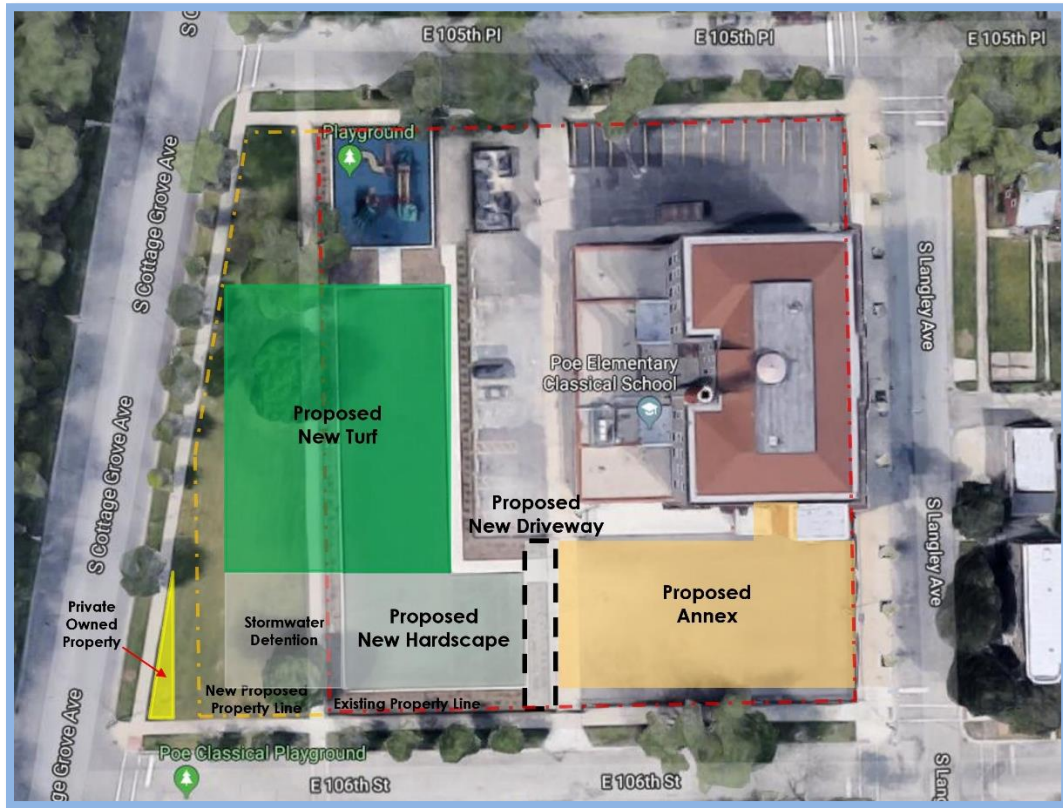


EDGAR ALLEN POE CLASSICAL ELEMENTARY SCHOOL PROPOSED ANNEX EXPANSION/RENOVATION

Traffic Impact Study



Prepared for:



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DRAFT

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EXECUTIVE SUMMARY

Knight E/A, Inc. (Knight) was retained by The Public Building Commission of Chicago (PBCC) to prepare a traffic impact study for the proposed annex expansion and renovation of Edgar Allan Poe Classical Elementary School. The school is located at 10538 South Langley Avenue and is bounded by 105th Place to the north, Langley Avenue to the east, 106th Street to the south, and Cottage Grove Avenue to the west. The existing school currently serves students in Kindergarten through sixth grade, has a current enrollment of 209 students, and an ideal capacity of 240 students.

In order to accommodate the proposed annex and exterior modifications, the site will be expanded to the west to include a portion of the parcel located east of Cottage Grove Avenue. The annex will primarily contain a gymnasium/multi-purpose room and dining area and a number of rooms within the existing building will be renovated. Overall, the expansion and renovation will allow for the school to offer grades seventh and eighth and serve approximately 60 additional students for a total ideal capacity of 270 students. Minimal modifications will be made to the access drives and parking lot.

To understand the traffic operation of the school and the surrounding street network, the following intersections were included in the study area.

- 105th Place with Cottage Grove Avenue
- 105th Place with North Poe Parking Lot Access Drive/North-South Alley
- 105th Place with Langley Avenue
- 106th Street with Cottage Grove Avenue
- 106th Street with Champlain Avenue
- 106th Street with South Poe Parking Lot Access Drive/North-South Alley
- 106th Street with Langley Avenue

Vehicular, pedestrian, and bicycle traffic counts were conducted via video data collection at these intersections during the morning peak period (7:00 A.M. to 10:00 A.M.), the afternoon school dismissal period (2:00 P.M. to 5:00 P.M.), and the evening peak period (5:00 P.M. to 9:00 P.M.) as requested by the PBCC. In addition, the drop-off/pick-up lay-by lane on Langley Avenue was also counted and observed. The traffic counts, along with multiple field visits, provided an overall understanding of the morning arrival (drop-off) and afternoon dismissal (pick-up) peak periods, which are described in detail within the report. Overall, the drop-off/pick-up activity primarily occurs along Langley Avenue, 105th Place, and 106th Street. From these observations and the traffic counts, Knight determined the number of vehicle trips generated during the morning and afternoon peak periods. These rates were then used to determine the increase in vehicle trips under projected conditions.

The existing and projected traffic conditions were analyzed using the Synchro/SimTraffic 9.0 traffic capacity analysis and simulation software. All existing intersections operate at acceptable levels of service and experience minimal increases in delay under projected conditions. A significant portion of the traffic on these streets is related to the school, and therefore peaks generally only occur within a 20 to 30 minute period surrounding the start or end of the school day. During these times, the intersections continue to operate under capacity, although some additional delay is observed adjacent to the school due to conflicts with drop-off/pick-up traffic and pedestrians. Overall, no capacity improvements are required. In order to improve pedestrian safety in the area, consideration should be given to the installation of sidewalk and high-visibility crosswalks for the south and east legs of the intersection of Langley Avenue with 106th Street.

The following recommendations are provided to improve upon the existing drop-off/pick-up operation as well as mitigate the modest increase in traffic under projected conditions.

- Consideration should be given to permanently restricting Langley Avenue and 106th Street to one-way travel only. Langley Avenue would be restricted to one-way southbound travel only between 105th Place and 106th Street while 106th Street would be restricted to one-way westbound travel only between Cottage Grove Avenue and Langley Avenue. One-way travel would allow for one clockwise travel lane around the school with parking on both sides of the street. Temporary restrictions may also be considered during the school peak periods. This would improve drop-off/pick-up operation and safety by prevent blockage due to the existing narrow street cross section.
- Parents/guardians should be instructed to continue to drop-off/pick-up along Langley Avenue and walk their student to the front door or playlot. They should also be encouraged to avoid parking within the buses and van loading zones until those vehicles have departed, use the crosswalks at all times, and to limit the amount of time parked along the school curbside during the drop-off/pick-up period.
- The parking lot should be closed to drop-off/pick-up traffic in the morning and afternoon.
- Cones should be placed to restrict vehicles from entering the playlot or turning around using the driveway.
- The existing cones designating the private van loading area should be placed within the street to more effectively reserve these spaces. A staff member may be required to remove the cones from the street once the vans arrive/depart.

1 – INTRODUCTION

Knight E/A, Inc. (Knight) was retained by the Public Building Commission of Chicago (PBCC) to prepare a traffic impact study for the proposed annex expansion/renovation of Edgar Allan Poe Classical Elementary School in Chicago, Illinois. The school is located at 10538 South Langley Avenue and is bounded by 105th Place to the north, Langley Avenue to the east, 106th Street to the south, and Cottage Grove Avenue to the west. The existing school currently serves students in Kindergarten through sixth grade, has a current enrollment of 209 students, and an ideal capacity of 240 students. A map of the study location and an aerial photograph of the existing surrounding street network are presented in **Exhibit 1.1** and **Exhibit 1.2**, respectively.

As proposed, the school is to be expanded/renovated to increase the ideal capacity to 270 students, provide athletic amenities, and serve the seventh and eighth grades. Improvements to the school will include renovations to the existing facilities as well as a one-story, 20,000 square-foot annex located immediately south of the existing building, which will primarily be occupied by a gymnasium/multi-purpose room and dining area. The site will be expanded to the west to include a portion of the parcel located east of Cottage Grove Avenue to accommodate the proposed annex.

The purpose of this study was to determine the projected impacts on traffic operations and identify any improvements/modifications to the street network, traffic control, or school operation. As a part of this study, the existing street network surrounding the school was observed, counted, and analyzed to determine the operation at the study intersections during the weekday hourly peaks in the morning, during the school dismissal period, and in the evening. New trips generated based on the projected capacity following the expansion/renovation as well as background traffic conditions were determined and assigned to the street network to evaluate future traffic conditions. This report presents and documents the data collection, summarizes the evaluation of traffic conditions on the surrounding street network, details the potential impact of the projected school traffic on the adjacent street network, and identifies recommendations to mitigate operational issues.

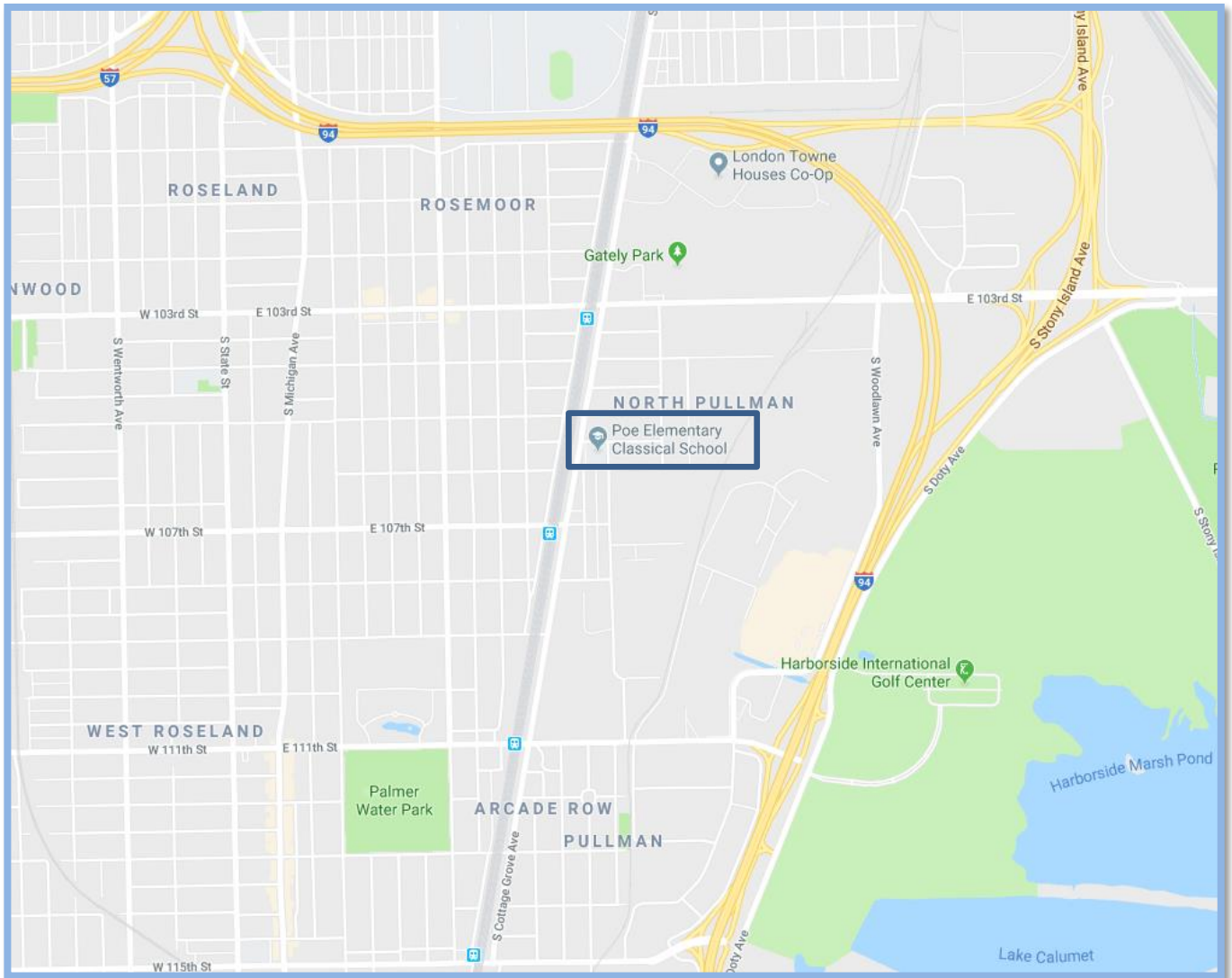


Exhibit 1.1: Site Location Map



Exhibit 1.2: Aerial View of Poe Classical Elementary School

2 – EXISTING CONDITIONS

The study area and adjacent streets were evaluated through field data collection and traffic counts. Information regarding the characteristics and operation of the school are based on observations, contact with school officials, and publicized data. A detailed summary of the findings are as follows.

2.1 Study Area

The study area is located within the Pullman neighborhood of Chicago and is defined by 105th Place to the north, Langley Avenue to the east, 106th Street to the south, and Cottage Grove Avenue to the west. Residential uses are primarily located to the west and north of the site and commercial/industrial uses are located to the south. Immediately west of Cottage Grove Avenue is the Northeast Illinois Regional Commuter Corporation Railroad. There are eight rail lines, some of which are utilized by the Metra Electric rail line. The nearest railroad crossings are grade-separated at 105th Street and 107th Street. East of the site is the Norfolk Southern Railway Company rail line, which generally provides a single rail with a spur directly connected to the Dutch Farm/Pullman Sugar Factory located in the southeast corner of the intersection of 106th Street with Langley Avenue. It should be noted that Corliss High School and Wendall Smith Elementary School are located to the northeast and Gwendolyn Brooks Prep School and Pullman Elementary School are located to the southwest.

2.2 Existing Street Characteristics

A description of the existing street system within the study area follows and is illustrated in **Exhibit 2.1**. This information was primarily collected from online databases or obtained during field investigations. It should be noted that all streets are under the jurisdiction of the Chicago Department of Transportation (CDOT) unless otherwise noted.

Langley Avenue is a north-south street providing one lane in each direction with parking on both sides of the street. Parking is prohibited on the west side of the street on school days from 7:00 A.M. to 4:30 P.M. Langley Avenue is under all-way stop sign control at its intersections with 105th Place and 106th Street and extends from 105th Place to 111th Street to the south.

Cottage Grove Avenue is a northeast-southwest collector street generally providing one lane in each direction and parking with buffered-bike lanes provided on each side. At select intersections, including 105th Place and 106th Street, turn lanes are provided within the bike lane striping. Grade-separated crossings of the railroad tracks to the west are provided at 105th Street and 107th Street. Cottage Grove Avenue is under the jurisdiction of the Cook County Department of Transportation and Highways (CCDOH) and carries an Average Annual Daily Traffic (AADT) volume of 6,650 vehicles per day, according to the Illinois Department of Transportation (IDOT).

105th Place is an east-west street restricted to one-way eastbound travel. It provides one travel lane with parking provided on both sides of the street, but is restricted on school days from 7:00 A.M. to 4:30 P.M. along the school frontage. It is under all-way stop sign control at its 'T'-intersection with Langley Avenue.

106th Street is an east-west street providing one lane in each direction with parking permitted on both sides of the street except on school days from 7:00 A.M. to 4:30 P.M. along the school frontage. It is under minor-street stop sign control at its intersections with Cottage Grove Avenue and Champlain Avenue and under all-way stop sign control at Langley Avenue.

Champlain Avenue is a north-south street extending from 106th Street to 108th Street and is under stop sign control at each of these intersections. Parking is provided on both sides of the street.

In addition to the street network, a north-south alley is located between Champlain Avenue and Langley Avenue providing access to numerous residential garages. The alley extends through the site to provide access to the Poe Classical parking lot. Approximately 12 perpendicular parking spaces are located along the north-south drive and approximately 14 parking spaces are located in the parking lot north of the school. It should be noted that all intersections provide high-visibility crosswalks for all applicable legs. Furthermore, no sidewalks or crosswalks are provided on the southeast corner of the intersection of Langley Avenue with 106th Street.

2.3 Existing School Characteristics and Drop-off/Pick-Up Operation

The following description of the school and its morning drop-off and afternoon pick-up periods are based on information acquired from school officials, field observations made during the morning and afternoon on October 31, 2018 throughout the study area, and from observations of the Miovision Scout Data Collection Unit videos from October 30, 2018 at each intersection and of the drop-off/pick-up activity. It should be noted that although the observations occurred on Halloween, Poe Classical officials confirmed there were no holiday activities before or after school and would still represent typical school day.

The existing Edgar Allan Poe Classical School serves 209 students Kindergarten through sixth grade. It currently has a total of 20 faculty and staff with an ideal capacity of 240 students (increase of 61 students when compared to existing enrollment). While it is part of the Chicago Public School (CPS) System, Poe Classical is a selective enrollment school with students chosen based on applications and testing. A typical school day is in session from 9:00 A.M. to 4:00 P.M. Buses typically arrive and release students no earlier than 8:40 A.M. (8:55 A.M. during inclement weather). Students are to be dropped off no earlier than 8:40 A.M. (no supervision prior to that time) unless enrolled in the “Before Care” program (provided by Something to Build Upon). This program begins at 7:00 A.M. every day school is in session. In addition, “After Care” is also provided from 4:00 P.M. to 6:00 P.M. every day school is in session (also provided by Something to Build Upon). Overall, approximately 20 to 25 students in the morning and 75 to 100 students in the afternoon participate in the “Before Care”/“After Care” or other extra-curricular school activities.

It is important to note that most, if not all, faculty/staff drive to work and park within the parking lot. Also, only a couple students live in the neighborhood and none of whom walk to school. Bus service is provided by CPS for students within the transportation boundaries of Poe Classical, which include everywhere within the City of Chicago south of 71st Street. In addition, private van transportation is also provided. Overall, school officials estimate that approximately 50 percent of students ride the bus, 20 percent arrive/depart via private vans, and the remaining 30 percent are dropped off/picked up by a parent/guardian. For safety and efficiency, school officials explained that barricades are typically placed at 106th Street to block northbound traffic along Langley Avenue. However, no barricades were observed to be in place on the days of the video data collection or field observations. When the barricades are in place, school officials noted that some vehicles will ignore the barricades and continue northbound along Langley Avenue.

2.3.1 Morning School Drop-Off Period

Starting around 8:30 A.M., multiple full-length school buses park along the north side of 106th Street. The buses unload around 8:40 A.M., some of which only have a small number of students that disembark. After this time, student drop off increases up to the start of school with students proceeding to the playlot on the south side of the school. A loading area is designated for private transportation vans (typically for off-site daycare) near the northwest corner of Langley Avenue's intersection with 106th Street by three traffic cones. Drop-off activity primarily occurs along both sides of Langley Avenue and 106th Street, including along the south and east legs of their intersection with each other. Parents/guardians typically walk their student across the street before dropping them off at the front door or playlot. Once the buses departed from 106th Street, a number of drop offs occurred along this site frontage. Some notable safety issues that were observed include dropping off students on the opposite side of the street, not crossing at crosswalk, and illegal parking. Several vehicles were seen parked where buses and private vans typically park. Others were observed to cross into the opposing lane of traffic to drop their student off on the school-side of the street. This was most notable when northbound traffic on Langley Avenue dropped off students on the west curb-side in front of the street (primarily done outside of the peak period). Activity decreased just after 9:00 A.M., although some drop offs continued until around 9:15 A.M.

No students were observed walking to the school and little to no drop-off activity was observed within the school parking lot. Overall, intersections in the area during the morning drop-off period continued to operate efficiently, although some queuing occurred for westbound traffic at the intersection of Cottage Grove Avenue with 106th Street. It is important to note that most street segments surrounding the school are not wide enough for parking on both sides and two travel lanes. Conflicts between opposing traffic along Langley Avenue and 106th Street result in limited circulation with numerous maneuvers to avoid oncoming traffic were observed. School officials also noted that vehicles will occasionally enter the playlot and, as previously stated, will avoid the barriers meant to restrict certain traffic movements.

2.3.2 Afternoon School Pick-up Period

Prior to 3:45 P.M., parents/guardians were already parked along area streets and full-length buses were located along 106th Street. Leading up to the dismissal, some of the private transportation vans also arrived and parked on Langley Avenue in the northwest corner of its intersection with 106th Street. At one point, a vehicle was parked in the loading area and had to be told to move once the van arrived. Parents/guardians began exiting their vehicle to retrieve their student prior to dismissal.

At 4:00 P.M., students are dismissed and parents/guardians returned to their vehicles with their students. Around 4:05 P.M., the first private van leaves and by 4:10 P.M., the first school bus departed the school. Within five minutes, the last bus departed. After 4:10 P.M., activity decreased significantly and the majority of the remaining pick-up activity occurred along the school frontage on Langley Avenue.

No students were observed to walk home from school. Some parents/guardians were observed to park within vacant spaces within the parking lot while they waited for dismissal. As with the morning peak period, the streets are not wide enough to accommodate two-way traffic and parking on both sides of the street. Conflicts and congestion were compounded by the parallel parking maneuvers on both sides of the streets. Observations showed multiple vehicles reversed into an intersection to avoid sections of Langley Avenue and 106th Street or simply waited for the vehicles in front of them to move. Back-ups occasionally extended into the intersection of Langley Avenue with 106th Street. Given the minimal outbound trips from the parking lot at 105th Place, exiting vehicles operate efficiently.

2.4 Traffic Count Data

In order to determine existing conditions in the area, traffic counts were conducted at the following study area intersections to capture vehicle, pedestrian, and bicycle data using Miovision Scout Data Collection Units.

- 105th Place with Cottage Grove Avenue
- 105th Place with North Poe Parking Lot Access Drive/North-South Alley
- 105th Place with Langley Avenue
- 106th Street with Cottage Grove Avenue
- 106th Street with Champlain Avenue
- 106th Street with South Poe Parking Lot Access Drive/North-South Alley
- 106th Street with Langley Avenue

Based on input from the PBCC, counts were conducted on Tuesday, October 30, 2018 to capture the morning peak hour (7:00 A.M. to 10:00 A.M.), the afternoon school dismissal period (2:00 P.M. to 5:00 P.M.), and the evening peak periods (5:00 P.M. to 9:00 P.M.). In addition, a Miovision Scout Unit was also located near the drop-off/pick-up area on Langley Avenue for additional counts and video observations.

The results indicate that overall peak traffic conditions of the street network take place from 8:15 A.M. to 9:15 A.M. during the morning peak hour, 3:15 P.M. to 4:15 P.M. during the afternoon school dismissal peak period, and 5:00 P.M. to 6:00 P.M. during the evening peak hour. These volumes demonstrate the overall demand within the study area. The existing weekday morning, afternoon school dismissal, and evening peak hour traffic volumes are illustrated in **Exhibit 2.2** and pedestrian volumes are illustrated in **Exhibit 2.3**. It should be noted that bicycle traffic at all intersections was minimal within the study area (less than five) and therefore not included in the exhibits.

