 0.84 | 0.99 | 0.31 | 0.47 | 0.09 | 0.11 | 0.04 | 0.18 |
| Control Delay | 43.7 | 34.9 | 15.9 | 9.4 | 15.6 | 13.6 | 15.1 | 7.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 43.7 | 34.9 | 15.9 | 9.4 | 15.6 | 13.6 | 15.1 | 7.2 |
| Queue Length 50th (m) | 18.9 | 99.0 | 2.1 | 28.6 | 2.7 | 3.8 | 1.4 | 1.9 |
| Queue Length 95th (m) | #57.3 | #158.4 | 9.0 | 40.6 | 8.1 | 10.6 | 5.1 | 10.6 |
| Internal Link Dist (m) | | 342.2 | | 163.2 | | 135.7 | | 172.7 |
| Turn Bay Length (m) | 200.0 | | 80.0 | | | | 30.0 | |
| Base Capacity (vph) | 268 | 1932 | 125 | 1933 | 401 | 544 | 417 | 567 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.84 | 0.99 | 0.31 | 0.47 | 0.09 | 0.11 | 0.04 | 0.18 |

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

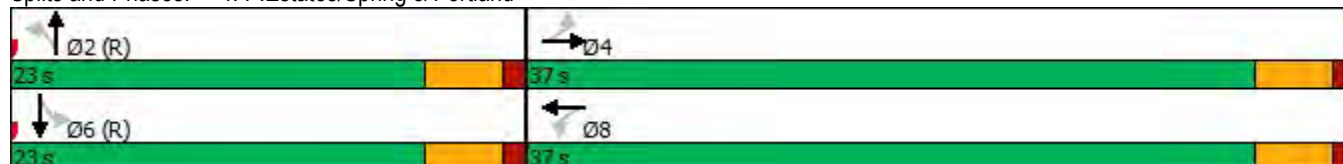
Natural Cycle: 65









Control Type: Pretimed

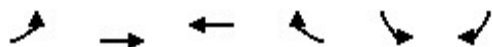
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: P.Estates/Spring & Portland















| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | | | | |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 0 | 0 | 189 |
| Future Volume (Veh/h) | 5 | 2 | 0 | 0 | 20 | 199 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 5 | 2 | 0 | 0 | 22 | 216 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | 72 | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 260 | 0 | | | 0 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 260 | 0 | | | 0 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 99 | 100 | | | 99 | |
| cM capacity (veh/h) | 719 | 1085 | | | 1623 | |
| Direction, Lane # | WB 1 | SB 1 | | | | |
| Volume Total | 7 | 238 | | | | |
| Volume Left | 5 | 22 | | | | |
| Volume Right | 2 | 0 | | | | |
| cSH | 796 | 1623 | | | | |
| Volume to Capacity | 0.01 | 0.01 | | | | |
| Queue Length 95th (m) | 0.2 | 0.3 | | | | |
| Control Delay (s) | 9.6 | 0.8 | | | | |
| Lane LOS | A | A | | | | |
| Approach Delay (s) | 9.6 | 0.8 | | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | 1.0 | | | | |
| Intersection Capacity Utilization | | 13.3% | ICU Level of Service | A | | |
| Analysis Period (min) | | 15 | | | | |



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|-----------------------------------|------|------|-------|------|----------------------|------|
| Lane Configurations | | ↑↑ | ↑↑↑ | | | ↑ |
| Traffic Volume (veh/h) | 0 | 1878 | 865 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 1975 | 912 | 1 | 0 | 1 |
| Sign Control | | Free | Free | | Stop | |
| Grade | | 0% | 0% | | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 0 | 2147 | 991 | 1 | 0 | 1 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | None | None | | | |
| Median storage veh | | | | | | |
| Upstream signal (m) | | 65 | | | | |
| pX, platoon unblocked | | | | | 0.51 | |
| vC, conflicting volume | 992 | | | | 2065 | 331 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 992 | | | | 1175 | 331 |
| tC, single (s) | 4.1 | | | | 6.8 | 6.9 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 2.2 | | | | 3.5 | 3.3 |
| p0 queue free % | 100 | | | | 100 | 100 |
| cM capacity (veh/h) | 693 | | | | 95 | 665 |
| Direction, Lane # | EB 1 | EB 2 | WB 1 | WB 2 | WB 3 | SB 1 |
| Volume Total | 1074 | 1074 | 396 | 396 | 199 | 1 |
| Volume Left | 0 | 0 | 0 | 0 | 0 | 0 |
| Volume Right | 0 | 0 | 0 | 0 | 1 | 1 |
| cSH | 1700 | 1700 | 1700 | 1700 | 1700 | 665 |
| Volume to Capacity | 0.63 | 0.63 | 0.23 | 0.23 | 0.12 | 0.00 |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.4 |
| Lane LOS | | | | | | B |
| Approach Delay (s) | 0.0 | | 0.0 | | | 10.4 |
| Approach LOS | | | | | | B |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.0 | | | |
| Intersection Capacity Utilization | | | 55.2% | | ICU Level of Service | B |
| Analysis Period (min) | | | 15 | | | |