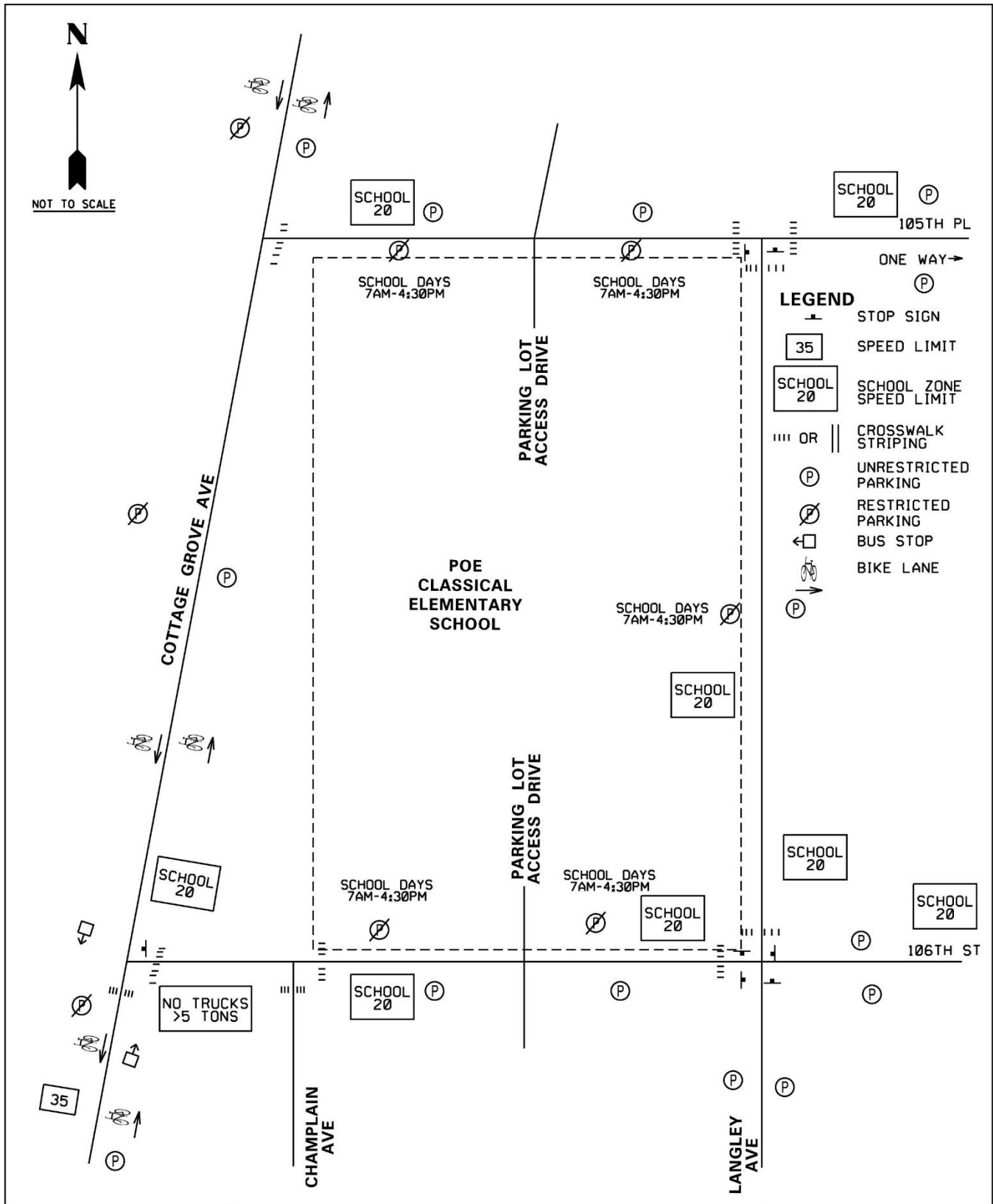


Exhibit 2.1 – Existing Conditions

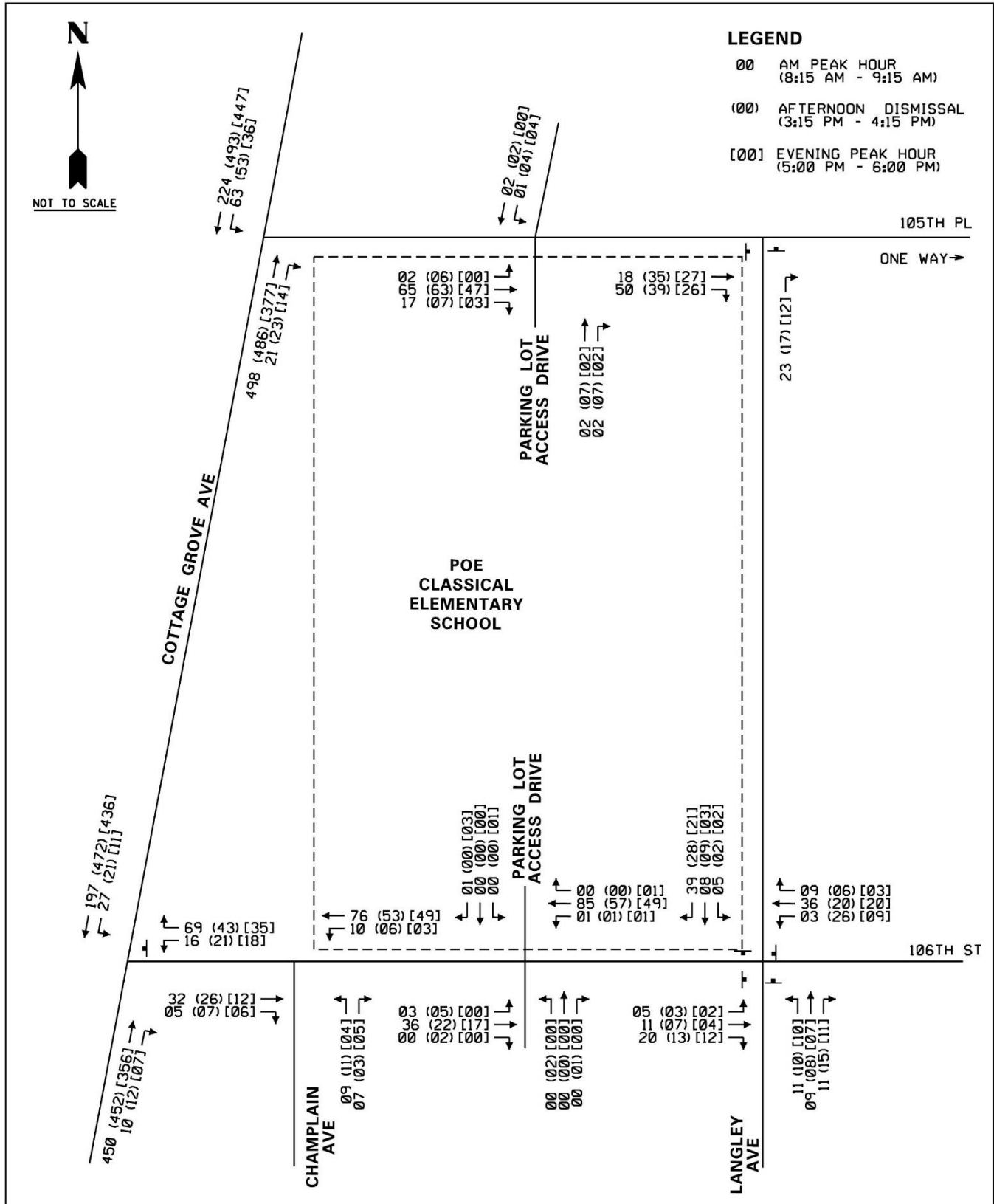


Exhibit 2.2 – Existing Traffic Volumes

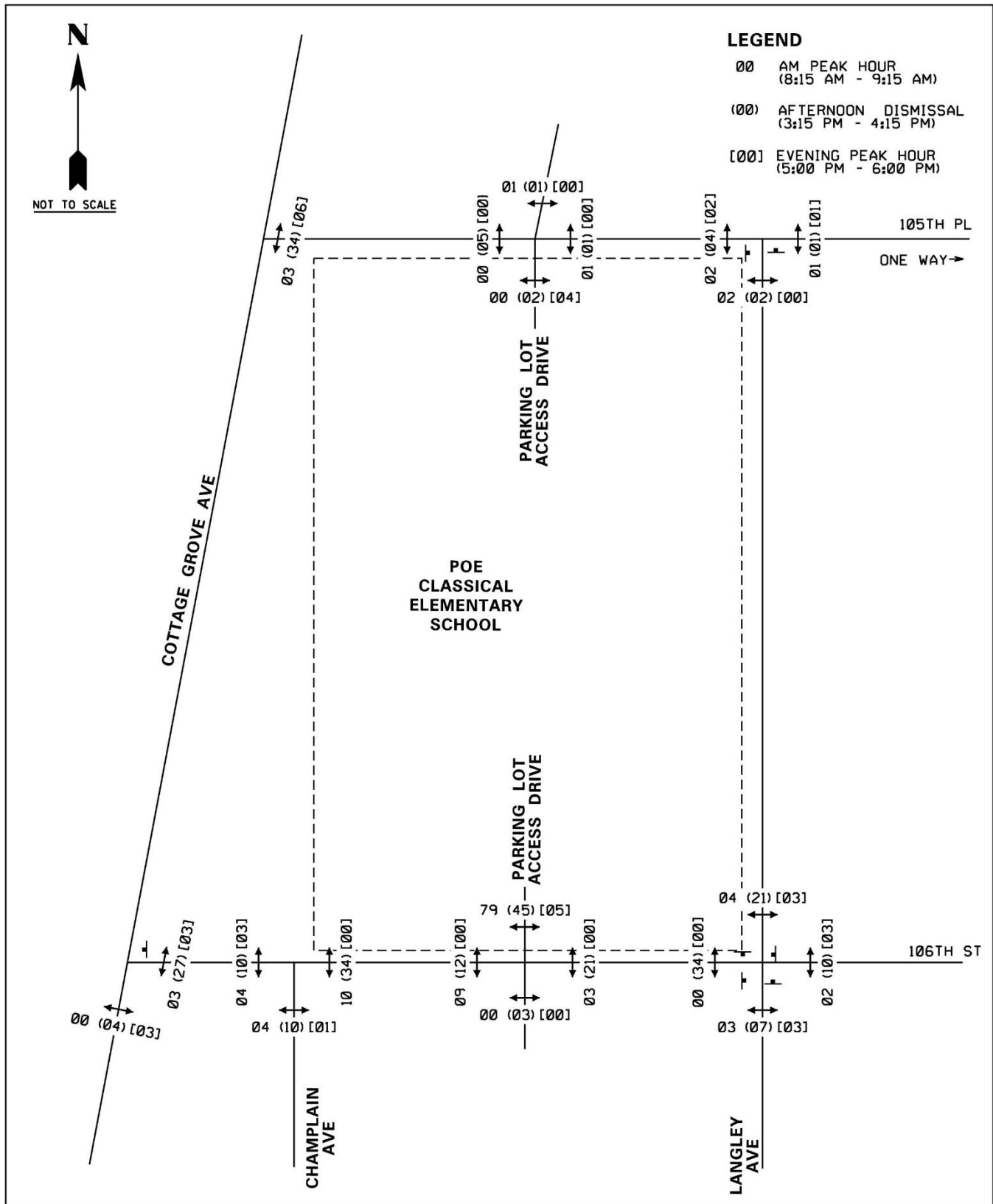


Exhibit 2.3 – Existing Pedestrian Volumes

3 – PROPOSED EXPANSION/RENOVATION AND PROJECTED CONDITIONS

This section of the report outlines the proposed expansion/renovation, summarizes site-specific traffic characteristics, and identifies other characteristics impacting the analysis of future conditions.

3.1 Description and Characteristics of the Proposed Expansion/Renovation

The expansion/renovation will allow for an increased ideal capacity of 30 students for a total of 270 students, allowing Poe Classical to serve the seventh and eighth grades. With the increase, faculty/staff will increase by approximately ten people to provide a total of 30 employees. As proposed, an 18,000 square-foot, two-story annex will be provided in the southeast corner of the site primarily providing a new gymnasium with stage and lunchroom/multi-purpose room with kitchen and serving space. The west side of the site will be modified to expand the existing artificial turf field as well as add a new playlot/paved plaza, landscaping, and stormwater detention. It should be noted that according to the PBCC, the land west of the existing turf field is currently the former Champlain Avenue right-of-way, which does not appear to have been officially vacated. Therefore, this land would need to be obtained prior to the expansion. The remaining renovations/improvements, which will occur within the existing building, will include the following:

- Convert existing gymnasium/auditorium into two typical classrooms.
- Combine existing library and computer room into a single media room.
- Renovate existing classrooms and offices.
- Convert existing kitchen to a faculty lounge.
- Provide additional student lockers, office space, storage, and restrooms.

With these changes, the parking lot access drive on the south side of the school will be relocated to the west by approximately 15 feet. This will result in an increase in the approach offset between the alley and access drive to be approximately 25 feet. The north access drive and the on-site parking will not be impacted (26 parking spaces will remain). Since the proposed annex will occupy the playlot currently utilized during the arrival and departure periods, students will now congregate at the proposed playlot immediately west. Parents should continue to walk their students to and from the playlot. No changes are anticipated to the vehicular drop-off/pick-up patterns with the increase in students.

3.2 Trip Generation, Distribution and Assignment

In order to more accurately represent the impact of the school's proposed increase in students, Knight utilized the existing traffic counts and video (recorded on Tuesday, October 30, 2018) to estimate the increase in future traffic volumes. To do so, the traffic counts were analyzed and manual counts of drop-off/pick-up activity and other school-related traffic were conducted using the Miovision Scout Data Collection Unit videos during the morning drop-off and afternoon pick-up periods. This data is summarized in **Table 3.1**. The vehicle trip generation rate per student and resulting increase in vehicle trips are also shown in this table. It should be noted that in order to provide a conservative analysis and account for any school-related trips during the peak hours that were not captured by the video observations, the total observed trips were increased by ten percent. Furthermore, these trip generation rates assume each student that is dropped off/picked up accounts for one inbound and one outbound trip.

To determine school traffic during the evening peak hour, time-of-day distribution data from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition, was utilized. The manual provides hourly percentages of weekday daily traffic per one hour period for elementary schools. A ratio of the evening peak hour (approximately 5.9 percent of a school's daily traffic) to the morning peak hour percentages along with the observed school-related traffic determined the total evening peak hour traffic generated by the school.

Table 3.1: Existing and Projected School Trip Generation

| | Morning Arrival Peak (8:15 to 9:15 A.M.) | | | Afternoon Dismissal Peak (3:15-4:15 P.M.) | | | Evening Peak (5:00-6:00 P.M.) | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------|------------|----------------------------------------------|-----------------|------------|----------------------------------|-----------|-----------|
| | In | Out | Total | In | Out | Total | In | Out | Total |
| Observed Existing Drop-off/Pick-up Activity (209 students) | 100 ¹ | -- | -- | -- | 86 ¹ | -- | 17 ² | -- | -- |
| 10% Increase ³ | 10 | -- | -- | -- | 9 | -- | 2 | -- | -- |
| Estimated Total Existing School-Related Trips | 110 | 110 | 220 | 95 | 95 | 190 | 19 | 19 | 38 |
| Vehicle Trips per Student | 0.53 | 0.53 | 1.05 | 0.45 | 0.45 | 0.90 | 0.09 | 0.09 | 0.18 |
| Proposed Trip Increase (61 Additional Students ⁴) | 32 | 32 | 64 | 28 | 28 | 56 | 6 | 6 | 12 |
| Total Estimated Trip Generation | 142 | 142 | 284 | 123 | 123 | 246 | 25 | 25 | 50 |
| 1 – Based on manual counts of Miovision Scout Data Collection Unit videos during the morning drop-off and afternoon pick-up periods. 2 – Based on time-of-day distribution data for ITE Land Use Code 520 (Elementary School) relative to the morning arrival peak period. 3 – Percent increase provided to account for any vehicles not captured during the manual count of school-related traffic. 4 – Assuming 270-student Ideal Capacity. | | | | | | | | | |

As seen from the table, over 50 percent of the students are dropped off in the morning while about 45 percent of the total student population is picked up in the evening. This translates to approximately 1.05 vehicle trips per student during the morning arrival peak hour while the afternoon dismissal peak hour generates approximately 0.90 trips per student. With the increased capacity (approximately 61 additional students), the school would generate 32 and 28 additional drop-off/pick-up trips during the morning arrival and afternoon dismissal peak hours, respectively.

Since there will be limited modifications to the vehicular drop-off/pick-up operations, the existing traffic to and from the school was not modified. The existing routes of arrival and departure from the school within the study area were utilized to determine the trip distribution for the projected trips, which can be seen in **Exhibit 3.1**. Trips were then assigned to the study intersections in accordance with the trip distribution, which are shown in **Exhibit 3.2**.

3.3 Projected Traffic Volumes

Per standard practice, background traffic projections were developed for a “build plus five” design horizon year. A growth factor of 0.5 percent per year was applied to the existing traffic volumes along the collector street within the study area. Therefore, the existing traffic volumes were increased by a total of 3.0 percent at the intersections of Cottage Grove Avenue with 105th Place and 106th Street and added to the additional school trips to determine the Year 2024 projected volumes, which are shown in **Exhibit 3.3**. Pedestrian volumes surrounding the school were also increased by 20 percent for the analysis.

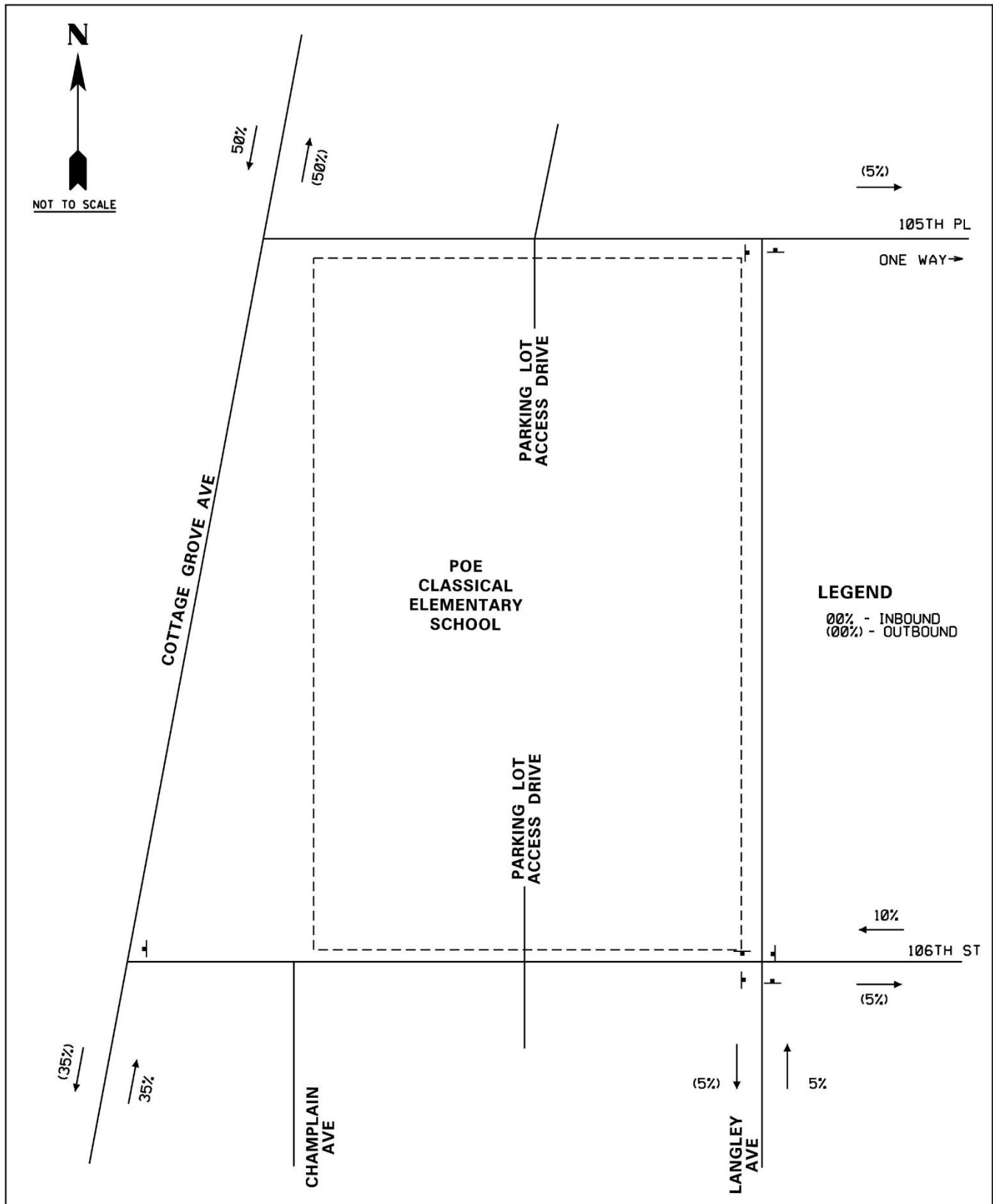


Exhibit 3.1 – Trip Distribution

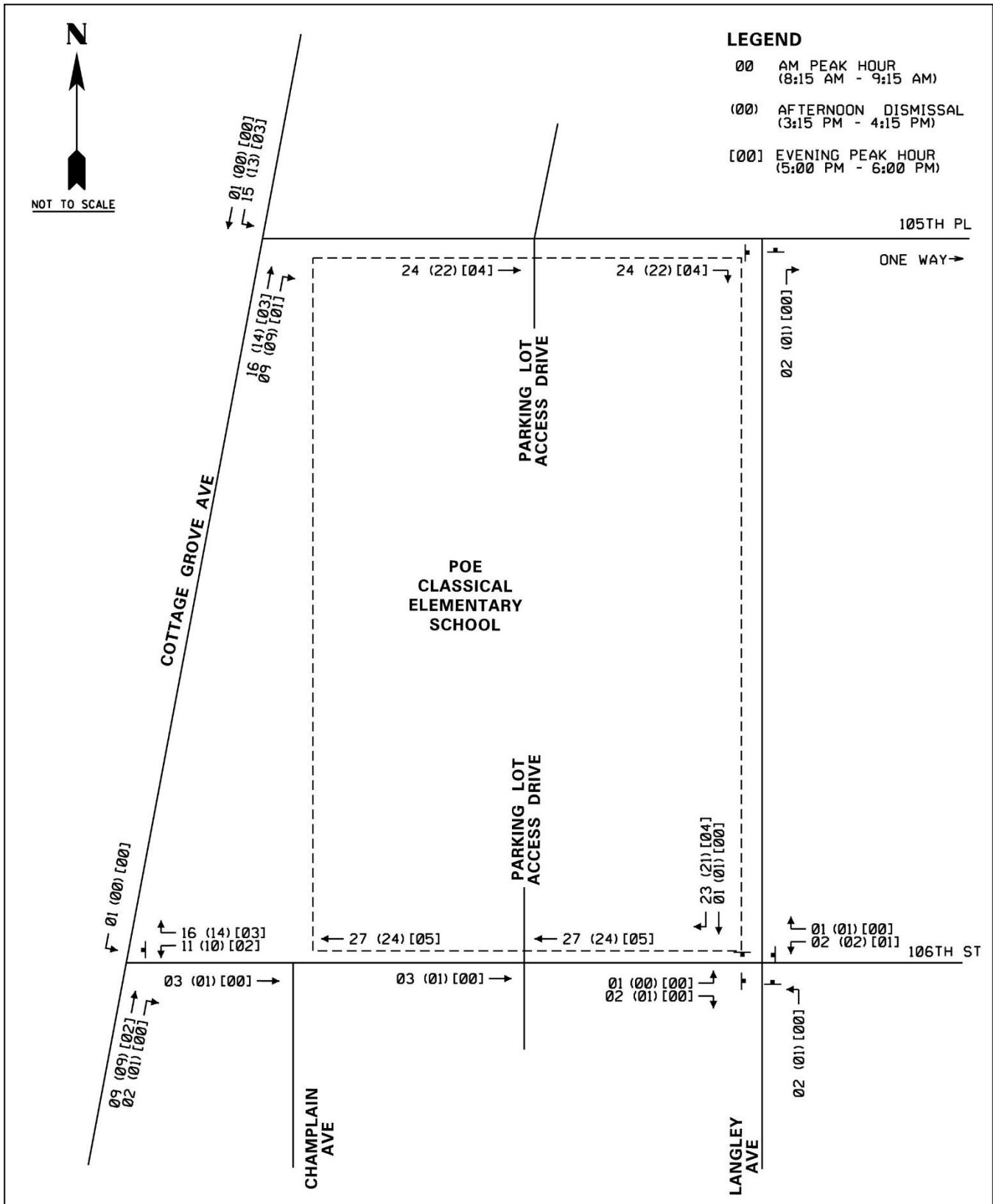


Exhibit 3.2 – Trip Assignment

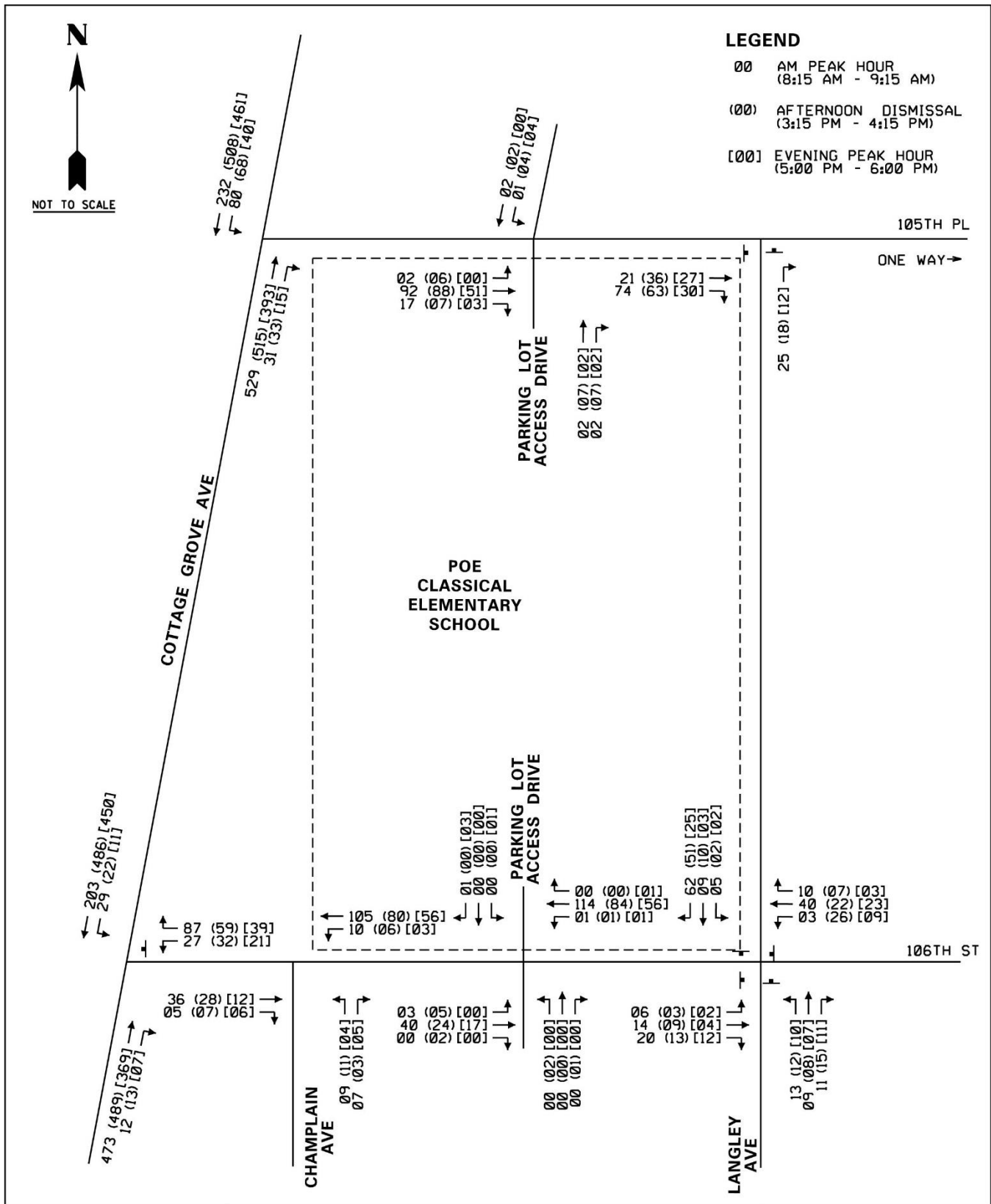


Exhibit 3.3 – Projected Volumes

4 – TRAFFIC ANALYSIS AND RECOMMENDATIONS

This section of the report summarizes the process and results of the traffic analysis for the existing and projected conditions during the morning, afternoon dismissal, and evening peak hours. It will also provide recommendations to mitigate/improve upon conditions in the future.

4.1 Analysis Procedure

Traffic volume data was analyzed with the Synchro/SimTraffic 9.0 traffic capacity analysis/simulation software in order to determine the quality of operation in the existing and proposed street networks. Operation is characterized according to a Level of Service (LOS), which is based on the control delay of each approach. The LOS grades shown below, which are provided in the Transportation Research Board's *Highway Capacity Manual (HCM)*, quantify and categorize a driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 4.1**. **Table 4.2** presents the range of stop sign control delay for each LOS rating as detailed in the *HCM*. Based on the *HCM* methodologies, capacity results for the existing intersections were identified for each of the study intersections and are summarized in **Table 4.3** below. **Table 4.4** summarizes the results for the projected conditions.

Table 4.1: Level of Service Descriptions

| Level of Service | Description |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| A | Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream. |
| B | Minor control delay at intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream. |
| C | Moderate control delay; movement within traffic stream more restricted than LOS B; formation of queues contributes to lower average travel speeds. |
| D | Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease. |
| E | High control delay; average travel speed between 30 to 40 percent of free flow speed. |
| F | Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flows. |

Table 4.2: Level of Service Grading Criteria for Unsignalized Intersections

| Level of Service | Control Delay per Vehicle (s/veh) |
|------------------|-----------------------------------|
| A | 0 – 10 |
| B | >10 – 20 |
| C | >20 – 35 |
| D | >35 – 55 |
| E | >55 – 80 |
| F ¹ | >80 |

Based on criteria from the Transportation Research Board's *Highway Capacity Manual (HCM)*

¹All movements with a Volume to Capacity (v/c) ratio greater than 1.0 receive a rating of LOS F.

Table 4.3: Results of the Capacity Analyses – Existing Conditions

| | Morning Arrival Peak (8:15 to 9:15 A.M.) | | Afternoon Dismissal Peak (3:15-4:15 P.M.) | | Evening Peak (5:00-6:00 P.M.) | |
|-----------------------------------------------------------------------------------------------|---------------------------------------------|-------|----------------------------------------------|-------|----------------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Cottage Grove Avenue with 106th Street (One-Way Stop) | | | | | | |
| Westbound Approach | B | 14.2 | C | 17.1 | B | 13.4 |
| Southbound Left Turn | A | 8.6 | A | 8.6 | A | 8.1 |
| Cottage Grove Avenue with 105th Place (Uncontrolled) | | | | | | |
| Southbound Left Turn | A | 0.8 | A | 0.7 | A | 0.4 |
| Langley Avenue with 105th Place (All-Way Stop) | | | | | | |
| Overall | A | 6.8 | A | 7.1 | A | 6.8 |
| Eastbound Approach | A | 6.9 | A | 7.2 | A | 6.9 |
| Northbound Approach | A | 6.6 | A | 6.6 | A | 6.5 |
| Langley Avenue with 106th Street (All-Way Stop) | | | | | | |
| Overall | A | 7.4 | A | 7.5 | A | 7.1 |
| Eastbound Approach | A | 7.2 | A | 7.1 | A | 6.9 |
| Westbound Approach | A | 7.6 | A | 7.8 | A | 7.5 |
| Northbound Approach | A | 7.4 | A | 7.4 | A | 7.2 |
| Southbound Approach | A | 7.2 | A | 7.3 | A | 6.8 |
| 106th Street with Champlain Avenue (One-Way Stop) | | | | | | |
| Northbound Approach | A | 9.4 | A | 9.5 | A | 8.7 |
| 105th Place with Parking Lot Access Drive/North-South Alley (Two-Way Stop) | | | | | | |
| Northbound Approach | A | 9.2 | A | 9.4 | A | 9.0 |
| Southbound Approach | A | 9.5 | A | 9.7 | A | 8.9 |
| 106th Street with Parking Lot Access Drive/North-South Alley (Two-Way Stop) | | | | | | |
| Northbound Approach | N/A | N/A | A | 9.5 | N/A | N/A |
| Southbound Approach | A | 9.6 | N/A | N/A | A | 8.7 |

Table 4.4: Results of the Capacity Analyses – Projected Conditions

| | Morning Arrival Peak (8:15 to 9:15 A.M.) | | Afternoon Dismissal Peak (3:15-4:15 P.M.) | | Evening Peak (5:00-6:00 P.M.) | |
|-----------------------------------------------------------------------------------------------|---------------------------------------------|-------|----------------------------------------------|-------|----------------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Cottage Grove Avenue with 106th Street (One-Way Stop) | | | | | | |
| Westbound Approach | C | 16.1 | C | 20.0 | B | 13.9 |
| Southbound Left Turn | A | 8.7 | A | 8.8 | A | 8.1 |
| Cottage Grove Avenue with 105th Place (Uncontrolled) | | | | | | |
| Southbound Left Turn | A | 1.2 | A | 1.0 | A | 0.4 |
| Langley Avenue with 105th Place (All-Way Stop) | | | | | | |
| Overall | A | 6.9 | A | 7.2 | A | 6.8 |
| Eastbound Approach | A | 7.0 | A | 7.3 | A | 6.9 |
| Northbound Approach | A | 6.6 | A | 6.7 | A | 6.5 |
| Langley Avenue with 106th Street (All-Way Stop) | | | | | | |
| Overall | A | 7.5 | A | 7.6 | A | 7.2 |
| Eastbound Approach | A | 7.4 | A | 7.3 | A | 6.9 |
| Westbound Approach | A | 7.7 | A | 8.0 | A | 7.5 |
| Northbound Approach | A | 7.5 | A | 7.6 | A | 7.2 |
| Southbound Approach | A | 7.4 | A | 7.5 | A | 6.8 |
| 106th Street with Champlain Avenue (One-Way Stop) | | | | | | |
| Northbound Approach | A | 9.6 | A | 9.9 | A | 8.7 |
| 105th Place with Parking Lot Access Drive/North-South Alley (Two-Way Stop) | | | | | | |
| Northbound Approach | A | 9.4 | A | 9.7 | A | 9.0 |
| Southbound Approach | A | 9.8 | B | 10.0 | A | 8.9 |
| 106th Street with Parking Lot Access Drive/North-South Alley (Two-Way Stop) | | | | | | |
| Northbound Approach | N/A | N/A | A | 9.8 | N/A | N/A |
| Southbound Approach | B | 10.0 | N/A | N/A | A | 8.7 |

4.2 Discussion of Existing and Projected Operation

The results of the analysis show that all intersections operate efficiently with acceptable delays and levels of service during each peak hour under existing conditions. A significant portion of the traffic on these streets is related to the school, and therefore peak within a 20 to 30 minute period surrounding the start or end of the school day. During these times, access to Cottage Grove Avenue via 106th Street continues to operate at acceptable levels of service with occasional queuing, particularly when the buses are released. The intersections also experience additional delay due to the limited width of Langley Avenue and 106th Street. As previously stated, the streets are not wide enough to adequately accommodate two-way circulation and parking on both sides of the street. This results in conflicts with opposing traffic which cause delays and back-ups, particularly near the intersection of Langley Avenue with 106th Street. These delays and safety issues were most notable where vehicles are continuously utilizing the curbside and maneuvering in and out of the travel lane.

Under projected conditions, all intersections continue to operate at adequate levels of service with minimal increases in delay. The additional traffic to and from the school will be accommodated by the existing infrastructure and no capacity improvements are required at this time. Given the minimal traffic on the south parking lot access drive and alley at 106th Street, the additional approach offset created with the expansion/renovation will not significantly impact the operation of the intersection. This relocation will also not result in any loss of on-street parking along 106th Street. Furthermore, the increase in faculty/staff and students will not significantly increase the use of the parking lot access drives and therefore, will continue to operate at acceptable levels of service. Consideration should be given to providing sidewalk along the southeast corner of the intersection of Langley Avenue with 106th Street. A number of parents/guardians elected to park along these sides of the streets, which required students and parents to walk in the street. High-visibility crosswalks should also be provided at the applicable legs of the intersection if a sidewalk is introduced.

4.3 Future School Drop-Off/Pick-Up Procedures

With the proposed annex expansion/renovation, the school will need to slightly modify its existing arrival/departure procedures to determine where students will enter and exit the school since the proposed annex will occupy the existing playlot. In the future, students should congregate within the proposed playlot which will be relocated to the west of the annex. However, this should not significantly impact vehicular drop-off/pick-up operation. To improve/mitigate drop-off and pick-up activity under existing and projected conditions, the following recommendations are made. In addition, **Section 4.3.1** discusses the potential for additional one-way restrictions in the area.

- Parents/guardians should be instructed to continue to drop-off/pick-up along Langley Avenue and walk their student to the front door or playlot. They should also be encouraged to avoid parking within the buses and van loading zones until those vehicles have departed, use the crosswalks at all times, and to limit the amount of time parked along the school curbside during the drop-off/pick-up period.
- The parking lot should be closed to drop-off/pick-up traffic in the morning and afternoon. While access to and from the parking lot is not currently a significant issue, the increase in drop-off/pick-up traffic may encourage more traffic to enter the parking lot.
- Cones should be placed to restrict vehicles from entering the playlot or turning around using the driveway. This access drive will be the primary pedestrian access to the playlot with the expansion/renovation.

- The existing cones designating the private van loading area should be placed within the street to more effectively reserve these spaces. A staff member may be required to remove the cones from the street once the vans arrive/depart.

4.3.1 One-Way Restrictions

Due to the conflicts resulting from the width of the area streets, consideration should be given to permanently restricting Langley Avenue and 106th Street to one-way travel only. Langley Avenue would be restricted to one-way southbound travel only between 105th Place and 106th Street while 106th Street would be restricted to one-way westbound travel only between Cottage Grove Avenue and Langley Avenue. One-way travel would permit for one clockwise travel lane around the school with parking on both sides of the street. The extents of these restrictions were chosen to limit the impact on the surrounding neighborhood traffic by continuing to allow vehicles access to 106th Street, Corliss Avenue, and Maryland Avenue from the south on Langley Avenue. Curb extensions (bump-outs) at the intersection of Langley Avenue with 106th Street may be added to better inform drivers of the change from one-way to two-way traffic flow as well as further discourage drivers from going the wrong way and improve pedestrian visibility. Additional study may be required to determine the impact on the rest of the neighborhood as well as the commercial/industrial developments in the area.

Currently, a significant portion of the traffic during the peak periods is attributed to the school. All intersections and approaches would benefit from one-way operation at these intersections, particularly at the intersection of Cottage Grove Avenue with 106th Street where outbound traffic would no longer conflict with inbound turning movements. With these restrictions, all school traffic would be rerouted in a clockwise approach around the school, eliminating conflicting opposing traffic to improve circulation. The limited extents of the restrictions would also continue to efficiently accommodate drop-off/pick-up activity along the east and south legs of the intersection of Langley Avenue with 106th Street.

Should permanent one-way restrictions not be implemented (or prior to permanent installation), consideration should be given to limiting Langley Avenue and 106th Street to one-way travel only during the school arrival and dismissal peak periods. Signage, cones, and other barriers deployed by staff at the following locations would significantly improve circulation during the drop-off/pick-up periods. Staff members may also need to be positioned around the school near these locations.

- Close the receiving lane for the east leg of 106th Street at Cottage Grove Avenue.
- Restrict the northbound right turn movement at the intersection of 106th Street with Champlain Avenue.
- Close the receiving lane for the north leg of Langley Avenue at 106th Street.

Given the limited time the school's drop-off/pick-up activity impacts these streets, temporary restrictions would maintain existing operation on area streets thought the rest of the day, when the street adequately accommodates area traffic.

5 – RECOMMENDATIONS AND CONCLUSIONS

Based on Knight's review of the proposed annex expansion/renovations for Poe Classical Elementary School and the existing and future traffic conditions in the area, the following conclusions and recommendations are provided.

- The existing intersections operate at acceptable Levels of Service (LOS) and adequately accommodate the existing traffic in the area.
- The annex expansion/renovations will increase the school's ideal capacity from 240 to 270 students, allowing the school to serve approximately 61 additional students compared to its current enrollment of 209 students.
- Based on observations/counts of existing drop-off and pick-up operation, approximately 1.05 vehicle trips per student are made during the morning peak hour and 0.90 trips per student during the afternoon peak hour. These rates account for one inbound trip and one outbound trip per student.
- The proposed increase of 61 students would result in approximately 32 additional drop-off trips during the morning peak hour and 28 additional pick-up trips during the afternoon peak hour.
- Under projected conditions, all intersections would continue to operate at acceptable LOS with minimal increases in delay. Therefore, no capacity improvements/modifications are required at this time.
- In order to improve pedestrian safety in the area, consideration should be given to the installation of sidewalk and high-visibility crosswalks for the south and east legs of the intersection of Langley Avenue with 106th Street.
- Recommendations were made in regards to the existing and projected drop-off/pick-up operation as specified in **Section 4.3** of the report. This section identifies the possibility for temporary or permanent one-way restrictions of Langley Avenue and 106th Street along the school frontage to improve operations and safety.

EDGAR ALLAN POE CLASSICAL ELEMENTARY SCHOOL PROPOSED ANNEX EXPANSION/RENOVATION

Traffic Impact Study Appendix

TRAFFIC COUNT DATA

Cottage Grove Avenue with 106th Street

Cottage Grove Avenue with 105th Place

Langley Avenue with 105th Place

Langley Avenue with 106th Street

106th Street with Champlain Avenue

105th Place with Parking Lot Access Drive/Alley

106th Street with Parking Lot Access Drive/Alley

HIGHWAY CAPACITY ANALYSIS REPORTS

Existing Morning Peak Hour

Existing Afternoon Dismissal Peak Hour

Existing Evening Peak Hour

Projected Morning Peak Hour

Projected Afternoon Dismissal Peak Hour

Projected Evening Peak Hour

EDGAR ALLAN POE CLASSICAL ELEMENTARY SCHOOL PROPOSED ANNEX EXPANSION/RENOVATION

Traffic Impact Study Appendix

TRAFFIC COUNT DATA

Cottage Grove Avenue with 106th Street

Cottage Grove Avenue with 105th Place

Langley Avenue with 105th Place

Langley Avenue with 106th Street

106th Street with Champlain Avenue

105th Place with Parking Lot Access Drive/Alley

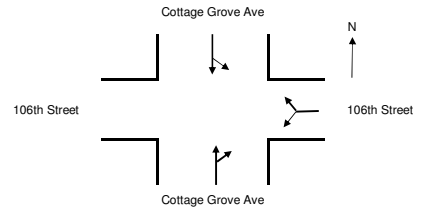
106th Street with Parking Lot Access Drive/Alley

Cottage Grove Ave with 106th Street AM

Intersection: Cottage Grove Ave with 106th Street
Traffic Count Date: 10/30/2018
Count Time: AM Count (12:00am-12:00pm)
North-South Street: Cottage Grove Ave
East-West Street: 106th Street
PEAK HOUR: 08:15 - 09:15

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram
Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

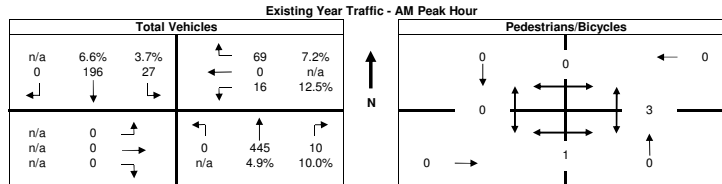


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|-------------------|------|-------|------------|------|-------------------|------|-------|---------|----------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int | Peak 15- |
| Start | End | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Cottage Grove Ave | | | SOUTHBOUND | | Cottage Grove Ave | | | Vehicle | min |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Total | Int PHF |
| 0:00 | 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:15 | 1:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:30 | 1:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:45 | 1:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:00 | 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:15 | 2:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:30 | 2:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:45 | 2:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:00 | 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:15 | 3:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:30 | 3:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:45 | 3:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:00 | 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:15 | 4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:30 | 4:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:45 | 4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:00 | 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:15 | 5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:30 | 5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:45 | 5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:00 | 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:15 | 6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:30 | 6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:45 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:00 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:15 | 7:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 1 | 115 | 0 | 0 | 1 | 0 | 34 | 0 | 0 | 0 | 157 | 0.25 |
| 6:30 | 7:30 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 15 | 1 | 1 | 1 | 270 | 0 | 0 | 1 | 1 | 77 | 0 | 1 | 0 | 367 | 0.44 |
| 6:45 | 7:45 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 22 | 2 | 2 | 1 | 430 | 3 | 0 | 1 | 5 | 141 | 0 | 1 | 0 | 610 | 0.63 |
| 7:00 | 8:00 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 32 | 4 | 4 | 1 | 614 | 5 | 0 | 1 | 7 | 232 | 0 | 1 | 0 | 909 | 0.76 |
| 7:15 | 8:15 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 38 | 4 | 4 | 0 | 656 | 5 | 0 | 0 | 9 | 258 | 0 | 1 | 0 | 990 | 0.83 |
| 7:30 | 8:30 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 41 | 4 | 4 | 0 | 625 | 5 | 1 | 0 | 15 | 266 | 0 | 0 | 0 | 978 | 0.82 |
| 7:45 | 8:45 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 48 | 4 | 4 | 0 | 594 | 5 | 1 | 0 | 14 | 266 | 0 | 0 | 0 | 951 | 0.80 |
| 8:00 | 9:00 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 63 | 3 | 3 | 0 | 501 | 9 | 1 | 0 | 25 | 213 | 0 | 0 | 0 | 829 | 0.87 |
| 8:15 | 9:15 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 69 | 3 | 3 | 0 | 445 | 10 | 1 | 0 | 27 | 196 | 0 | 0 | 0 | 763 | 0.88 |
| 8:30 | 9:30 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 60 | 4 | 4 | 0 | 393 | 11 | 2 | 0 | 20 | 184 | 0 | 0 | 0 | 684 | 0.79 |
| 8:45 | 9:45 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 49 | 3 | 3 | 0 | 336 | 10 | 2 | 0 | 17 | 167 | 0 | 0 | 0 | 593 | 0.84 |
| 9:00 | 10:00 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 28 | 2 | 2 | 0 | 330 | 5 | 2 | 0 | 5 | 177 | 0 | 0 | 0 | 556 | 0.81 |
| 9:15 | 10:15 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 10 | 2 | 2 | 0 | 229 | 4 | 2 | 0 | 1 | 134 | 0 | 0 | 0 | 384 | 0.69 |
| 9:30 | 10:30 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 7 | 0 | 0 | 0 | 157 | 3 | 0 | 0 | 1 | 95 | 0 | 0 | 0 | 285 | 0.47 |
| 9:45 | 10:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 85 | 1 | 0 | 0 | 1 | 48 | 0 | 0 | 0 | 140 | 0.25 |
| 10:00 | 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:15 | 11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:30 | 11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:45 | 11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:00 | 12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:15 | 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:30 | 12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:45 | 12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

PEAK HOUR INFORMATION

Time Interval: 08:15 - 09:15
Int Peak 1hr Vol: 763
Int Peak 15min Vol: 216
Int PHF: 0.883

| Existing Year Traffic - AM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-------|--------------|-------|-------|-----------|-------|------|--------------|------|------|------------|------|-------|-------------------|------|-------|------------|-------|-------|-------------------|--|--|---------|
| From West | | | | | | From East | | | | | | From South | | | | | | From North | | | | | | Int |
| EASTBOUND | | | 106th Street | | | WESTBOUND | | | 106th Street | | | NORTHBOUND | | | Cottage Grove Ave | | | SOUTHBOUND | | | Cottage Grove Ave | | | Vehicle |
| Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Total | | | | |
| 0 | 0 | 0 | 0 | 0 | 16 | 0 | 69 | 3 | 0 | 0 | 445 | 10 | 1 | 0 | 27 | 196 | 0 | 0 | 0 | 763 | | | | |
| 0 | 0 | 0 | -- | -- | 2 | 0 | 5 | -- | -- | 0 | 22 | 1 | -- | -- | 1 | 13 | 0 | -- | -- | 44 | | | | |
| n/a | n/a | n/a | -- | -- | 12.5% | n/a | 7.2% | -- | -- | n/a | 4.9% | 10.0% | -- | -- | 3.7% | 6.6% | n/a | -- | -- | 5.8% | | | | |