| Movement | EBL | EBR | NBL | SER | SER2 |
|-----------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|
| Lane Configurations |  | |  |  | |
| Traffic Volume (veh/h) | 10 | 45 | 0 | 144 | 20 |
| Future Volume (Veh/h) | 11 | 66 | 1 | 152 | 21 |
| Sign Control | Stop | | Free | Free | |
| Grade | 0% | | 0% | 0% | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 72 | 1 | 165 | 23 |
| Pedestrians | | | | | |
| Lane Width (m) | | | | | |
| Walking Speed (m/s) | | | | | |
| Percent Blockage | | | | | |
| Right turn flare (veh) | | | | | |
| Median type | | | None | None | |
| Median storage veh | | | | | |
| Upstream signal (m) | | | 109 | | |
| pX, platoon unblocked | | | | | |
| vC, conflicting volume | 180 | 176 | | | |
| vC1, stage 1 conf vol | | | | | |
| vC2, stage 2 conf vol | | | | | |
| vCu, unblocked vol | 180 | 176 | | | |
| tC, single (s) | 6.4 | 6.2 | | | |
| tC, 2 stage (s) | | | | | |
| tF (s) | 3.5 | 3.3 | | | |
| p0 queue free % | 99 | 92 | | | |
| cM capacity (veh/h) | 809 | 867 | | | |
| Direction, Lane # | EB 1 | NB 1 | SE 1 | | |
| Volume Total | 84 | 2 | 188 | | |
| Volume Left | 12 | 1 | 0 | | |
| Volume Right | 72 | 0 | 23 | | |
| cSH | 858 | 1386 | 1700 | | |
| Volume to Capacity | 0.10 | 0.00 | 0.11 | | |
| Queue Length 95th (m) | 2.5 | 0.0 | 0.0 | | |
| Control Delay (s) | 9.7 | 3.8 | 0.0 | | |
| Lane LOS | A | A | | | |
| Approach Delay (s) | 9.7 | 3.8 | 0.0 | | |
| Approach LOS | A | | | | |
| Intersection Summary | | | | | |
| Average Delay | | | 3.0 | | |
| Intersection Capacity Utilization | | | 13.5% | ICU Level of Service | |
| Analysis Period (min) | | | 15 | A | |

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  | | |  |
| Traffic Volume (veh/h) | 10 | 10 | 27 | 25 | 30 | 21 |
| Future Volume (Veh/h) | 11 | 12 | 29 | 30 | 46 | 22 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph) | 12 | 13 | 32 | 33 | 50 | 24 |
| Pedestrians | | | | | | |
| Lane Width (m) | | | | | | |
| Walking Speed (m/s) | | | | | | |
| Percent Blockage | | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh | | | | | | |
| Upstream signal (m) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 172 | 48 | | | 65 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 172 | 48 | | | 65 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 98 | 99 | | | 97 | |
| cM capacity (veh/h) | 791 | 1020 | | | 1537 | |
| Direction, Lane # | WB 1 | NB 1 | SB 1 | | | |
| Volume Total | 25 | 65 | 74 | | | |
| Volume Left | 12 | 0 | 50 | | | |
| Volume Right | 13 | 33 | 0 | | | |
| cSH | 896 | 1700 | 1537 | | | |
| Volume to Capacity | 0.03 | 0.04 | 0.03 | | | |
| Queue Length 95th (m) | 0.7 | 0.0 | 0.8 | | | |
| Control Delay (s) | 9.1 | 0.0 | 5.1 | | | |
| Lane LOS | A | | A | | | |
| Approach Delay (s) | 9.1 | 0.0 | 5.1 | | | |
| Approach LOS | A | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 3.7 | | | |
| Intersection Capacity Utilization | | 19.4% | | ICU Level of Service | | A |
| Analysis Period (min) | | 15 | | | | |