Cottage Grove Ave with 106th Street

Afternoon Dismissal

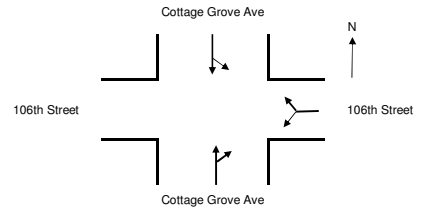
Intersection: Cottage Grove Ave with 106th Street
 Traffic Count Date: 10/30/2018
 Count Time: PM Count (12:00pm-12:00am)
 North-South Street: Cottage Grove Ave
 East-West Street: 106th Street

PEAK HOUR: 15:15 - 16:15

Weather: Fair
 Day of Week: Tuesday
 Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

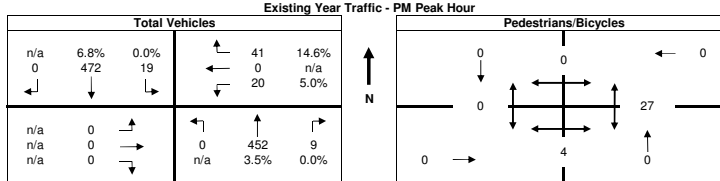


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|-------------------|------|-------|------------|------|-------------------|------|-------|-------------------|-------------|---------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF |
| Interval: | 1:00 | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Cottage Grove Ave | | | SOUTHBOUND | | Cottage Grove Ave | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:15 | 14:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 71 | 0 | 0 | 0 | 2 | 52 | 0 | 0 | 0 | | | |
| 13:30 | 14:30 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 6 | 2 | 0 | 0 | 170 | 0 | 0 | 0 | 4 | 108 | 0 | 0 | 0 | | | |
| 13:45 | 14:45 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 13 | 4 | 0 | 0 | 270 | 1 | 0 | 1 | 9 | 186 | 0 | 0 | 0 | | | |
| 14:00 | 15:00 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 16 | 4 | 0 | 0 | 350 | 2 | 0 | 1 | 12 | 261 | 0 | 0 | 0 | | | |
| 14:15 | 15:15 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 5 | 1 | 0 | 373 | 3 | 0 | 1 | 14 | 287 | 0 | 0 | 0 | | | |
| 14:30 | 15:30 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 15 | 9 | 1 | 0 | 379 | 3 | 0 | 1 | 15 | 342 | 0 | 0 | 0 | | | |
| 14:45 | 15:45 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 17 | 9 | 1 | 0 | 411 | 6 | 3 | 0 | 13 | 370 | 0 | 0 | 0 | | | |
| 15:00 | 16:00 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 18 | 12 | 1 | 0 | 441 | 9 | 4 | 0 | 17 | 427 | 0 | 0 | 0 | | | |
| 15:15 | 16:15 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 41 | 27 | 0 | 0 | 452 | 9 | 4 | 0 | 19 | 472 | 0 | 0 | 0 | | | |
| 15:30 | 16:30 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 54 | 23 | 0 | 0 | 435 | 9 | 4 | 0 | 22 | 470 | 0 | 0 | 0 | | | |
| 15:45 | 16:45 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 53 | 21 | 0 | 0 | 402 | 5 | 3 | 1 | 21 | 469 | 0 | 1 | 0 | | | |
| 16:00 | 17:00 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 54 | 19 | 0 | 0 | 349 | 1 | 4 | 1 | 21 | 443 | 0 | 3 | 0 | | | |
| 16:15 | 17:15 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 34 | 3 | 0 | 0 | 341 | 5 | 5 | 1 | 20 | 435 | 0 | 3 | 0 | | | |
| 16:30 | 17:30 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 32 | 2 | 0 | 0 | 347 | 5 | 6 | 1 | 17 | 436 | 0 | 3 | 0 | | | |
| 16:45 | 17:45 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 35 | 4 | 0 | 0 | 317 | 7 | 4 | 0 | 16 | 438 | 0 | 2 | 0 | | | |
| 17:00 | 18:00 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 32 | 3 | 0 | 0 | 356 | 7 | 2 | 1 | 11 | 436 | 0 | 1 | 0 | | | |
| 17:15 | 18:15 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 32 | 3 | 0 | 0 | 331 | 2 | 1 | 1 | 8 | 409 | 0 | 1 | 0 | | | |
| 17:30 | 18:30 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 23 | 2 | 0 | 0 | 312 | 2 | 0 | 1 | 7 | 389 | 0 | 1 | 0 | | | |
| 17:45 | 18:45 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 18 | 1 | 0 | 0 | 311 | 1 | 0 | 1 | 9 | 373 | 0 | 1 | 0 | | | |
| 18:00 | 19:00 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 19 | 1 | 0 | 0 | 277 | 3 | 0 | 0 | 8 | 327 | 0 | 0 | 0 | | | |
| 18:15 | 19:15 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 14 | 3 | 0 | 0 | 279 | 4 | 0 | 0 | 7 | 285 | 0 | 0 | 1 | | | |
| 18:30 | 19:30 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 11 | 3 | 0 | 0 | 249 | 5 | 0 | 0 | 7 | 238 | 0 | 0 | 1 | | | |
| 18:45 | 19:45 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 3 | 0 | 0 | 225 | 5 | 0 | 0 | 7 | 180 | 0 | 0 | 1 | | | |
| 19:00 | 20:00 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 3 | 0 | 0 | 196 | 4 | 0 | 0 | 6 | 150 | 0 | 0 | 1 | | | |
| 19:15 | 20:15 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 11 | 3 | 0 | 0 | 188 | 5 | 1 | 0 | 7 | 139 | 0 | 0 | 0 | | | |
| 19:30 | 20:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 14 | 5 | 0 | 0 | 188 | 5 | 1 | 0 | 5 | 135 | 0 | 0 | 0 | | | |
| 19:45 | 20:45 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 12 | 4 | 0 | 0 | 181 | 5 | 1 | 0 | 2 | 137 | 0 | 0 | 0 | | | |
| 20:00 | 21:00 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 12 | 5 | 0 | 1 | 178 | 4 | 1 | 0 | 3 | 135 | 0 | 0 | 0 | | | |
| 20:15 | 21:15 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 7 | 3 | 0 | 1 | 112 | 2 | 0 | 0 | 1 | 100 | 0 | 0 | 0 | | | |
| 20:30 | 21:30 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 1 | 0 | 1 | 67 | 1 | 0 | 0 | 1 | 61 | 0 | 0 | 0 | | | |
| 20:45 | 21:45 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 1 | 30 | 0 | 0 | 0 | 1 | 26 | 0 | 0 | 0 | | | |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |

PEAK HOUR INFORMATION

Time Interval: 15:15 - 16:15
 Int Peak 1hr Vol: 1,013
 Int Peak 15min Vol: 269
 Int PHF: 0.941

| Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-------|--------------|-------|--|-----------|------|-------|--------------|-------|--|------------|------|-------|-------------------|-------|--|------------|------|-------|-------------------|-------|--|-------------|
| From West | | | | | | From East | | | | | | From South | | | | | | From North | | | | | | Int Vehicle |
| EASTBOUND | | | 106th Street | | | WESTBOUND | | | 106th Street | | | NORTHBOUND | | | Cottage Grove Ave | | | SOUTHBOUND | | | Cottage Grove Ave | | | Total |
| Left | Thru | Right | Peds | Bikes | | Left | Thru | Right | Peds | Bikes | | Left | Thru | Right | Peds | Bikes | | Left | Thru | Right | Peds | Bikes | | |
| 0 | 0 | 0 | 0 | 0 | | 20 | 0 | 41 | 27 | 0 | | 0 | 452 | 9 | 4 | 0 | | 19 | 472 | 0 | 0 | 0 | | 1,013 |
| 0 | 0 | 0 | -- | -- | | 1 | 0 | 6 | -- | -- | | 0 | 16 | 0 | -- | -- | | 0 | 32 | 0 | -- | -- | | 55 |
| n/a | n/a | n/a | -- | -- | | 5.0% | n/a | 14.6% | -- | -- | | n/a | 3.5% | 0.0% | -- | -- | | 0.0% | 6.8% | n/a | -- | -- | | 5.4% |



Cottage Grove Ave with 106th Street

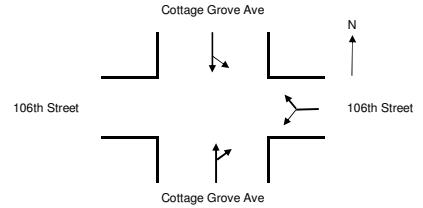
PM

Intersection: Cottage Grove Ave with 106th Street
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Cottage Grove Ave
East-West Street: 106th Street
PEAK HOUR: 17:00 - 18:00

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

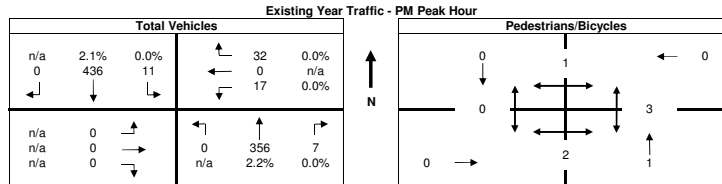


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|-------------------|------|-------|------------|------|-------------------|------|-------|-------------------|-------------|---------|------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF | |
| Start | End | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Cottage Grove Ave | | | SOUTHBOUND | | Cottage Grove Ave | | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 13:15 | 14:15 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 71 | 0 | 0 | 0 | 2 | 52 | 0 | 0 | 0 | 0 | 131 | 131 | 0.25 |
| 13:30 | 14:30 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 6 | 2 | 0 | 0 | 170 | 0 | 0 | 0 | 4 | 108 | 0 | 0 | 0 | 0 | 291 | 160 | 0.45 |
| 13:45 | 14:45 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 13 | 4 | 0 | 0 | 270 | 1 | 0 | 1 | 9 | 186 | 0 | 0 | 0 | 0 | 484 | 193 | 0.63 |
| 14:00 | 15:00 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 16 | 4 | 0 | 0 | 350 | 2 | 0 | 1 | 12 | 261 | 0 | 0 | 0 | 0 | 650 | 193 | 0.84 |
| 14:15 | 15:15 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 5 | 1 | 0 | 373 | 3 | 0 | 1 | 14 | 287 | 0 | 0 | 0 | 0 | 703 | 193 | 0.91 |
| 14:30 | 15:30 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 15 | 9 | 1 | 0 | 379 | 3 | 0 | 1 | 15 | 342 | 0 | 0 | 0 | 0 | 766 | 223 | 0.86 |
| 14:45 | 15:45 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 17 | 9 | 1 | 0 | 411 | 6 | 3 | 0 | 13 | 370 | 0 | 0 | 0 | 0 | 833 | 260 | 0.80 |
| 15:00 | 16:00 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 18 | 12 | 1 | 0 | 441 | 9 | 4 | 0 | 17 | 427 | 0 | 0 | 0 | 0 | 928 | 261 | 0.89 |
| 15:15 | 16:15 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 41 | 27 | 0 | 0 | 452 | 9 | 4 | 0 | 19 | 472 | 0 | 0 | 0 | 0 | 1,013 | 269 | 0.94 |
| 15:30 | 16:30 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 54 | 23 | 0 | 0 | 435 | 9 | 4 | 0 | 22 | 470 | 0 | 0 | 0 | 0 | 1,012 | 269 | 0.94 |
| 15:45 | 16:45 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 53 | 21 | 0 | 0 | 402 | 5 | 3 | 1 | 21 | 469 | 0 | 1 | 0 | 0 | 967 | 269 | 0.90 |
| 16:00 | 17:00 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 54 | 19 | 0 | 0 | 349 | 1 | 4 | 1 | 21 | 443 | 0 | 3 | 0 | 0 | 887 | 269 | 0.82 |
| 16:15 | 17:15 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 34 | 3 | 0 | 0 | 341 | 5 | 5 | 1 | 20 | 435 | 0 | 3 | 0 | 0 | 847 | 229 | 0.92 |
| 16:30 | 17:30 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 32 | 2 | 0 | 0 | 347 | 5 | 6 | 1 | 17 | 436 | 0 | 3 | 0 | 0 | 850 | 229 | 0.93 |
| 16:45 | 17:45 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 35 | 4 | 0 | 0 | 317 | 7 | 4 | 0 | 16 | 438 | 0 | 2 | 0 | 0 | 830 | 229 | 0.91 |
| 17:00 | 18:00 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 32 | 3 | 0 | 0 | 356 | 7 | 2 | 1 | 11 | 436 | 0 | 1 | 0 | 0 | 859 | 229 | 0.94 |
| 17:15 | 18:15 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 32 | 3 | 0 | 0 | 331 | 2 | 1 | 1 | 8 | 409 | 0 | 1 | 0 | 0 | 802 | 225 | 0.89 |
| 17:30 | 18:30 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 23 | 2 | 0 | 0 | 312 | 2 | 0 | 1 | 7 | 389 | 0 | 1 | 0 | 0 | 750 | 210 | 0.89 |
| 17:45 | 18:45 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 18 | 1 | 0 | 0 | 311 | 1 | 0 | 1 | 9 | 373 | 0 | 1 | 0 | 0 | 726 | 210 | 0.86 |
| 18:00 | 19:00 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 19 | 1 | 0 | 0 | 277 | 3 | 0 | 0 | 8 | 327 | 0 | 0 | 0 | 0 | 643 | 173 | 0.93 |
| 18:15 | 19:15 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 14 | 3 | 0 | 0 | 279 | 4 | 0 | 0 | 7 | 285 | 0 | 0 | 1 | 0 | 597 | 173 | 0.86 |
| 18:30 | 19:30 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 11 | 3 | 0 | 0 | 249 | 5 | 0 | 0 | 7 | 238 | 0 | 0 | 1 | 0 | 519 | 171 | 0.76 |
| 18:45 | 19:45 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 3 | 0 | 0 | 225 | 5 | 0 | 0 | 7 | 180 | 0 | 0 | 1 | 0 | 433 | 127 | 0.85 |
| 19:00 | 20:00 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 3 | 0 | 0 | 196 | 4 | 0 | 0 | 6 | 150 | 0 | 0 | 1 | 0 | 370 | 126 | 0.73 |
| 19:15 | 20:15 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 11 | 3 | 0 | 0 | 188 | 5 | 1 | 0 | 7 | 139 | 0 | 0 | 0 | 0 | 354 | 110 | 0.80 |
| 19:30 | 20:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 14 | 5 | 0 | 0 | 188 | 5 | 1 | 0 | 5 | 135 | 0 | 0 | 0 | 0 | 348 | 110 | 0.79 |
| 19:45 | 20:45 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 12 | 4 | 0 | 0 | 181 | 5 | 1 | 0 | 2 | 137 | 0 | 0 | 0 | 0 | 340 | 110 | 0.77 |
| 20:00 | 21:00 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 12 | 5 | 0 | 1 | 178 | 4 | 1 | 0 | 3 | 135 | 0 | 0 | 0 | 0 | 337 | 110 | 0.77 |
| 20:15 | 21:15 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 7 | 3 | 0 | 1 | 112 | 2 | 0 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 227 | 89 | 0.64 |
| 20:30 | 21:30 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 1 | 0 | 1 | 67 | 1 | 0 | 0 | 1 | 61 | 0 | 0 | 0 | 0 | 138 | 77 | 0.45 |
| 20:45 | 21:45 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 1 | 30 | 0 | 0 | 0 | 1 | 26 | 0 | 0 | 0 | 0 | 61 | 61 | 0.25 |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |

PEAK HOUR INFORMATION

Time Interval: 17:00 - 18:00
Int Peak 1hr Vol: 859
Int Peak 15min Vol: 229
Int PHF: 0.938

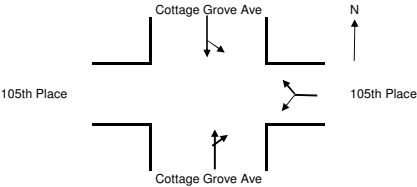
| Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-------|--------------|-------|------|-----------|-------|------|--------------|------|------|------------|------|-------|-------------------|------|-------|------------|-------|------|-------------------|-------|--|-------------|
| From West | | | | | | From East | | | | | | From South | | | | | | From North | | | | | | Int Vehicle |
| EASTBOUND | | | 106th Street | | | WESTBOUND | | | 106th Street | | | NORTHBOUND | | | Cottage Grove Ave | | | SOUTHBOUND | | | Cottage Grove Ave | | | Total |
| Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Total | | |
| 0 | 0 | 0 | 0 | 0 | 17 | 0 | 32 | 3 | 0 | 0 | 356 | 7 | 2 | 1 | 11 | 436 | 0 | 1 | 0 | 859 | | | | |
| 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 8 | 0 | -- | -- | 0 | 9 | 0 | -- | -- | 17 | | | | |
| n/a | n/a | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | 2.2% | 0.0% | -- | -- | 0.0% | 2.1% | n/a | -- | -- | 2.0% | | | | |



Cottage Grove Ave with 105th Place
AM

Intersection: Cottage Grove Ave with 105th Place
Traffic Count Date: 10/30/2018
Count Time: AM Count (12:00am-12:00pm)
North-South Street: Cottage Grove Ave
East-West Street: 105th Place
PEAK HOUR: 08:15 - 09:15

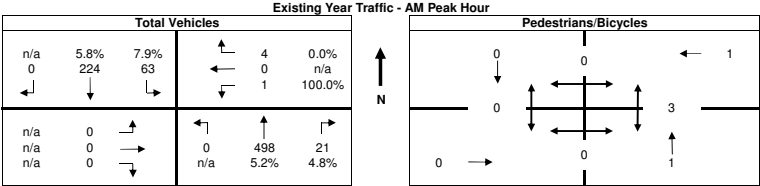
Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram
Note: Peds counted; eastbound peds are peds crossing the west leg
INDICATES PROHIBITED MOVEMENT



| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle Total | Peak 15-min | Int PHF | | |
|-----------|-------|-----------------------|------|-------|------|-------|-----------------------|------|-------|------|-------|------------------------------|------|-------|------|-------|------------------------------|------|-------|------|-------|-------------------|-------------|---------|------|------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | | | | |
| Interval: | 1:00 | EASTBOUND 105th Place | | | | | WESTBOUND 105th Place | | | | | NORTHBOUND Cottage Grove Ave | | | | | SOUTHBOUND Cottage Grove Ave | | | | | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | | |
| 0:00 | 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:15 | 1:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:30 | 1:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:45 | 1:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:00 | 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:15 | 2:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:30 | 2:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:45 | 2:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:00 | 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:15 | 3:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:30 | 3:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:45 | 3:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:00 | 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:15 | 4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:30 | 4:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:45 | 4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:00 | 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:15 | 5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:30 | 5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:45 | 5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:00 | 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:15 | 6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:30 | 6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:45 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:00 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:15 | 7:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 3 | 0 | 1 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 156 | 156 | 0.25 | |
| 6:30 | 7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 0 | 278 | 6 | 0 | 1 | 4 | 76 | 0 | 0 | 0 | 0 | 364 | 208 | 0.44 | |
| 6:45 | 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 440 | 11 | 0 | 1 | 10 | 142 | 0 | 0 | 0 | 0 | 603 | 239 | 0.63 | |
| 7:00 | 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 11 | 623 | 18 | 0 | 1 | 20 | 235 | 0 | 0 | 0 | 0 | 897 | 294 | 0.76 | |
| 7:15 | 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 12 | 668 | 25 | 0 | 0 | 33 | 267 | 0 | 0 | 0 | 0 | 994 | 294 | 0.85 | |
| 7:30 | 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 0 | 642 | 26 | 0 | 0 | 44 | 282 | 0 | 0 | 0 | 0 | 996 | 294 | 0.85 | |
| 7:45 | 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 5 | 0 | 617 | 29 | 0 | 0 | 60 | 286 | 0 | 0 | 0 | 0 | 994 | 294 | 0.85 | |
| 8:00 | 9:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 4 | 4 | 0 | 543 | 30 | 0 | 1 | 65 | 244 | 0 | 0 | 0 | 0 | 885 | 253 | 0.87 | |
| 8:15 | 9:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 3 | 3 | 0 | 498 | 21 | 0 | 1 | 63 | 224 | 0 | 0 | 0 | 0 | 811 | 237 | 0.86 | |
| 8:30 | 9:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 4 | 0 | 440 | 18 | 0 | 1 | 52 | 206 | 0 | 0 | 0 | 0 | 720 | 237 | 0.76 | |
| 8:45 | 9:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 2 | 2 | 0 | 374 | 12 | 0 | 1 | 33 | 186 | 0 | 0 | 0 | 0 | 609 | 185 | 0.82 | |
| 9:00 | 10:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 352 | 6 | 0 | 0 | 20 | 184 | 0 | 0 | 0 | 0 | 564 | 179 | 0.79 | |
| 9:15 | 10:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 233 | 5 | 0 | 0 | 9 | 138 | 0 | 0 | 0 | 0 | 385 | 140 | 0.69 | |
| 9:30 | 10:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 158 | 4 | 0 | 0 | 5 | 99 | 0 | 0 | 0 | 0 | 266 | 140 | 0.48 | |
| 9:45 | 10:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 87 | 2 | 0 | 0 | 2 | 49 | 0 | 0 | 0 | 0 | 140 | 140 | 0.25 | |
| 10:00 | 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 10:15 | 11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 10:30 | 11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 10:45 | 11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:00 | 12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:15 | 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:30 | 12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:45 | 12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |

PEAK HOUR INFORMATION
Time Interval: 08:15 - 09:15
Int Peak 1hr Vol: 811
Int Peak 15min Vol: 237
Int PHF: 0.855

| Existing Year Traffic - AM Peak Hour | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|-------------------|------|-------|------------|------|-------------------|------|-------|-------------------|
| From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total |
| EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Cottage Grove Ave | | | SOUTHBOUND | | Cottage Grove Ave | | | |
| Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 3 | 1 | 0 | 498 | 21 | 0 | 1 | 63 | 224 | 0 | 0 | 0 | 811 |
| 0 | 0 | 0 | -- | -- | 1 | 0 | 0 | -- | -- | 0 | 26 | 1 | -- | -- | 5 | 13 | 0 | -- | -- | 46 |
| n/a | n/a | n/a | -- | -- | 100.0% | n/a | 0.0% | -- | -- | n/a | 5.2% | 4.8% | -- | -- | 7.9% | 5.8% | n/a | -- | -- | 5.7% |



Cottage Grove Ave with 105th Place Afternoon Dismissal

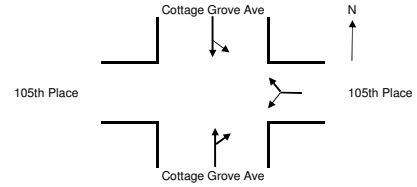
Intersection: Cottage Grove Ave with 105th Place
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Cottage Grove Ave
East-West Street: 105th Place

PEAK HOUR: 15:15 - 16:15

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

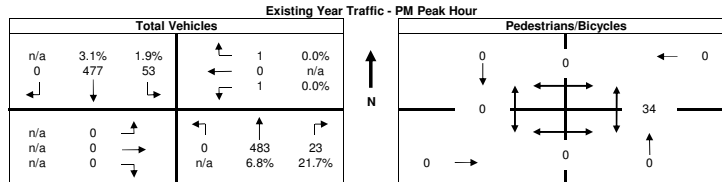


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|-------|-------------|-------|-----------|------|-------|-------------|-------|------------|------|-------|-------------------|-------|------------|------|-------|-------------------|-------|-------------------|-------------|---------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF |
| Start | End | EASTBOUND | | | 105th Place | | WESTBOUND | | | 105th Place | | NORTHBOUND | | | Cottage Grove Ave | | SOUTHBOUND | | | Cottage Grove Ave | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:15 | 14:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 0 | 0 | 0 | 3 | 55 | 0 | 0 | 0 | 135 | 135 | 0.25 |
| 13:30 | 14:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 178 | 1 | 0 | 0 | 8 | 110 | 0 | 0 | 0 | 297 | 162 | 0.46 |
| 13:45 | 14:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 274 | 3 | 0 | 1 | 10 | 198 | 0 | 0 | 0 | 487 | 190 | 0.64 |
| 14:00 | 15:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 362 | 3 | 0 | 1 | 11 | 273 | 0 | 0 | 0 | 651 | 190 | 0.86 |
| 14:15 | 15:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 9 | 0 | 0 | 378 | 4 | 0 | 1 | 11 | 302 | 0 | 0 | 0 | 698 | 190 | 0.92 |
| 14:30 | 15:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 14 | 0 | 0 | 386 | 4 | 0 | 1 | 13 | 358 | 0 | 0 | 0 | 764 | 228 | 0.84 |
| 14:45 | 15:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 20 | 0 | 0 | 429 | 6 | 0 | 0 | 24 | 373 | 0 | 0 | 0 | 833 | 259 | 0.80 |
| 15:00 | 16:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 20 | 0 | 0 | 443 | 19 | 0 | 0 | 45 | 433 | 0 | 0 | 0 | 941 | 272 | 0.86 |
| 15:15 | 16:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 34 | 0 | 0 | 483 | 23 | 0 | 0 | 53 | 477 | 0 | 0 | 0 | 1,038 | 279 | 0.93 |
| 15:30 | 16:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 30 | 0 | 0 | 474 | 26 | 0 | 0 | 50 | 483 | 0 | 0 | 0 | 1,036 | 279 | 0.93 |
| 15:45 | 16:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 24 | 0 | 0 | 432 | 29 | 0 | 1 | 41 | 485 | 0 | 0 | 0 | 991 | 279 | 0.89 |
| 16:00 | 17:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 27 | 0 | 0 | 394 | 16 | 0 | 1 | 27 | 463 | 0 | 0 | 0 | 904 | 279 | 0.81 |
| 16:15 | 17:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 10 | 0 | 0 | 364 | 14 | 0 | 1 | 26 | 454 | 0 | 0 | 0 | 861 | 236 | 0.91 |
| 16:30 | 17:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 8 | 0 | 0 | 368 | 13 | 0 | 1 | 30 | 453 | 0 | 0 | 0 | 868 | 236 | 0.92 |
| 16:45 | 17:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 9 | 0 | 0 | 348 | 9 | 0 | 0 | 35 | 453 | 0 | 0 | 0 | 848 | 236 | 0.90 |
| 17:00 | 18:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 0 | 0 | 377 | 14 | 0 | 1 | 36 | 447 | 0 | 0 | 0 | 877 | 236 | 0.93 |
| 17:15 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 0 | 352 | 11 | 0 | 1 | 29 | 420 | 0 | 0 | 0 | 814 | 233 | 0.87 |
| 17:30 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 325 | 9 | 0 | 1 | 25 | 393 | 0 | 0 | 0 | 752 | 214 | 0.88 |
| 17:45 | 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 322 | 7 | 0 | 1 | 18 | 383 | 0 | 0 | 0 | 730 | 214 | 0.85 |
| 18:00 | 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 293 | 3 | 0 | 0 | 14 | 337 | 0 | 0 | 0 | 647 | 173 | 0.93 |
| 18:15 | 19:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 292 | 3 | 1 | 0 | 14 | 292 | 0 | 0 | 1 | 601 | 172 | 0.87 |
| 18:30 | 19:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 262 | 2 | 1 | 0 | 12 | 247 | 0 | 0 | 1 | 523 | 172 | 0.76 |
| 18:45 | 19:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 235 | 2 | 1 | 0 | 11 | 186 | 0 | 0 | 1 | 434 | 131 | 0.83 |
| 19:00 | 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 205 | 1 | 1 | 0 | 9 | 153 | 0 | 0 | 1 | 368 | 127 | 0.72 |
| 19:15 | 20:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 198 | 1 | 0 | 0 | 11 | 143 | 0 | 0 | 0 | 353 | 112 | 0.79 |
| 19:30 | 20:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 198 | 4 | 0 | 0 | 13 | 138 | 0 | 0 | 0 | 353 | 112 | 0.79 |
| 19:45 | 20:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 186 | 6 | 0 | 0 | 15 | 139 | 0 | 0 | 0 | 346 | 112 | 0.77 |
| 20:00 | 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 184 | 6 | 0 | 0 | 16 | 139 | 0 | 0 | 0 | 345 | 112 | 0.77 |
| 20:15 | 21:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 114 | 6 | 0 | 0 | 11 | 102 | 0 | 0 | 0 | 233 | 93 | 0.63 |
| 20:30 | 21:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 67 | 3 | 0 | 0 | 7 | 63 | 0 | 0 | 0 | 140 | 76 | 0.46 |
| 20:45 | 21:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 32 | 0 | 0 | 0 | 4 | 28 | 0 | 0 | 0 | 64 | 64 | 0.25 |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

PEAK HOUR INFORMATION

Time Interval: 15:15 - 16:15
Int Peak 1hr Vol: 1,038
Int Peak 15min Vol: 279
Int PHF: 0.930

| Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-----------|------|-------|-------------|-------|-----------|------|-------|-------------|-------|------------|-------|-------|-------------------|-------|------------|------|-------|-------------------|-------|----------------------|--|
| Total Volume HV Volume HV% | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | |
| | EASTBOUND | | | 105th Place | | WESTBOUND | | | 105th Place | | NORTHBOUND | | | Cottage Grove Ave | | SOUTHBOUND | | | Cottage Grove Ave | | | |
| | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | |
| | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 34 | 0 | 0 | 483 | 23 | 0 | 0 | 53 | 477 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 33 | 5 | -- | -- | 1 | 15 | 0 | -- | -- | | |
| n/a | n/a | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | 6.8% | 21.7% | -- | -- | 1.9% | 3.1% | n/a | -- | -- | | | |



Cottage Grove Ave with 105th Place

PM

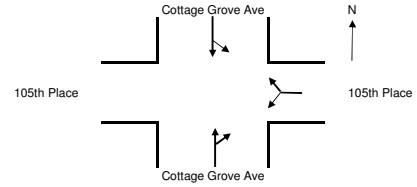
Intersection: Cottage Grove Ave with 105th Place
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Cottage Grove Ave
East-West Street: 105th Place

PEAK HOUR: 17:00 - 18:00

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

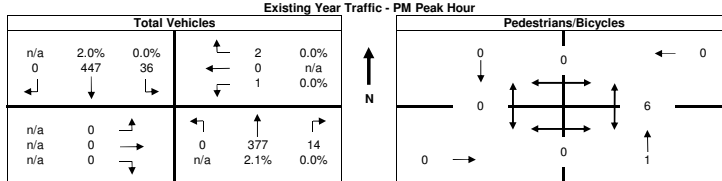


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|-------------------|------|-------|------------|------|-------------------|------|-------|-------------------|-------------|---------|------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF | |
| Start | End | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Cottage Grove Ave | | | SOUTHBOUND | | Cottage Grove Ave | | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 13:15 | 14:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 0 | 0 | 3 | 55 | 0 | 0 | 0 | 0 | 0 | 135 | 135 | 0.25 |
| 13:30 | 14:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 178 | 1 | 0 | 0 | 8 | 110 | 0 | 0 | 0 | 0 | 297 | 162 | 0.46 |
| 13:45 | 14:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 274 | 3 | 0 | 1 | 10 | 198 | 0 | 0 | 0 | 0 | 487 | 190 | 0.64 |
| 14:00 | 15:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 362 | 3 | 0 | 1 | 11 | 273 | 0 | 0 | 0 | 0 | 651 | 190 | 0.86 |
| 14:15 | 15:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 9 | 0 | 0 | 378 | 4 | 0 | 1 | 11 | 302 | 0 | 0 | 0 | 0 | 698 | 190 | 0.92 |
| 14:30 | 15:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 14 | 0 | 0 | 386 | 4 | 0 | 1 | 13 | 358 | 0 | 0 | 0 | 0 | 764 | 228 | 0.84 |
| 14:45 | 15:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 20 | 0 | 0 | 429 | 6 | 0 | 0 | 24 | 373 | 0 | 0 | 0 | 0 | 833 | 259 | 0.80 |
| 15:00 | 16:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 20 | 0 | 0 | 443 | 19 | 0 | 0 | 45 | 433 | 0 | 0 | 0 | 0 | 941 | 272 | 0.86 |
| 15:15 | 16:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 34 | 0 | 0 | 483 | 23 | 0 | 0 | 53 | 477 | 0 | 0 | 0 | 0 | 1,038 | 279 | 0.93 |
| 15:30 | 16:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 30 | 0 | 0 | 474 | 26 | 0 | 0 | 50 | 483 | 0 | 0 | 0 | 0 | 1,036 | 279 | 0.93 |
| 15:45 | 16:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 24 | 0 | 0 | 432 | 29 | 0 | 1 | 41 | 485 | 0 | 0 | 0 | 0 | 991 | 279 | 0.89 |
| 16:00 | 17:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 27 | 0 | 0 | 394 | 16 | 0 | 1 | 27 | 463 | 0 | 0 | 0 | 0 | 904 | 279 | 0.81 |
| 16:15 | 17:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 10 | 0 | 0 | 364 | 14 | 0 | 1 | 26 | 454 | 0 | 0 | 0 | 0 | 861 | 236 | 0.91 |
| 16:30 | 17:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 8 | 0 | 0 | 368 | 13 | 0 | 1 | 30 | 453 | 0 | 0 | 0 | 0 | 868 | 236 | 0.92 |
| 16:45 | 17:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 9 | 0 | 0 | 348 | 9 | 0 | 0 | 35 | 453 | 0 | 0 | 0 | 0 | 848 | 236 | 0.90 |
| 17:00 | 18:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 0 | 0 | 377 | 14 | 0 | 1 | 36 | 447 | 0 | 0 | 0 | 0 | 877 | 236 | 0.93 |
| 17:15 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 0 | 352 | 11 | 0 | 1 | 29 | 420 | 0 | 0 | 0 | 0 | 814 | 233 | 0.87 |
| 17:30 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 325 | 9 | 0 | 1 | 25 | 393 | 0 | 0 | 0 | 0 | 752 | 214 | 0.88 |
| 17:45 | 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 322 | 7 | 0 | 1 | 18 | 383 | 0 | 0 | 0 | 0 | 730 | 214 | 0.85 |
| 18:00 | 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 293 | 3 | 0 | 0 | 14 | 337 | 0 | 0 | 0 | 0 | 647 | 173 | 0.93 |
| 18:15 | 19:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 292 | 3 | 1 | 0 | 14 | 292 | 0 | 0 | 1 | 0 | 601 | 172 | 0.87 |
| 18:30 | 19:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 262 | 2 | 1 | 0 | 12 | 247 | 0 | 0 | 1 | 0 | 523 | 172 | 0.76 |
| 18:45 | 19:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 235 | 2 | 1 | 0 | 11 | 186 | 0 | 0 | 1 | 0 | 434 | 131 | 0.83 |
| 19:00 | 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 205 | 1 | 1 | 0 | 9 | 153 | 0 | 0 | 1 | 0 | 368 | 127 | 0.72 |
| 19:15 | 20:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 198 | 1 | 0 | 0 | 11 | 143 | 0 | 0 | 0 | 0 | 353 | 112 | 0.79 |
| 19:30 | 20:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 198 | 4 | 0 | 0 | 13 | 138 | 0 | 0 | 0 | 0 | 353 | 112 | 0.79 |
| 19:45 | 20:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 186 | 6 | 0 | 0 | 15 | 139 | 0 | 0 | 0 | 0 | 346 | 112 | 0.77 |
| 20:00 | 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 184 | 6 | 0 | 0 | 16 | 139 | 0 | 0 | 0 | 0 | 345 | 112 | 0.77 |
| 20:15 | 21:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 114 | 6 | 0 | 0 | 11 | 102 | 0 | 0 | 0 | 0 | 233 | 93 | 0.63 |
| 20:30 | 21:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 67 | 3 | 0 | 0 | 7 | 63 | 0 | 0 | 0 | 0 | 140 | 76 | 0.46 |
| 20:45 | 21:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 32 | 0 | 0 | 0 | 4 | 28 | 0 | 0 | 0 | 0 | 64 | 64 | 0.25 |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

PEAK HOUR INFORMATION

Time Interval: 17:00 - 18:00
Int Peak 1hr Vol: 877
Int Peak 15min Vol: 236
Int PHF: 0.929

| Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|-------------------|------|-------|------------|------|-------------------|------|-------|-------------|
| From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle |
| EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Cottage Grove Ave | | | SOUTHBOUND | | Cottage Grove Ave | | | |
| Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 0 | 0 | 377 | 14 | 0 | 1 | 36 | 447 | 0 | 0 | 0 |
| HV Volume | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 8 | 0 | -- | -- | 0 | 9 | 0 | -- | -- |
| HV% | n/a | n/a | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | 2.1% | 0.0% | -- | -- | 0.0% | 2.0% | n/a | -- | -- |
| | | | | | | | | | | | | | | | | | | | | 1.9% |



Langley Avenue with 105th Place AM

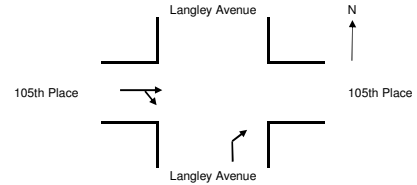
Intersection: Langley Avenue with 105th Place
Traffic Count Date: 10/30/2018
Count Time: AM Count (12:00am-12:00pm)
North-South Street: Langley Avenue
East-West Street: 105th Place

PEAK HOUR: 08:15 - 09:15

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

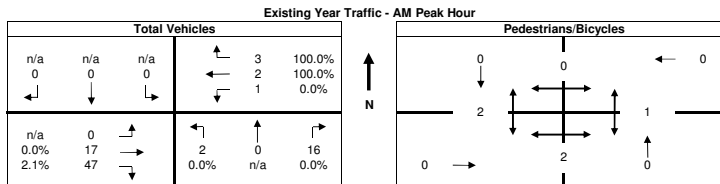


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|----------------|------|-------|------------|------|----------------|------|-------|-------------------|-------------|---------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF |
| Start | End | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Langley Avenue | | | SOUTHBOUND | | Langley Avenue | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 0:00 | 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:15 | 1:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:30 | 1:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:45 | 1:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:00 | 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:15 | 2:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:30 | 2:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:45 | 2:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:00 | 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:15 | 3:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:30 | 3:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:45 | 3:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:00 | 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:15 | 4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:30 | 4:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:45 | 4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:00 | 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:15 | 5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:30 | 5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:45 | 5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:00 | 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:15 | 6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:30 | 6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:45 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:00 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:15 | 7:15 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0.25 |
| 6:30 | 7:30 | 0 | 3 | 4 | 0 | 0 | 0 | 2 | 0 | 4 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0.31 |
| 6:45 | 7:45 | 0 | 5 | 15 | 0 | 0 | 0 | 2 | 0 | 4 | 4 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 14 | 0.43 |
| 7:00 | 8:00 | 0 | 11 | 21 | 0 | 0 | 0 | 2 | 0 | 4 | 4 | 3 | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 20 | 0.55 |
| 7:15 | 8:15 | 0 | 15 | 33 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 20 | 0.76 |
| 7:30 | 8:30 | 0 | 15 | 38 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 20 | 0.85 |
| 7:45 | 8:45 | 0 | 18 | 43 | 0 | 0 | 0 | 1 | 3 | 1 | 1 | 3 | 0 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 29 | 0.72 |
| 8:00 | 9:00 | 0 | 19 | 52 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 1 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 29 | 0.77 |
| 8:15 | 9:15 | 0 | 17 | 47 | 2 | 0 | 1 | 2 | 3 | 1 | 1 | 2 | 0 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 88 | 29 | 0.76 |
| 8:30 | 9:30 | 0 | 18 | 41 | 2 | 0 | 1 | 2 | 3 | 0 | 0 | 2 | 0 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 29 | 0.69 |
| 8:45 | 9:45 | 0 | 16 | 26 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 0 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 26 | 0.54 |
| 9:00 | 10:00 | 0 | 15 | 11 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 0 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 18 | 0.51 |
| 9:15 | 10:15 | 0 | 12 | 4 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 7 | 0.68 |
| 9:30 | 10:30 | 0 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 7 | 0.43 |
| 9:45 | 10:45 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 0.25 |
| 10:00 | 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:15 | 11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:30 | 11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:45 | 11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:00 | 12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:15 | 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:30 | 12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:45 | 12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

PEAK HOUR INFORMATION

Time Interval: 08:15 - 09:15
Int Peak 1hr Vol: 88
Int Peak 15min Vol: 29
Int PHF: 0.759

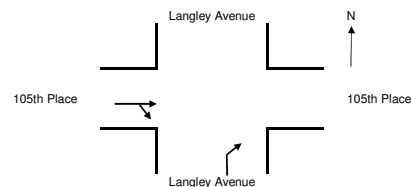
| Existing Year Traffic - AM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-------|-------------|-------|------|-----------|--------|------|-------------|------|------|------------|------|-------|----------------|------|-------|------------|-------|----|----------------|----|--|----------------------|
| From West | | | | | | From East | | | | | | From South | | | | | | From North | | | | | | Int Vehicle Total |
| EASTBOUND | | | 105th Place | | | WESTBOUND | | | 105th Place | | | NORTHBOUND | | | Langley Avenue | | | SOUTHBOUND | | | Langley Avenue | | | |
| Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | | |
| 0 | 17 | 47 | 2 | 0 | 1 | 2 | 3 | 1 | 0 | 2 | 0 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | -- | 0 | 0 | 88 | | |
| 0 | 0 | 1 | -- | -- | 0 | 2 | 3 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | -- | 6 | | | |
| n/a | 0.0% | 2.1% | -- | -- | 0.0% | 100.0% | 100.0% | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | -- | 6.8% | | | |



Intersection: Langley Avenue with 105th Place
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Langley Avenue
East-West Street: 105th Place

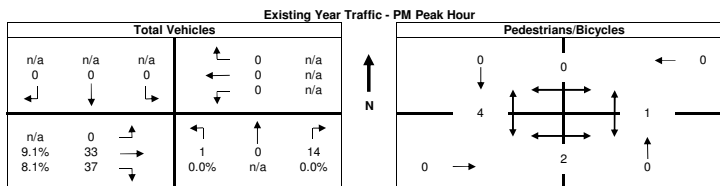
PEAK HOUR: 15:15 - 16:15

INDICATES PROHIBITED MOVEMENT

[illegible]

Time Interval: 15:15 - 16:15
Int Peak 1hr Vol: 85
Int Peak 15min Vol: 30
Int PHF: 0.708

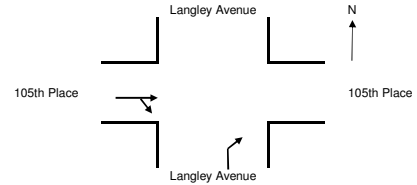
| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|----------------------------------|------|--------------------------------------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|----------------|------|-------|------------|------|----------------|------|-------|-------------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | |
| | | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Langley Avenue | | | SOUTHBOUND | | Langley Avenue | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| | | 0 | 33 | 37 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 3 | 3 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 6 | | |
| n/a | 9.1% | 8.1% | -- | -- | n/a | n/a | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | 7.1% | | |



Langley Avenue with 105th Place PM

Intersection: Langley Avenue with 105th Place
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Langley Avenue
East-West Street: 105th Place
PEAK HOUR: 17:00 - 18:00

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram
Note: Peds counted; eastbound peds are peds crossing the west leg
INDICATES PROHIBITED MOVEMENT

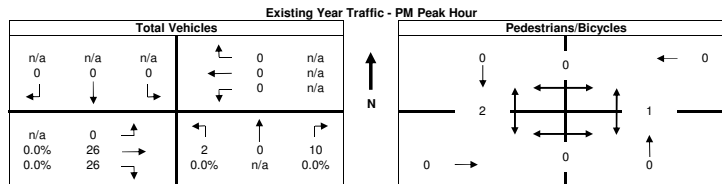


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|----------------|------|-------|------------|------|----------------|------|-------|-------------------|-------------|---------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF |
| Start | End | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Langley Avenue | | | SOUTHBOUND | | Langley Avenue | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:15 | 14:15 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0.25 |
| 13:30 | 14:30 | 0 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 7 | 0.43 |
| 13:45 | 14:45 | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 8 | 0.63 |
| 14:00 | 15:00 | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 8 | 0.72 |
| 14:15 | 15:15 | 0 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 1 | 0 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 11 | 0.66 |
| 14:30 | 15:30 | 0 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 11 | 0.70 |
| 14:45 | 15:45 | 0 | 23 | 10 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 19 | 0.55 |
| 15:00 | 16:00 | 0 | 27 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 27 | 0.61 |
| 15:15 | 16:15 | 0 | 33 | 37 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 30 | 0.71 |
| 15:30 | 16:30 | 0 | 30 | 40 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 87 | 30 | 0.73 |
| 15:45 | 16:45 | 0 | 25 | 39 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 30 | 0.71 |
| 16:00 | 17:00 | 0 | 28 | 31 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 30 | 0.64 |
| 16:15 | 17:15 | 0 | 25 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 21 | 0.81 |
| 16:30 | 17:30 | 0 | 28 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 21 | 0.83 |
| 16:45 | 17:45 | 0 | 26 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 21 | 0.80 |
| 17:00 | 18:00 | 0 | 25 | 26 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 21 | 0.76 |
| 17:15 | 18:15 | 0 | 21 | 17 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 16 | 0.73 |
| 17:30 | 18:30 | 0 | 20 | 15 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 16 | 0.69 |
| 17:45 | 18:45 | 0 | 17 | 10 | 2 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 16 | 0.55 |
| 18:00 | 19:00 | 0 | 15 | 2 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 10 | 0.60 |
| 18:15 | 19:15 | 0 | 17 | 1 | 0 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 10 | 0.63 |
| 18:30 | 19:30 | 0 | 14 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 5 | 0.90 |
| 18:45 | 19:45 | 0 | 13 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 0.75 |
| 19:00 | 20:00 | 0 | 11 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 0.75 |
| 19:15 | 20:15 | 0 | 12 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 0.75 |
| 19:30 | 20:30 | 0 | 16 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 7 | 0.68 |
| 19:45 | 20:45 | 0 | 19 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 7 | 0.82 |
| 20:00 | 21:00 | 0 | 20 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 7 | 0.82 |
| 20:15 | 21:15 | 0 | 16 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 7 | 0.64 |
| 20:30 | 21:30 | 0 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 0.46 |
| 20:45 | 21:45 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0.25 |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

PEAK HOUR INFORMATION

Time Interval: 17:00 - 18:00
Int Peak 1hr Vol: 64
Int Peak 15min Vol: 21
Int PHF: 0.762

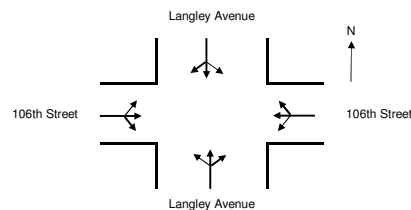
| | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | |
|--------------|--|--------------------------------------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|----------------|------|-------|------------|------|----------------|------|-------|----------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total |
| | | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Langley Avenue | | | SOUTHBOUND | | Langley Avenue | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| Total Volume | | 0 | 26 | 26 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| HV Volume | | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 |
| HV% | | n/a | 0.0% | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | 0.0% |



AM

PEAK HOUR: 08:15 - 09:15

INDICATES PROHIBITED MOVEMENT



PEAK HOUR INFORMATION

Time Interval: 08:15 - 09:15
Int Peak 1hr Vol: 161
Int Peak 15min Vol: 56
Int PHF: 0.719

| | | Existing Year Traffic - AM Peak Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|--------------|--|--------------------------------------|-------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|----------------|------|-------|------------|-------|----------------|------|-------|-------------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | |
| | | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Langley Avenue | | | SOUTHBOUND | | Langley Avenue | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| Total Volume | | 5 | 9 | 18 | 0 | 0 | 3 | 34 | 9 | 2 | 0 | 11 | 9 | 11 | 3 | 0 | 5 | 8 | 39 | 4 | 0 | 161 |
| HV Volume | | 0 | 2 | 0 | -- | -- | 1 | 3 | 0 | -- | -- | 1 | 0 | 0 | -- | -- | 0 | 1 | 3 | -- | -- | 11 |
| HV% | | 0.0% | 22.2% | 0.0% | -- | -- | 33.3% | 8.8% | 0.0% | -- | -- | 9.1% | 0.0% | 0.0% | -- | -- | 0.0% | 12.5% | 7.7% | -- | -- | 6.8% |

Existing Year Traffic - AM Peak Hour

Total Vehicles

| Approach | Count | Percentage |
|------------------------|-------|------------|
| Northbound | 39 | 7.7% |
| Southbound | 8 | 12.5% |
| Eastbound | 5 | 0.0% |
| Westbound | 34 | 8.8% |
| Left Turn (Northbound) | 3 | 33.3% |
| Left Turn (Southbound) | 11 | 9.1% |
| Left Turn (Eastbound) | 11 | 0.0% |
| Left Turn (Westbound) | 11 | 0.0% |

Pedestrians/Bicycles

| Approach | Count |
|------------------------|-------|
| Northbound | 0 |
| Southbound | 0 |
| Eastbound | 0 |
| Westbound | 0 |
| Left Turn (Northbound) | 4 |
| Left Turn (Southbound) | 2 |
| Left Turn (Eastbound) | 3 |
| Left Turn (Westbound) | 0 |

North Arrow

Intersection: Langley Avenue with 106th Street
Traffic Count Date: 10/8/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Langley Avenue
East-West Street: 106th Street

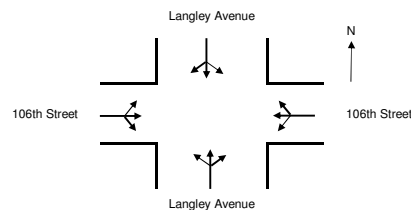
PEAK HOUR: 15:15 - 16:15

Weather: Fair
Day of Week: Monday

Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT



| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | Int Vehicle Total | Peak 15- min | Int PHF |
|-----------|-------|----------------------|------|-------|------|-------|------|--------------|-------|------|-------|------|------|----------------|------|-------|------|------|-------|----------------|-------|------|------|-------|------|----------------------|-----------------|---------|
| Interval: | 1:00 | From West | | | | | | From East | | | | | | From South | | | | | | From North | | | | | | | | |
| | | 106th Street | | | | | | 106th Street | | | | | | Langley Avenue | | | | | | Langley Avenue | | | | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:15 | 14:15 | 1 | 1 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 16 | 16 | 0 | 16 | 0.25 | |
| 13:30 | 14:30 | 1 | 2 | 0 | 0 | 0 | 7 | 4 | 0 | 0 | 0 | 6 | 1 | 5 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 30 | 16 | 0 | 30 | 0.47 | | |
| 13:45 | 14:45 | 1 | 4 | 1 | 3 | 9 | 9 | 9 | 3 | 6 | 0 | 10 | 3 | 8 | 1 | 0 | 1 | 2 | 1 | 2 | 0 | 52 | 22 | 0 | 52 | 0.59 | | |
| 14:00 | 15:00 | 3 | 4 | 4 | 0 | 0 | 13 | 12 | 4 | 0 | 0 | 11 | 3 | 0 | 1 | 0 | 2 | 3 | 2 | 0 | 68 | 22 | 0 | 68 | 0.77 | | | |
| 14:15 | 15:15 | 2 | 4 | 7 | 4 | 0 | 12 | 15 | 5 | 0 | 1 | 7 | 5 | 8 | 1 | 0 | 2 | 4 | 2 | 0 | 71 | 22 | 0.81 | | | | | |
| 14:30 | 15:30 | 2 | 4 | 9 | 4 | 0 | 15 | 16 | 6 | 1 | 1 | 5 | 4 | 4 | 2 | 1 | 0 | 2 | 4 | 2 | 0 | 71 | 22 | 0.81 | | | | |
| 14:45 | 15:45 | 2 | 4 | 11 | 1 | 0 | 18 | 18 | 3 | 1 | 1 | 5 | 4 | 5 | 1 | 1 | 0 | 2 | 8 | 0 | 0 | 80 | 31 | 0.65 | | | | |
| 15:00 | 16:00 | 3 | 5 | 10 | 17 | 0 | 22 | 17 | 5 | 2 | 1 | 6 | 7 | 7 | 1 | 1 | 1 | 5 | 13 | 3 | 0 | 101 | 37 | 0.68 | | | | |
| 15:15 | 16:15 | 3 | 6 | 13 | 34 | 0 | 26 | 20 | 6 | 10 | 0 | 10 | 8 | 15 | 7 | 2 | 2 | 9 | 27 | 21 | 0 | 145 | 63 | 0.58 | | | | |
| 15:30 | 16:30 | 3 | 6 | 15 | 36 | 0 | 21 | 22 | 7 | 10 | 0 | 13 | 8 | 15 | 6 | 2 | 2 | 9 | 32 | 21 | 0 | 153 | 63 | 0.61 | | | | |
| 15:45 | 16:45 | 3 | 5 | 13 | 37 | 0 | 18 | 16 | 9 | 10 | 0 | 10 | 8 | 16 | 6 | 2 | 2 | 10 | 30 | 22 | 1 | 140 | 63 | 0.56 | | | | |
| 16:00 | 17:00 | 1 | 6 | 15 | 20 | 0 | 13 | 19 | 8 | 10 | 0 | 10 | 7 | 19 | 6 | 2 | 1 | 8 | 26 | 20 | 1 | 133 | 63 | 0.53 | | | | |
| 16:15 | 17:15 | 3 | 7 | 13 | 3 | 0 | 9 | 12 | 8 | 2 | 0 | 9 | 7 | 12 | 0 | 0 | 0 | 3 | 14 | 3 | 1 | 97 | 30 | 0.81 | | | | |
| 16:30 | 17:30 | 3 | 6 | 11 | 0 | 0 | 9 | 12 | 6 | 4 | 0 | 10 | 8 | 16 | 3 | 0 | 1 | 4 | 16 | 3 | 1 | 102 | 30 | 0.85 | | | | |
| 16:45 | 17:45 | 3 | 6 | 11 | 0 | 0 | 10 | 19 | 5 | 4 | 1 | 10 | 8 | 14 | 3 | 0 | 1 | 18 | 4 | 3 | 1 | 108 | 30 | 0.90 | | | | |
| 17:00 | 18:00 | 2 | 4 | 11 | 0 | 0 | 9 | 20 | 3 | 3 | 1 | 10 | 7 | 11 | 3 | 0 | 2 | 3 | 17 | 3 | 1 | 99 | 27 | 0.92 | | | | |
| 17:15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Time Interval: 15:15 - 16:15
Int Peak 1hr Vol: 145
Int Peak 15min Vol: 63
Int PHF: 0.575

| | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|--------------|--|--------------------------------------|------|--------------|------|-------|-----------|-------|--------------|------|-------|------------|------|----------------|------|-------|------------|------|----------------|------|-------|-------------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | |
| | | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Langley Avenue | | | SOUTHBOUND | | Langley Avenue | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| Total Volume | | 3 | 6 | 13 | 34 | 0 | 26 | 20 | 6 | 10 | 0 | 10 | 8 | 15 | 7 | 2 | 2 | 9 | 27 | 21 | 0 | 145 |
| HV Volume | | 0 | 0 | 0 | -- | -- | 0 | 3 | 0 | -- | -- | 2 | 0 | 0 | -- | -- | 0 | 0 | 3 | -- | -- | 8 |
| HV% | | 0.0% | 0.0% | 0.0% | -- | -- | 0.0% | 15.0% | 0.0% | -- | -- | 20.0% | 0.0% | 0.0% | -- | -- | 0.0% | 0.0% | 11.1% | -- | -- | 5.5% |

Existing Year Traffic - PM Peak Hour

Total Vehicles

| Approach | Left Turn (%) | Through/Right Turn (%) | Left Turn (Veh) | Through/Right Turn (Veh) |
|------------|---------------|------------------------|-----------------|--------------------------|
| Northbound | 11.1% | 0.0% | 27 | 0 |
| Southbound | 0.0% | 0.0% | 9 | 2 |
| Eastbound | 6 | 15.0% | 20 | 26 |
| Westbound | 0.0% | 0.0% | 10 | 8 |

Pedestrians/Bicycles

| Approach | Left Turn (Veh) | Through/Right Turn (Veh) |
|------------|-----------------|--------------------------|
| Northbound | 0 | 21 |
| Southbound | 34 | 10 |
| Eastbound | 0 | 7 |
| Westbound | 0 | 2 |

Langley Avenue with 106th Street
PM

Intersection: Langley Avenue with 106th Street
Traffic Count Date: 10/8/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Langley Avenue
East-West Street: 106th Street

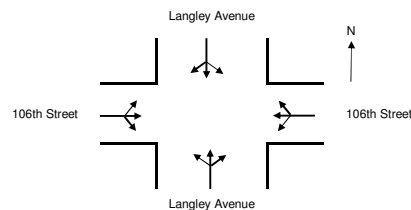
PEAK HOUR: 17:00 - 18:00

Weather: Fair
Day of Week: Monday

Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

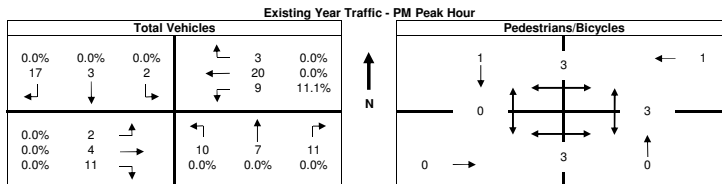


| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | Int Vehicle | Peak 15- min | Int PHF | | | |
|-----------|-------|----------------------|------|-------|--------------|-------|------|-----------|-------|------|--------------|------|------|------------|------|-------|----------------|------|-------|------------|-------|------|----------------|-------|------|-------------|--------------|---------|------|------|------|
| Interval: | 1:00 | From West | | | | | | From East | | | | | | From South | | | | | | From North | | | | | | | | | | | |
| | | EASTBOUND | | | 106th Street | | | WESTBOUND | | | 106th Street | | | NORTHBOUND | | | Langley Avenue | | | SOUTHBOUND | | | Langley Avenue | | | | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 13:15 | 14:15 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 16 | 16 | 0.25 |
| 13:30 | 14:30 | 1 | 2 | 0 | 0 | 0 | 7 | 4 | 0 | 0 | 0 | 0 | 6 | 1 | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 17 | 16 | 0.47 |
| 13:45 | 14:45 | 1 | 4 | 1 | 3 | 0 | 9 | 9 | 3 | 0 | 0 | 0 | 10 | 3 | 8 | 1 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 0 | 52 | 22 | 55 | 0.79 |
| 14:00 | 15:00 | 3 | 4 | 4 | 4 | 0 | 13 | 12 | 4 | 0 | 0 | 11 | 3 | 8 | 1 | 0 | 1 | 2 | 3 | 2 | 2 | 0 | 68 | 22 | 0 | 0 | 68 | 22 | 0.57 | 0.57 | |
| 14:15 | 15:15 | 2 | 4 | 7 | 4 | 0 | 12 | 15 | 5 | 0 | 1 | 7 | 5 | 8 | 1 | 1 | 0 | 2 | 4 | 2 | 2 | 0 | 71 | 22 | 0 | 0 | 71 | 22 | 0.81 | 0.81 | |
| 14:30 | 15:30 | 2 | 4 | 9 | 4 | 0 | 15 | 16 | 6 | 1 | 1 | 5 | 4 | 4 | 2 | 1 | 0 | 2 | 4 | 2 | 2 | 0 | 71 | 22 | 0 | 0 | 71 | 22 | 0.81 | 0.81 | |
| 14:45 | 15:45 | 2 | 4 | 11 | 1 | 0 | 18 | 18 | 3 | 1 | 1 | 5 | 4 | 5 | 1 | 1 | 0 | 2 | 8 | 0 | 0 | 0 | 80 | 31 | 0 | 0 | 80 | 31 | 0.65 | 0.65 | |
| 15:00 | 16:00 | 3 | 5 | 10 | 17 | 0 | 22 | 17 | 5 | 2 | 1 | 6 | 7 | 7 | 1 | 1 | 1 | 5 | 13 | 3 | 0 | 101 | 37 | 0 | 0 | 101 | 37 | 0.68 | 0.68 | | |
| 15:15 | 16:15 | 3 | 6 | 13 | 34 | 0 | 26 | 20 | 6 | 10 | 0 | 10 | 8 | 15 | 7 | 2 | 2 | 2 | 9 | 27 | 21 | 0 | 145 | 63 | 0 | 0 | 145 | 63 | 0.58 | 0.58 | |
| 15:30 | 16:30 | 3 | 6 | 15 | 36 | 0 | 21 | 22 | 7 | 10 | 0 | 13 | 8 | 15 | 6 | 2 | 2 | 2 | 9 | 32 | 21 | 0 | 153 | 63 | 0 | 0 | 153 | 63 | 0.61 | 0.61 | |
| 15:45 | 16:45 | 3 | 5 | 13 | 37 | 0 | 18 | 16 | 9 | 10 | 0 | 10 | 8 | 16 | 6 | 2 | 2 | 10 | 30 | 22 | 1 | 140 | 63 | 0 | 0 | 140 | 63 | 0.56 | 0.56 | | |
| 16:00 | 17:00 | 1 | 6 | 15 | 20 | 0 | 13 | 19 | 8 | 10 | 0 | 10 | 7 | 19 | 6 | 2 | 1 | 8 | 26 | 20 | 1 | 133 | 63 | 0 | 0 | 133 | 63 | 0.53 | 0.53 | | |
| 16:15 | 17:15 | 3 | 7 | 13 | 3 | 0 | 9 | 12 | 8 | 2 | 0 | 9 | 7 | 12 | 0 | 0 | 0 | 3 | 14 | 3 | 1 | 97 | | | | | | | | | |

PEAK HOUR INFORMATION

Time Interval: 17:00 - 18:00
Int Peak 1hr Vol: 99
Int Peak 15min Vol: 27
Int PHF: 0.917

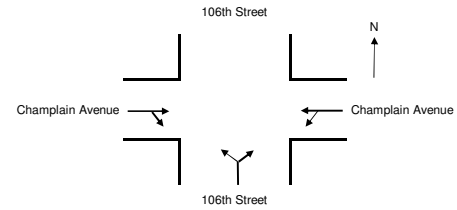
| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|----------------------------------|--|--------------------------------------|------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|----------------|------|-------|------------|------|----------------|------|-------|-------------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | |
| | | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Langley Avenue | | | SOUTHBOUND | | Langley Avenue | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| | | 2 | 4 | 11 | 0 | 0 | 9 | 20 | 3 | 3 | 1 | 10 | 7 | 11 | 3 | 0 | 2 | 3 | 17 | 3 | 1 | 99 |
| | | 0 | 0 | 0 | -- | -- | 1 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 1 |
| | | 0.0% | 0.0% | 0.0% | -- | -- | 11.1% | 0.0% | 0.0% | -- | -- | 0.0% | 0.0% | 0.0% | -- | -- | 0.0% | 0.0% | 0.0% | -- | -- | 1.0% |



106th Street with Champlain Avenue AM

Intersection: 106th Street with Champlain Avenue
Traffic Count Date: 10/30/2018
Count Time: AM Count (12:00am-12:00pm)
North-South Street: 106th Street
East-West Street: Champlain Avenue
PEAK HOUR: 08:15 - 09:15

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram
Note: Peds counted; eastbound peds are peds crossing the west leg
INDICATES PROHIBITED MOVEMENT

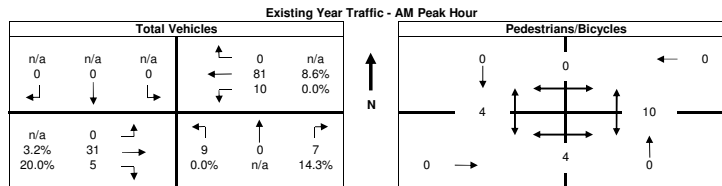


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|------------------|------|-------|-----------|------|------------------|------|-------|------------|------|--------------|------|-------|------------|------|--------------|------|-------|-------------------|-------------|---------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF |
| Start | End | EASTBOUND | | Champlain Avenue | | | WESTBOUND | | Champlain Avenue | | | NORTHBOUND | | 106th Street | | | SOUTHBOUND | | 106th Street | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 0:00 | 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 0:15 | 1:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 0:30 | 1:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 0:45 | 1:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 1:00 | 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 1:15 | 2:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 1:30 | 2:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 1:45 | 2:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 2:00 | 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 2:15 | 3:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 2:30 | 3:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 2:45 | 3:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 3:00 | 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 3:15 | 4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 3:30 | 4:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 3:45 | 4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 4:00 | 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 4:15 | 5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 4:30 | 5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 4:45 | 5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 5:00 | 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 5:15 | 6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 5:30 | 6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 5:45 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 6:00 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | |
| 6:15 | 7:15 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 0.25 | |
| 6:30 | 7:30 | 0 | 1 | 0 | 0 | 0 | 1 | 15 | 0 | 6 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 12 | 0.42 | |
| 6:45 | 7:45 | 0 | 4 | 4 | 1 | 0 | 1 | 27 | 0 | 6 | 6 | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 40 | 20 | 0.50 | |
| 7:00 | 8:00 | 0 | 8 | 4 | 3 | 0 | 1 | 45 | 0 | 6 | 6 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 25 | 0.65 | |
| 7:15 | 8:15 | 0 | 10 | 4 | 3 | 0 | 3 | 58 | 0 | 6 | 6 | 4 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 81 | 25 | 0.81 | |
| 7:30 | 8:30 | 0 | 13 | 6 | 4 | 0 | 7 | 63 | 0 | 0 | 6 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 28 | 0.87 | |
| 7:45 | 8:45 | 0 | 16 | 2 | 5 | 0 | 9 | 67 | 0 | 3 | 3 | 7 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 105 | 28 | 0.94 | |
| 8:00 | 9:00 | 0 | 28 | 4 | 4 | 0 | 11 | 79 | 0 | 10 | 10 | 7 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 134 | 54 | 0.62 | |
| 8:15 | 9:15 | 0 | 31 | 5 | 4 | 0 | 10 | 81 | 0 | 10 | 10 | 9 | 0 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 143 | 54 | 0.66 | |
| 8:30 | 9:30 | 0 | 28 | 3 | 5 | 0 | 6 | 73 | 0 | 11 | 11 | 6 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 123 | 54 | 0.57 | |
| 8:45 | 9:45 | 0 | 23 | 4 | 3 | 0 | 5 | 60 | 0 | 8 | 8 | 5 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 104 | 54 | 0.48 | |
| 9:00 | 10:00 | 0 | 9 | 2 | 2 | 0 | 4 | 33 | 0 | 1 | 1 | 5 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 58 | 33 | 0.44 | |
| 9:15 | 10:15 | 0 | 4 | 1 | 2 | 0 | 2 | 13 | 0 | 1 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 9 | 0.69 | |
| 9:30 | 10:30 | 0 | 3 | 1 | 0 | 0 | 2 | 6 | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 9 | 0.47 | |
| 9:45 | 10:45 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 0.25 | |
| 10:00 | 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 10:15 | 11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 10:30 | 11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 10:45 | 11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:00 | 12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:15 | 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:30 | 12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 11:45 | 12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |

PEAK HOUR INFORMATION

Time Interval: 08:15 - 09:15
Int Peak 1hr Vol: 143
Int Peak 15min Vol: 54
Int PHF: 0.662

| Existing Year Traffic - AM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|------------------|------|-------|--|-----------|------|------------------|------|-------|--|------------|------|--------------|------|-------|--|------------|------|--------------|------|-------|--|-------------------|
| From West | | | | | | From East | | | | | | From South | | | | | | From North | | | | | | Int Vehicle Total |
| EASTBOUND | | Champlain Avenue | | | | WESTBOUND | | Champlain Avenue | | | | NORTHBOUND | | 106th Street | | | | SOUTHBOUND | | 106th Street | | | | |
| Left | Thru | Right | Peds | Bikes | | Left | Thru | Right | Peds | Bikes | | Left | Thru | Right | Peds | Bikes | | Left | Thru | Right | Peds | Bikes | | |
| 0 | 31 | 5 | 4 | 0 | | 10 | 81 | 0 | 10 | 0 | | 9 | 0 | 7 | 4 | 0 | | 0 | 0 | 0 | 0 | 143 | | |
| 0 | 1 | 1 | -- | -- | | 0 | 7 | 0 | -- | -- | | 0 | 0 | 1 | -- | -- | | 0 | 0 | 0 | -- | -- | | |
| n/a | 3.2% | 20.0% | -- | -- | | 0.0% | 8.6% | n/a | -- | -- | | 0.0% | n/a | 14.3% | -- | -- | | n/a | n/a | n/a | -- | -- | | |

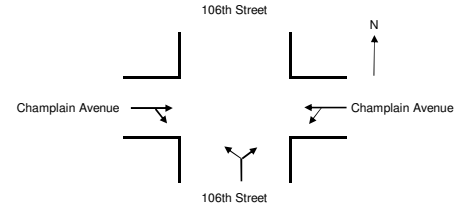


106th Street with Champlain Avenue

Afternoon Dismissal

Intersection: 106th Street with Champlain Avenue
 Traffic Count Date: 10/30/2018
 Count Time: PM Count (12:00pm-12:00am)
 North-South Street: 106th Street
 East-West Street: Champlain Avenue
 PEAK HOUR: 15:15 - 16:15

Weather: Fair
 Day of Week: Tuesday
 Intersection Allowed Movements: See Diagram
 Note: Peds counted; eastbound peds are peds crossing the west leg
 INDICATES PROHIBITED MOVEMENT

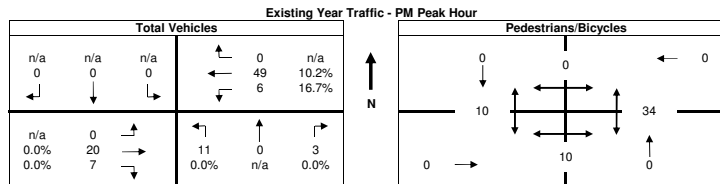


| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | Int Vehicle Total | Peak 15-min | Int PHF |
|-----------|-------|----------------------|------|------------------|------|-------|-----------|------|------------------|------|-------|------------|------|--------------|------|-------|------------|------|--------------|-------------------|-------------|---------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | |
| Interval: | 1:00 | EASTBOUND | | Champlain Avenue | | | WESTBOUND | | Champlain Avenue | | | NORTHBOUND | | 106th Street | | | SOUTHBOUND | | 106th Street | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 13:15 | 14:15 | 0 | 0 | 2 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 13:30 | 14:30 | 0 | 2 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 13:45 | 14:45 | 0 | 5 | 5 | 6 | 1 | 2 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 14:00 | 15:00 | 0 | 8 | 6 | 6 | 1 | 2 | 24 | 0 | 1 | 0 | 3 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 14:15 | 15:15 | 0 | 13 | 4 | 7 | 1 | 2 | 25 | 0 | 2 | 0 | 2 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 14:30 | 15:30 | 0 | 14 | 4 | 9 | 0 | 1 | 27 | 0 | 4 | 0 | 2 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 14:45 | 15:45 | 0 | 17 | 2 | 6 | 0 | 2 | 27 | 0 | 13 | 0 | 8 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 15:00 | 16:00 | 0 | 20 | 6 | 11 | 0 | 3 | 26 | 0 | 19 | 0 | 8 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 15:15 | 16:15 | 0 | 20 | 7 | 10 | 0 | 6 | 49 | 0 | 34 | 0 | 11 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 15:30 | 16:30 | 0 | 21 | 9 | 6 | 0 | 6 | 63 | 0 | 32 | 0 | 11 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 15:45 | 16:45 | 0 | 16 | 9 | 5 | 0 | 4 | 59 | 0 | 25 | 0 | 9 | 0 | 2 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:00 | 17:00 | 0 | 17 | 4 | 0 | 0 | 3 | 63 | 0 | 20 | 0 | 8 | 0 | 1 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:15 | 17:15 | 0 | 18 | 6 | 0 | 0 | 1 | 39 | 0 | 4 | 0 | 6 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:30 | 17:30 | 0 | 16 | 5 | 1 | 0 | 1 | 38 | 0 | 3 | 0 | 7 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:45 | 17:45 | 0 | 16 | 6 | 3 | 0 | 2 | 46 | 0 | 1 | 0 | 5 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 17:00 | 18:00 | 0 | 11 | 6 | 3 | 0 | 3 | 45 | 0 | 0 | 0 | 4 | 0 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 17:15 | 18:15 | 0 | 6 | 4 | 3 | 0 | 4 | 49 | 0 | 3 | 0 | 3 | 0 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 17:30 | 18:30 | 0 | 6 | 3 | 2 | 0 | 4 | 38 | 0 | 8 | 0 | 2 | 0 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 17:45 | 18:45 | 0 | 9 | 1 | 1 | 0 | 4 | 31 | 0 | 10 | 0 | 1 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 18:00 | 19:00 | 0 | 10 | 1 | 1 | 0 | 4 | 25 | 0 | 15 | 0 | 3 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 18:15 | 19:15 | 0 | 11 | 0 | 3 | 1 | 2 | 19 | 0 | 15 | 0 | 3 | 0 | 4 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 18:30 | 19:30 | 0 | 11 | 1 | 4 | 1 | 2 | 16 | 0 | 10 | 0 | 4 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 18:45 | 19:45 | 0 | 8 | 4 | 4 | 1 | 2 | 10 | 0 | 8 | 0 | 6 | 0 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 19:00 | 20:00 | 0 | 6 | 4 | 4 | 1 | 3 | 10 | 0 | 3 | 0 | 4 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 19:15 | 20:15 | 0 | 7 | 5 | 4 | 0 | 5 | 10 | 0 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 19:30 | 20:30 | 0 | 6 | 4 | 5 | 0 | 6 | 10 | 0 | 0 | 0 | 5 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 19:45 | 20:45 | 0 | 6 | 1 | 4 | 0 | 6 | 12 | 0 | 1 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 20:00 | 21:00 | 0 | 6 | 1 | 5 | 0 | 5 | 12 | 0 | 2 | 0 | 4 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 20:15 | 21:15 | 0 | 3 | 0 | 3 | 0 | 3 | 8 | 0 | 2 | 0 | 3 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 20:30 | 21:30 | 0 | 2 | 0 | 1 | 0 | 2 | 5 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 20:45 | 21:45 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

PEAK HOUR INFORMATION

Time Interval: 15:15 - 16:15
 Int Peak 1hr Vol: 96
 Int Peak 15min Vol: 42
 Int PHF: 0.571

| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|----------------------------------|------|--------------------------------------|------|-----------|-------|-------|------------------|------|------------|------|-------|--------------|------|-------|------|-------|--------------|------|-------|------|-------|------|--|--|--|----------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | | | | |
| | | Champlain Avenue | | | | | Champlain Avenue | | | | | 106th Street | | | | | 106th Street | | | | | | | | | |
| | | EASTBOUND | | WESTBOUND | | | NORTHBOUND | | SOUTHBOUND | | | | | | | | | | | | | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | | |
| 0 | 20 | 7 | 10 | 0 | 6 | 49 | 0 | 34 | 0 | 11 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | | | | |
| 0 | 0 | 0 | -- | -- | 1 | 5 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | -- | -- | 6 | | | | |
| n/a | 0.0% | 0.0% | -- | -- | 16.7% | 10.2% | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | -- | -- | 6.3% | | | | |



106th Street with Champlain Avenue
PM

Intersection: 106th Street with Champlain Avenue
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: 106th Street
East-West Street: Champlain Avenue

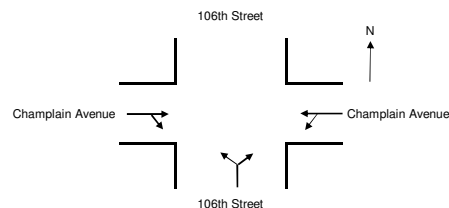
PEAK HOUR: 17:00 - 18:00

Weather: Fair
Day of Week: Tuesday

Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT



| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle Total | Peak 15-min | Int PHF |
|-----------|-------|----------------------|------|-------|------|-------|------------------|------|-------|------|-------|--------------|------|-------|------|-------|--------------|------|-------|------|-------|-------------------|-------------|---------|
| Interval: | 1:00 | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | | |
| | | Champlain Avenue | | | | | Champlain Avenue | | | | | 106th Street | | | | | 106th Street | | | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:15 | 14:15 | 0 | 0 | 2 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:30 | 14:30 | 0 | 2 | 2 | 2 | 1 | 1 | 8 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:45 | 14:45 | 0 | 5 | 5 | 6 | 18 | 2 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 14:00 | 15:00 | 0 | 8 | 6 | 1 | 2 | 24 | 1 | 3 | 0 | 3 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 14:15 | 15:15 | 0 | 13 | 4 | 7 | 1 | 2 | 25 | 0 | 2 | 0 | 2 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 14:30 | 15:30 | 0 | 14 | 4 | 9 | 0 | 1 | 27 | 0 | 4 | 0 | 2 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 14:45 | 15:45 | 0 | 17 | 2 | 6 | 0 | 2 | 27 | 0 | 13 | 0 | 8 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 15:00 | 16:00 | 0 | 20 | 6 | 11 | 0 | 3 | 26 | 0 | 19 | 0 | 8 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 15:15 | 16:15 | 0 | 20 | 7 | 10 | 0 | 6 | 49 | 0 | 34 | 0 | 11 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 15:30 | 16:30 | 0 | 21 | 9 | 6 | 0 | 6 | 63 | 0 | 32 | 0 | 11 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 15:45 | 16:45 | 0 | 16 | 9 | 5 | 0 | 4 | 59 | 0 | 25 | 0 | 9 | 0 | 2 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 16:00 | 17:00 | 0 | 17 | 4 | 0 | 0 | 3 | 63 | 0 | 20 | 0 | 8 | 0 | 1 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 16:15 | 17:15 | 0 | 18 | 6 | 0 | 0 | 1 | 39 | 0 | 4 | 0 | 6 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 16:30 | 17:30 | 0 | 16 | 5 | 1 | 0 | 1 | 38 | 0 | 3 | 0 | 7 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 16:45 | 17:45 | 0 | 16 | 6 | 3 | 0 | 2 | 46 | 0 | 1 | 0 | 5 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:00 | 18:00 | 0 | 11 | 6 | 3 | 0 | 2 | 45 | 0 | 0 | 0 | 4 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:15 | 18:15 | 0 | 6 | 4 | 3 | 0 | 4 | 49 | 0 | 3 | 0 | 3 | 0 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:30 | 18:30 | 0 | 6 | 3 | 2 | 0 | 4 | 38 | 0 | 8 | 0 | 2 | 0 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:45 | 18:45 | 0 | 9 | 1 | 1 | 0 | 4 | 31 | 0 | 10 | 0 | 1 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:00 | 19:00 | 0 | 10 | 1 | 1 | 0 | 4 | 25 | 0 | 15 | 0 | 3 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:15 | 19:15 | 0 | 11 | 0 | 3 | 1 | 2 | 19 | 0 | 15 | 0 | 3 | 0 | 4 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:30 | 19:30 | 0 | 11 | 1 | 4 | 1 | 2 | 16 | 0 | 10 | 0 | 4 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:45 | 19:45 | 0 | 8 | 4 | 4 | 1 | 2 | 10 | 0 | 8 | 0 | 6 | 0 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 19:00 | 20:00 | 0 | 6 | 4 | 4 | 1 | 3 | 10 | 0 | 3 | 0 | 4 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 19:15 | 20:15 | 0 | 7 | 5 | 4 | 0 | 5 | 10 | 0 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 19:30 | 20:30 | 0 | 6 | 4 | 5 | 0 | 6 | 10 | 0 | 0 | 0 | 5 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 19:45 | 20:45 | 0 | 6 | 1 | 4 | 0 | 6 | 12 | 0 | 1 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 20:00 | 21:00 | 0 | 1 | 5 | 0 | 5 | 12 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 20:15 | 21:15 | 0 | 3 | 0 | 3 | 0 | 3 | 8 | 0 | 2 | 0 | 3 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 20:30 | 21:30 | 0 | 2 | 0 | 1 | 0 | 2 | 5 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 20:45 | 21:45 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |

PEAK HOUR INFORMATION

Time Interval: 17:00 - 18:00
Int Peak 1hr Vol: 74
Int Peak 15min Vol: 21
Int PHF: 0.881

| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|----------------------------------|------|--------------------------------------|------|------------------|------|-------|------------------|------|------------------|------|-------|--------------|------|--------------|------|-------|--------------|------|--------------|------|-------|--|--|--|--|-------------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | | | | |
| | | Champlain Avenue | | | | | Champlain Avenue | | | | | 106th Street | | | | | 106th Street | | | | | | | | | |
| | | EASTBOUND | | Champlain Avenue | | | WESTBOUND | | Champlain Avenue | | | NORTHBOUND | | 106th Street | | | SOUTHBOUND | | 106th Street | | | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | | |
| 0 | 11 | 6 | 3 | 0 | 3 | 45 | 0 | 0 | 0 | 4 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | | | | | |
| 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | | | | | | |
| n/a | 0.0% | 0.0% | -- | -- | 0.0% | 0.0% | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | 0 | n/a | -- | -- | 0.0% | | | | | | |

Existing Year Traffic - PM Peak Hour

| Total Vehicles | | | | | |
|----------------|-----|-----|------|-----|------|
| n/a | n/a | n/a | | 0 | n/a |
| 0 | 0 | 0 | | 45 | 0.0% |
| | | | | 3 | 0.0% |
| | | | | 0 | n/a |
| n/a | 0 | | | 4 | |
| 0.0% | 11 | | | 0 | 5 |
| 0.0% | 6 | | 0.0% | n/a | 0.0% |

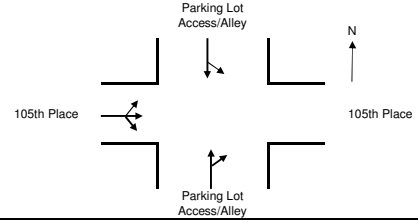
N

| Pedestrians/Bicycles | | | |
|----------------------|---|--|---|
| 0 | 0 | | 0 |
| | | | |
| 3 | | | 0 |
| | | | |
| 0 | | | 1 |
| | | | |
| | | | 1 |

Parking Lot Access/Alley with 105th PlaceAM

Intersection: Parking Lot Access/Alley with 105th Place
 Traffic Count Date: 10/30/2018
 Count Time: AM Count (12:00am-12:00pm)
 North-South Street: Parking Lot Access/Alley
 East-West Street: 105th Place
 PEAK HOUR: 08:15 - 09:15

Weather: Fair
 Day of Week: Tuesday
 Intersection Allowed Movements: See Diagram
 Note: Peds counted; eastbound peds are peds crossing the west leg
 INDICATES PROHIBITED MOVEMENT

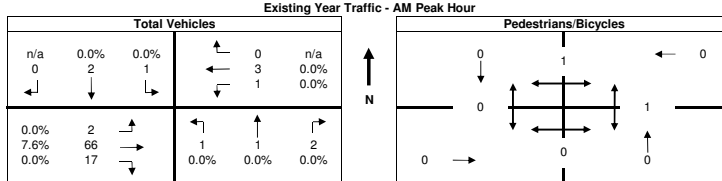


| Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-----------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|-------------|-------------|---------|
| Interval: 1:00 | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle | Peak 15-min | Int PHF |
| Start | End | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | Total | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 0:00 | 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:15 | 1:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:30 | 1:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 0:45 | 1:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:00 | 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:15 | 2:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:30 | 2:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 1:45 | 2:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:00 | 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:15 | 3:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:30 | 3:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 2:45 | 3:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:00 | 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:15 | 4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:30 | 4:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 3:45 | 4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:00 | 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:15 | 5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:30 | 5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 4:45 | 5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:00 | 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:15 | 6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:30 | 6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 5:45 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:00 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 6:15 | 7:15 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0.25 |
| 6:30 | 7:30 | 0 | 7 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 7 | 0.36 |
| 6:45 | 7:45 | 0 | 19 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 14 | 0.43 |
| 7:00 | 8:00 | 0 | 31 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 16 | 0.63 |
| 7:15 | 8:15 | 0 | 45 | 12 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 62 | 25 | 0.62 |
| 7:30 | 8:30 | 2 | 51 | 15 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 74 | 25 | 0.74 |
| 7:45 | 8:45 | 2 | 61 | 18 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 86 | 26 | 0.83 |
| 8:00 | 9:00 | 2 | 66 | 23 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 2 | 1 | 2 | 1 | 0 | 2 | 2 | 0 | 1 | 0 | 102 | 32 | 0.80 |
| 8:15 | 9:15 | 2 | 66 | 17 | 0 | 0 | 1 | 3 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 96 | 32 | 0.75 |
| 8:30 | 9:30 | 0 | 60 | 14 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 2 | 1 | 2 | 0 | 0 | 2 | 2 | 0 | 1 | 0 | 85 | 32 | 0.66 |
| 8:45 | 9:45 | 1 | 42 | 11 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 2 | 1 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 64 | 32 | 0.50 |
| 9:00 | 10:00 | 1 | 29 | 2 | 0 | 1 | 0 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 39 | 19 | 0.51 |
| 9:15 | 10:15 | 1 | 13 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 20 | 8 | 0.63 |
| 9:30 | 10:30 | 1 | 8 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 12 | 7 | 0.43 |
| 9:45 | 10:45 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 7 | 7 | 0.25 |
| 10:00 | 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:15 | 11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:30 | 11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 10:45 | 11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:00 | 12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:15 | 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:30 | 12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 11:45 | 12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

PEAK HOUR INFORMATION

Time Interval: 08:15 - 09:15
 Int Peak 1hr Vol: 96
 Int Peak 15min Vol: 32
 Int PHF: 0.750

| Existing Year Traffic - AM Peak Hour | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|--|-----------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|-------------|--|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle | |
| | | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | Total | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | |
| Total Volume | | 2 | 66 | 17 | 0 | 0 | 1 | 3 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 96 | |
| HV Volume | | 0 | 5 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 5 | |
| HV% | | 0.0% | 7.6% | 0.0% | -- | -- | 0.0% | 0.0% | n/a | -- | -- | 0.0% | 0.0% | 0.0% | -- | -- | 0.0% | 0.0% | n/a | -- | -- | 5.2% | |



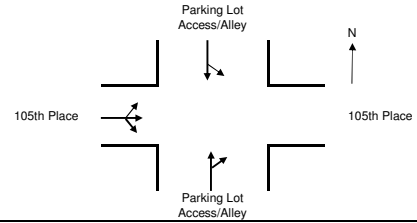
Parking Lot Access/Alley with 105th Place Afternoon Dismissal

Intersection: Parking Lot Access/Alley with 105th Place
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Parking Lot Access/Alley
East-West Street: 105th Place
PEAK HOUR: 15:15 - 16:15

Weather: Fair
Day of Week: Tuesday
Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg

INDICATES PROHIBITED MOVEMENT

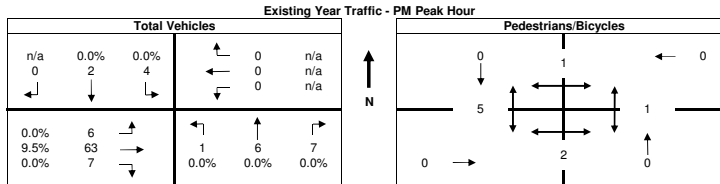


| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle Total | Peak 15-min | Int PHF | |
|-----------|-------|----------------------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|-------------------|-------------|---------|------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | | | |
| Interval: | 1:00 | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:15 | 14:15 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.25 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 5 | 0.25 |
| 13:30 | 14:30 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 11 | 6 | 0.46 |
| 13:45 | 14:45 | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 19 | 8 | 0.59 |
| 14:00 | 15:00 | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 22 | 8 | 0.69 |
| 14:15 | 15:15 | 0 | 11 | 4 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 25 | 8 | 0.78 |
| 14:30 | 15:30 | 1 | 14 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 28 | 9 | 0.78 |
| 14:45 | 15:45 | 1 | 21 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 7 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 35 | 15 | 0.58 |
| 15:00 | 16:00 | 4 | 48 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 7 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 72 | 40 | 0.45 |
| 15:15 | 16:15 | 6 | 63 | 7 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 7 | 2 | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 96 | 40 | 0.60 |
| 15:30 | 16:30 | 5 | 61 | 8 | 5 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 7 | 6 | 2 | 0 | 4 | 2 | 0 | 2 | 0 | 0 | 95 | 40 | 0.59 |
| 15:45 | 16:45 | 5 | 58 | 8 | 4 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 7 | 6 | 2 | 0 | 4 | 2 | 0 | 2 | 0 | 0 | 93 | 40 | 0.58 |
| 16:00 | 17:00 | 2 | 43 | 2 | 3 | 0 | 0 | 1 | 0 | 2 | 1 | 2 | 6 | 5 | 2 | 0 | 6 | 1 | 0 | 2 | 1 | 0 | 68 | 32 | 0.53 |
| 16:15 | 17:15 | 0 | 38 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 2 | 2 | 0 | 1 | 7 | 0 | 0 | 1 | 1 | 0 | 53 | 17 | 0.78 |
| 16:30 | 17:30 | 0 | 44 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 1 | 7 | 0 | 0 | 0 | 0 | 1 | 60 | 17 | 0.88 |
| 16:45 | 17:45 | 0 | 45 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 1 | 58 | 17 | 0.85 |
| 17:00 | 18:00 | 0 | 48 | 3 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 2 | 1 | 4 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 61 | 18 | 0.85 |
| 17:15 | 18:15 | 0 | 38 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 47 | 18 | 0.65 |
| 17:30 | 18:30 | 1 | 33 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 18 | 0.53 |
| 17:45 | 18:45 | 1 | 26 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 31 | 18 | 0.43 |
| 18:00 | 19:00 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 18 | 6 | 0.75 |
| 18:15 | 19:15 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 17 | 6 | 0.71 |
| 18:30 | 19:30 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 16 | 5 | 0.80 |
| 18:45 | 19:45 | 1 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 14 | 5 | 0.70 |
| 19:00 | 20:00 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 14 | 5 | 0.70 |
| 19:15 | 20:15 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 16 | 5 | 0.80 |
| 19:30 | 20:30 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 18 | 7 | 0.64 |
| 19:45 | 20:45 | 1 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 22 | 7 | 0.79 |
| 20:00 | 21:00 | 1 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 22 | 7 | 0.79 |
| 20:15 | 21:15 | 1 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 7 | 0.64 |
| 20:30 | 21:30 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 0.46 |
| 20:45 | 21:45 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0.25 |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |

PEAK HOUR INFORMATION

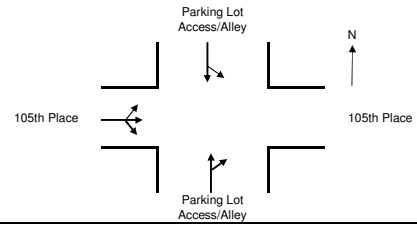
Time Interval: 15:15 - 16:15
Int Peak 1hr Vol: 96
Int Peak 15min Vol: 40
Int PHF: 0.600

| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|----------------------------------|--|--------------------------------------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|------|----------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | |
| | | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | 6 | 63 | 7 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 7 | 2 | 0 | 4 | 2 | 0 | 1 | 0 | 96 | |
| | | 0 | 6 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 6 | |
| | | 0.0% | 9.5% | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | 0.0% | 0.0% | 0.0% | -- | -- | 0.0% | 0.0% | n/a | -- | -- | 6.3% | |



Intersection: Parking Lot Access/Alley with 105th Place
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Parking Lot Access/Alley
East-West Street: 105th Place
PEAK HOUR: 17:00 - 18:00

INDICATES PROHIBITED MOVEMENT



| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle | Peak 15- min | Int PHF |
|-----------|-------|----------------------|------|-------------|------|-------|-----------|------|-------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|-------------|-----------------|---------|
| Interval: | 1:00 | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | | |
| | | EASTBOUND | | 105th Place | | | WESTBOUND | | 105th Place | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Total | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 13:15 | 14:15 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | | |
| 13:30 | 14:30 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 11 | | |
| 13:45 | 14:45 | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 19 | | |
| 14:00 | 15:00 | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 22 | | |
| 14:15 | 15:15 | 0 | 11 | 4 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 25 | | |
| 14:30 | 15:30 | 1 | 14 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 28 | | |
| 14:45 | 15:45 | 1 | 21 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 7 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 35 | | |
| 15:00 | 16:00 | 4 | 48 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 7 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 72 | | |
| 15:15 | 16:15 | 6 | 63 | 7 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 7 | 2 | 0 | 4 | 2 | 0 | 1 | 0 | 96 | | |
| 15:30 | 16:30 | 5 | 61 | 8 | 5 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 7 | 6 | 2 | 0 | 4 | 2 | 0 | 2 | 95 | | |
| 15:45 | 16:45 | 5 | 58 | 8 | 4 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 7 | 6 | 2 | 0 | 4 | 2 | 0 | 2 | 0 | 93 | | |
| 16:00 | 17:00 | 2 | 43 | 2 | 3 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 6 | 5 | 2 | 0 | 6 | 1 | 0 | 2 | 1 | 68 | | |
| 16:15 | 17:15 | 0 | 38 | 1 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 1 | 2 | 2 | 0 | 1 | 7 | 0 | 0 | 2 | 1 | 53 | | |
| 16:30 | 17:30 | 0 | 44 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 1 | 7 | 0 | 0 | 0 | 1 | 60 | | |
| 16:45 | 17:45 | 0 | 45 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 1 | 58 | | |
| 17:00 | 18:00 | 0 | 48 | 3 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 2 | 1 | 4 | 1 | 4 | 0 | 0 | 0 | 0 | 61 | | |
| 17:15 | 18:15 | 0 | 38 | 3 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 47 | | |
| 17:30 | 18:30 | 1 | 33 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 38 | | |
| 17:45 | 18:45 | 1 | 26 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 31 | | |
| 18:00 | 19:00 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 18 | | |
| 18:15 | 19:15 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 17 | | |
| 18:30 | 19:30 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 16 | | |
| 18:45 | 19:45 | 1 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 14 | | |
| 19:00 | 20:00 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 14 | | |
| 19:15 | 20:15 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 16 | | |
| 19:30 | 20:30 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 18 | | |
| 19:45 | 20:45 | 1 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 22 | | |
| 20:00 | 21:00 | 1 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 22 | | |
| 20:15 | 21:15 | 1 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | | |
| 20:30 | 21:30 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | | |
| 20:45 | 21:45 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | | |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

Time Interval: 17:00 - 18:00
Int Peak 1hr Vol: 61
Int Peak 15min Vol: 18
Int PHF: 0.847

| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|------|--------------------------------------|------|-------|-------------|-------|-----------|------|-------|-------------|-------|------------|------|-------|--------------------------|-------|------------|------|-------|--------------------------|-------|----------------|---|----|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle | | |
| | | EASTBOUND | | | 105th Place | | WESTBOUND | | | 105th Place | | NORTHBOUND | | | Parking Lot Access/Alley | | SOUTHBOUND | | | Parking Lot Access/Alley | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| | | 48 | 3 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 4 | 1 | 4 | 0 | 0 | 0 | 0 | | 0 | 61 |
| 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | | | |
| n/a | 0.0% | 0.0% | -- | -- | n/a | 0.0% | n/a | -- | -- | -- | 0.0% | 0.0% | 0.0% | -- | -- | 0.0% | n/a | n/a | -- | -- | 0.0% | | | |

Existing Year Traffic - PM Peak Hour

Total Vehicles

| Approach | Left Turn | Through/Right Turn | Total |
|----------------------|-----------|--------------------|-------|
| Highway 1 Northbound | 0 | 0 | 0 |
| Highway 1 Southbound | 0 | 0 | 0 |
| Highway 4 Northbound | 0 | 48 | 48 |
| Highway 4 Southbound | 3 | 0 | 3 |

Pedestrians/Bicycles

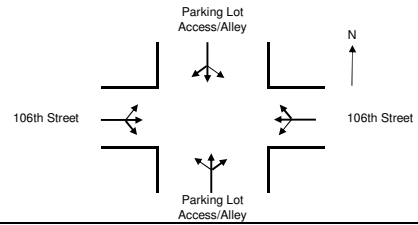
| Direction | Volume |
|----------------------|--------|
| Highway 1 Northbound | 0 |
| Highway 1 Southbound | 0 |
| Highway 4 Northbound | 4 |
| Highway 4 Southbound | 1 |

Intersection: Parking Lot Access/Alley with 106th Street
 Traffic Count Date: 10/30/2018
 Count Time: AM Count (12:00am-12:00pm)
 North-South Street: Parking Lot Access/Alley
 East-West Street: 106th Street
 PEAK HOUR: 08:15 - 09:15

Weather: Fair
Day of Week: Tuesday

Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg



| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|-------|----------------------|------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|-------------------|-------------|---------|------|--|--|--|
| Interval: | 1:00 | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF | | | | |
| | | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | | | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | | | | |
| Start | End | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0:00 | 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 0:15 | 1:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 0:30 | 1:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 0:45 | 1:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 1:00 | 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 1:15 | 2:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 1:30 | 2:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 1:45 | 2:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 2:00 | 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 2:15 | 3:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 2:30 | 3:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 2:45 | 3:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 3:00 | 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 3:15 | 4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 3:30 | 4:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 3:45 | 4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 4:00 | 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 4:15 | 5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 4:30 | 5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 4:45 | 5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 5:00 | 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 5:15 | 6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 5:30 | 6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 5:45 | 6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 6:00 | 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 6:15 | 7:15 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 0 | 0.25 | | | | |
| 6:30 | 7:30 | 0 | 1 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 18 | 12 | 0.38 | | | |
| 6:45 | 7:45 | 1 | 3 | 0 | 0 | 0 | 0 | 27 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 35 | 17 | 0.51 | | | | |
| 7:00 | 8:00 | 1 | 8 | 0 | 0 | 0 | 0 | 1 | 44 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 60 | 25 | 0.60 | | | | |
| 7:15 | 8:15 | 1 | 11 | 0 | 0 | 0 | 0 | 1 | 59 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 78 | 25 | 0.78 | | | | |
| 7:30 | 8:30 | 1 | 15 | 0 | 0 | 0 | 0 | 1 | 68 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 91 | 25 | 0.91 | | | | | |
| 7:45 | 8:45 | 0 | 19 | 0 | 3 | 1 | 2 | 76 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 24 | 0 | 100 | 26 | 0.96 | | | | | |
| 8:00 | 9:00 | 1 | 28 | 0 | 9 | 1 | 1 | 89 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 79 | 0 | 120 | 45 | 0.67 | | | | | |
| 8:15 | 9:15 | 3 | 32 | 0 | 9 | 1 | 1 | 83 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 79 | 0 | 120 | 45 | 0.67 | | | | | |
| 8:30 | 9:30 | 3 | 28 | 0 | 9 | 0 | 0 | 71 | 0 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 0 | 103 | 45 | 0.57 | | | | | |
| 8:45 | 9:45 | 3 | 25 | 0 | 6 | 0 | 0 | 55 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 84 | 45 | 0.47 | | | | | |
| 9:00 | 10:00 | 2 | 13 | 0 | 0 | 0 | 0 | 29 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 24 | 0.47 | | | | | |
| 9:15 | 10:15 | 0 | 6 | 0 | 0 | 0 | 0 | 14 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 8 | 0.66 | | | | | |
| 9:30 | 10:30 | 0 | 5 | 0 | 0 | 0 | 0 | 8 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 7 | 0.46 | | | | | |
| 9:45 | 10:45 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 0.25 | | | | | |
| 10:00 | 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 10:15 | 11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 10:30 | 11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 10:45 | 11:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 11:00 | 12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 11:15 | 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 11:30 | 12:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |
| 11:45 | 12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | | | | |

Time Interval: 08:15 - 09:15
Int Peak 1hr Vol: 120
Int Peak 15min Vol: 45
Int PHF: 0.667

| Existing Year Traffic - AM Peak Hour | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-----------|------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|----------------|
| Total Volume HV Volume HV% | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle |
| | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | |
| | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| | 3 | 32 | 0 | 9 | 1 | 1 | 83 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 79 | |
| | 0 | 2 | 0 | -- | -- | 0 | 7 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | |
| | 0.0% | 6.3% | n/a | -- | -- | 0.0% | 8.4% | n/a | -- | -- | n/a | n/a | n/a | -- | -- | n/a | n/a | 0.0% | -- | -- | |
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Existing Year Traffic - AM Peak Hour

| Total Vehicles | | | | | |
|----------------|-----|-----|-----|-----|------|
| 0.0% | n/a | n/a | | 0 | n/a |
| 1 | 0 | 0 | | 83 | 8.4% |
| | | | | 1 | 0.0% |
| | | | | | |
| 0.0% | 3 | | | | |
| 6.3% | 32 | | 0 | 0 | 0 |
| n/a | 0 | | n/a | n/a | n/a |

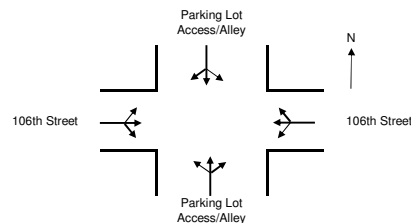
N

| Pedestrians/Bicycles | | | |
|----------------------|--|----|---|
| 0 | | 79 | |
| 9 | | | 3 |
| 1 | | 0 | |
| | | | 0 |

Intersection: Parking Lot Access/Alley with 106th Street
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Parking Lot Access/Alley
East-West Street: 106th Street

PEAK HOUR: 15:15 - 16:15

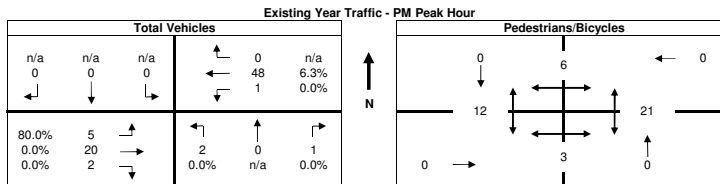
INDICATES PROHIBITED MOVEMENT



| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | Access/Alley | | | |
|-----------|-------|----------------------|------|-------|--------------|-------|-----------|------|-------|--------------|-------|------------|------|-------|--------------------------|-------|------------|------|-------|--------------------------|-------|-------------------|-------------|---------|------|
| Interval: | 1:00 | From West | | | | | From East | | | | | From South | | | | | From North | | | | | Int Vehicle Total | Peak 15-min | Int PHF | |
| | | EASTBOUND | | | 106th Street | | WESTBOUND | | | 106th Street | | NORTHBOUND | | | Parking Lot Access/Alley | | SOUTHBOUND | | | Parking Lot Access/Alley | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| 13:15 | 14:15 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 0.25 |
| 13:30 | 14:30 | 0 | 2 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 8 | 0.41 |
| 13:45 | 14:45 | 0 | 5 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 11 | 0.55 | |
| 14:00 | 15:00 | 0 | 8 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 11 | 0.75 | |
| 14:15 | 15:15 | 0 | 13 | 0 | 0 | 0 | 1 | 24 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 39 | 14 | 0.70 | |
| 14:30 | 15:30 | 0 | 15 | 0 | 1 | 0 | 1 | 23 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 41 | 14 | 0.73 | |
| 14:45 | 15:45 | 2 | 18 | 0 | 1 | 0 | 1 | 25 | 0 | 3 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 5 | 0 | 0 | 48 | 18 | 0.67 | |
| 15:00 | 16:00 | 4 | 20 | 2 | 5 | 0 | 1 | 25 | 0 | 5 | 1 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 5 | 0 | 0 | 55 | 18 | 0.76 | |
| 15:15 | 16:15 | 5 | 20 | 2 | 12 | 0 | 1 | 48 | 0 | 21 | 0 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 6 | 0 | 0 | 79 | 38 | 0.52 | |
| 15:30 | 16:30 | 5 | 21 | 2 | 13 | 0 | 1 | 57 | 0 | 26 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 7 | 0 | 0 | 88 | 38 | 0.58 | |
| 15:45 | 16:45 | 3 | 16 | 3 | 15 | 0 | 1 | 51 | 0 | 24 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 4 | 0 | 78 | 38 | 0.51 | |
| 16:00 | 17:00 | 1 | 18 | 1 | 11 | 0 | 1 | 54 | 0 | 27 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 7 | 0 | 78 | 38 | 0.51 | |
| 16:15 | 17:15 | 0 | 21 | 1 | 4 | 0 | 0 | 32 | 1 | 11 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 6 | 0 | 57 | 17 | 0.84 | |
| 16:30 | 17:30 | 0 | 19 | 1 | 2 | 1 | 0 | 36 | 1 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 5 | 0 | 0 | 61 | 20 | 0.76 | |
| 16:45 | 17:45 | 0 | 19 | 0 | 0 | 1 | 0 | 45 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 1 | 0 | 68 | 33 | 0.80 | |
| 17:00 | 18:00 | 0 | 16 | 0 | 0 | 1 | 1 | 45 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 5 | 1 | 67 | 20 | 0.84 | |
| 17:15 | 18:15 | 0 | 12 | 0 | 0 | 1 | 1 | 49 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 4 | 6 | 1 | 68 | 20 | 0.85 | |
| 17:30 | 18:30 | 0 | 13 | 0 | 0 | 0 | 1 | 38 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 3 | 5 | 2 | 57 | 18 | 0.79 | |
| 17:45 | 18:45 | 0 | 15 | 0 | 0 | 0 | 2 | 32 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 5 | 1 | 53 | 18 | 0.74 | |
| 18:00 | 19:00 | 0 | 17 | 0 | 0 | 0 | 1 | 26 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 4 | 1 | 48 | 18 | 0.67 | |
| 18:15 | 19:15 | 0 | 14 | 0 | 0 | 0 | 1 | 19 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 4 | 1 | 36 | 12 | 0.75 | |
| 18:30 | 19:30 | 0 | 14 | 0 | 0 | 0 | 1 | 17 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 33 | 12 | 0.69 | |
| 18:45 | 19:45 | 0 | 12 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 24 | 9 | 0.67 | |
| 19:00 | 20:00 | 0 | 8 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 21 | 6 | 0.88 | |
| 19:15 | 20:15 | 0 | 9 | 0 | 0 | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 9 | 0.67 | |
| 19:30 | 20:30 | 0 | 8 | 0 | 0 | 1 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 9 | 0.67 | |
| 19:45 | 20:45 | 0 | 8 | 0 | 0 | 1 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 9 | 0.72 | |
| 20:00 | 21:00 | 0 | 9 | 0 | 0 | 1 | 0 | 17 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 26 | 9 | 0.72 | |
| 20:15 | 21:15 | 0 | 6 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 6 | 0.71 | |
| 20:30 | 21:30 | 0 | 4 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 0.46 | |
| 20:45 | 21:45 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 0.25 | |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | |

Time Interval: 15:15 - 16:15
Int Peak 1hr Vol: 79
Int Peak 15min Vol: 38
Int PHF: 0.520

| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | | | Int Vehicle Total |
|----------------------------------|------|--------------------------------------|------|--------------|------|-------|-----------|------|--------------|------|-------|------------|------|--------------------------|------|-------|------------|------|--------------------------|------|-------|----|---|-------------------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | | | |
| | | EASTBOUND | | 106th Street | | | WESTBOUND | | 106th Street | | | NORTHBOUND | | Parking Lot Access/Alley | | | SOUTHBOUND | | Parking Lot Access/Alley | | | | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| | | 5 | 20 | 2 | 12 | 0 | 1 | 48 | 0 | 21 | 0 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 6 | 0 | -- | 7 | |
| 4 | 0 | 0 | -- | -- | 0 | 3 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | -- | 7 | | | |
| 80.0% | 0.0% | 0.0% | -- | -- | 0.0% | 6.3% | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | -- | 8.9% | | | |



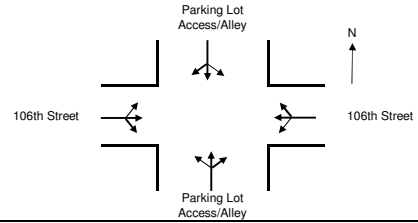
**Parking Lot Access/Alley with 106th Street
PM**

Intersection: Parking Lot Access/Alley with 106th Street
Traffic Count Date: 10/30/2018
Count Time: PM Count (12:00pm-12:00am)
North-South Street: Parking Lot Access/Alley
East-West Street: 106th Street

Weather: Fair
Day of Week: Tuesday

Intersection Allowed Movements: See Diagram

Note: Peds counted; eastbound peds are peds crossing the west leg



| | | Total Volume by Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle | Peak 15- min | Int PHF |
|-----------|-------|----------------------|------|--------------|------|-----------|------|--------------|-------|------------|-------|--------------------------|------|------------|------|--------------------------|------|------|-------|------|-------|-------------|-----------------|---------|
| Interval: | 1:00 | From West | | | | From East | | | | From South | | | | From North | | | | | | | | | | |
| | | EASTBOUND | | 106th Street | | WESTBOUND | | 106th Street | | NORTHBOUND | | Parking Lot Access/Alley | | SOUTHBOUND | | Parking Lot Access/Alley | | | | | | | | |
| Start | End | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | | | |
| 12:00 | 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:15 | 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:30 | 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 12:45 | 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:00 | 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13:15 | 14:15 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | | | |
| 13:30 | 14:30 | 0 | 2 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | | | |
| 13:45 | 14:45 | 0 | 5 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | | | |
| 14:00 | 15:00 | 0 | 8 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | | | |
| 14:15 | 15:15 | 0 | 13 | 0 | 0 | 0 | 1 | 24 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 39 | | | |
| 14:30 | 15:30 | 0 | 15 | 0 | 1 | 0 | 1 | 23 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 41 | | | |
| 14:45 | 15:45 | 2 | 18 | 0 | 1 | 0 | 1 | 25 | 0 | 3 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 5 | 0 | 48 | | | |
| 15:00 | 16:00 | 4 | 20 | 2 | 5 | 0 | 1 | 25 | 0 | 5 | 1 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 5 | 0 | 55 | | | |
| 15:15 | 16:15 | 5 | 20 | 2 | 12 | 0 | 1 | 48 | 0 | 21 | 0 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 6 | 0 | 79 | | | |
| 15:30 | 16:30 | 5 | 21 | 2 | 13 | 0 | 1 | 57 | 0 | 26 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 7 | 0 | 88 | | | |
| 15:45 | 16:45 | 3 | 16 | 3 | 15 | 0 | 1 | 51 | 0 | 24 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 4 | 0 | | | |
| 16:00 | 17:00 | 1 | 18 | 1 | 14 | 0 | 1 | 54 | 0 | 27 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 7 | 0 | | | |
| 16:15 | 17:15 | 0 | 21 | 1 | 4 | 0 | 0 | 32 | 1 | 11 | 0 | 0 | 0 | 4 | 1 | 11 | 0 | 0 | 0 | 6 | 0 | | | |
| 16:30 | 17:30 | 0 | 19 | 1 | 2 | 1 | 0 | 36 | 1 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 5 | 0 | | | |
| 16:45 | 17:45 | 0 | 19 | 0 | 0 | 1 | 0 | 45 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 7 | 1 | | | |
| 17:00 | 18:00 | 0 | 16 | 0 | 0 | 1 | 1 | 45 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 5 | 1 | | | |
| 17:15 | 18:15 | 0 | 12 | 0 | 0 | 1 | 1 | 49 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 4 | 6 | | | |
| 17:30 | 18:30 | 0 | 13 | 0 | 0 | 0 | 1 | 38 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 3 | 5 | 2 | | | |
| 17:45 | 18:45 | 0 | 15 | 0 | 0 | 0 | 2 | 32 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 5 | | | |
| 18:00 | 19:00 | 0 | 17 | 0 | 0 | 0 | 1 | 26 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 4 | 1 | | | |
| 18:15 | 19:15 | 0 | 14 | 0 | 0 | 0 | 1 | 19 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 4 | 1 | | | |
| 18:30 | 19:30 | 0 | 14 | 0 | 0 | 0 | 1 | 17 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | | | |
| 18:45 | 19:45 | 0 | 12 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | | | |
| 19:00 | 20:00 | 0 | 8 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | | | |
| 19:15 | 20:15 | 0 | 9 | 0 | 0 | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 19:30 | 20:30 | 0 | 8 | 0 | 0 | 1 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 19:45 | 20:45 | 0 | 8 | 0 | 0 | 1 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 20:00 | 21:00 | 0 | 9 | 0 | 0 | 1 | 0 | 17 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 26 | | | |
| 20:15 | 21:15 | 0 | 6 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 17 | | | |
| 20:30 | 21:30 | 0 | 4 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | | | |
| 20:45 | 21:45 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | | | |
| 21:00 | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:15 | 22:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:30 | 22:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 21:45 | 22:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:00 | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:15 | 23:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:30 | 23:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 22:45 | 23:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:00 | 0:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:15 | 0:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:30 | 0:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23:45 | 0:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |

PEAK HOUR INFORMATION

Time Interval: 17:00 - 18:00
Int Peak 1hr Vol: 67
Int Peak 15min Vol: 20
Int PHF: 0.838

| Total Volume HV Volume HV% | | Existing Year Traffic - PM Peak Hour | | | | | | | | | | | | | | | | | | | | Int Vehicle |
|----------------------------------|-----|--------------------------------------|------|-------|--------------|-------|-----------|------|-------|--------------|-------|------------|------|-------|--------------------------|-------|------------|------|-------|--------------------------|-------|----------------|
| | | From West | | | | | From East | | | | | From South | | | | | From North | | | | | |
| | | EASTBOUND | | | 106th Street | | WESTBOUND | | | 106th Street | | NORTHBOUND | | | Parking Lot Access/Alley | | SOUTHBOUND | | | Parking Lot Access/Alley | | |
| | | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | Left | Thru | Right | Peds | Bikes | |
| | | Total | | | | | | | | | | | | | | | | | | | | |
| | 0 | 16 | 0 | 0 | 1 | 1 | 45 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 3 | 5 | 1 | 67 |
| | 0 | 0 | 0 | -- | -- | 0 | 1 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 0 | 0 | 0 | -- | -- | 1 | |
| | n/a | 0.0% | n/a | -- | -- | 0.0% | 2.2% | 0.0% | -- | -- | n/a | n/a | n/a | -- | -- | 0.0% | n/a | 0.0% | -- | -- | 1.5% | |

Existing Year Traffic - PM Peak Hour

| Total Vehicles | | | | Pedestrians/Bicycles | | | |
|----------------|-----|------|-----|----------------------|-----|---|--|
| 0.0% | n/a | 0.0% | | | | | |
| 3 | 0 | 1 | 45 | 1 | 5 | 1 | |
| 3 | 0 | 1 | 1 | 0 | 0 | 0 | |
| 0.0% | 16 | 0.0% | 0 | 1 | 0 | 0 | |
| n/a | 0 | n/a | n/a | 0 | n/a | 1 | |

EDGER ALLAN POE CLASSICAL ELEMENTARY SCHOOL PROPOSED ANNEX EXPANSION/RENOVATION

Traffic Impact Study Appendix

HIGHWAY CAPACITY ANALYSIS REPORTS

Existing Morning Peak Hour

Existing Afternoon Dismissal Peak Hour

Existing Evening Peak Hour

Projected Morning Peak Hour












Projected Afternoon Dismissal Peak Hour

Projected Evening Peak Hour

HCM Unsignalized Intersection Capacity Analysis

1: Cottage Grove Avenue & 106th Street










11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 16 | 69 | 450 | 10 | 27 | 197 |
| Future Volume (Veh/h) | 16 | 69 | 450 | 10 | 27 | 197 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 18 | 78 | 511 | 11 | 31 | 224 |
| Pedestrians | 3 | | | | | |
| Lane Width (ft) | 14.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 800 | 514 | | | 525 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 800 | 514 | | | 525 | |
| tC, single (s) | 6.5 | 6.3 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.6 | 3.4 | | | 2.2 | |
| p0 queue free % | 95 | 86 | | | 97 | |
| cM capacity (veh/h) | 328 | 549 | | | 1028 | |
| Direction, Lane # | WB 1 | NB 1 | NB 2 | SB 1 | SB 2 | |
| Volume Total | 96 | 511 | 11 | 31 | 224 | |
| Volume Left | 18 | 0 | 0 | 31 | 0 | |
| Volume Right | 78 | 0 | 11 | 0 | 0 | |
| cSH | 487 | 1700 | 1700 | 1028 | 1700 | |
| Volume to Capacity | 0.20 | 0.30 | 0.01 | 0.03 | 0.13 | |
| Queue Length 95th (ft) | 18 | 0 | 0 | 2 | 0 | |
| Control Delay (s) | 14.2 | 0.0 | 0.0 | 8.6 | 0.0 | |
| Lane LOS | B | | | A | | |
| Approach Delay (s) | 14.2 | 0.0 | | 1.0 | | |
| Approach LOS | B | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.9 | | | |
| Intersection Capacity Utilization | | | 35.5% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis









2: Cottage Grove Avenue & 105th Place

11/13/2018

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | |  |  | |  |
| Traffic Volume (veh/h) | 0 | 0 | 498 | 21 | 63 | 224 |
| Future Volume (Veh/h) | 0 | 0 | 498 | 21 | 63 | 224 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Hourly flow rate (vph) | 0 | 0 | 579 | 24 | 73 | 260 |
| Pedestrians | 3 | | | | | |
| Lane Width (ft) | 0.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 988 | 582 | | | 606 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 988 | 582 | | | 606 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.2 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.3 | |
| p0 queue free % | 100 | 100 | | | 92 | |
| cM capacity (veh/h) | 255 | 517 | | | 943 | |
| Direction, Lane # | NB 1 | NB 2 | SB 1 | | | |
| Volume Total | 579 | 24 | 333 | | | |
| Volume Left | 0 | 0 | 73 | | | |
| Volume Right | 0 | 24 | 0 | | | |
| cSH | 1700 | 1700 | 943 | | | |
| Volume to Capacity | 0.34 | 0.01 | 0.08 | | | |
| Queue Length 95th (ft) | 0 | 0 | 6 | | | |
| Control Delay (s) | 0.0 | 0.0 | 2.7 | | | |
| Lane LOS | | | A | | | |
| Approach Delay (s) | 0.0 | | 2.7 | | | |
| Approach LOS | | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.9 | | | |
| Intersection Capacity Utilization | | | 48.2% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

















HCM Unsignalized Intersection Capacity Analysis3: Langley Avenue & 105th Place

11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | | | |  |
| Sign Control | Stop | | | Stop | Stop | |
| Traffic Volume (vph) | 18 | 50 | 0 | 0 | 0 | 23 |
| Future Volume (vph) | 18 | 50 | 0 | 0 | 0 | 23 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Hourly flow rate (vph) | 23 | 65 | 0 | 0 | 0 | 30 |
| Direction, Lane # | EB 1 | NB 1 | | | | |
| Volume Total (vph) | 88 | 30 | | | | |
| Volume Left (vph) | 0 | 0 | | | | |
| Volume Right (vph) | 65 | 30 | | | | |
| Hadj (s) | -0.39 | -0.60 | | | | |
| Departure Headway (s) | 3.6 | 3.5 | | | | |
| Degree Utilization, x | 0.09 | 0.03 | | | | |
| Capacity (veh/h) | 995 | 1000 | | | | |
| Control Delay (s) | 6.9 | 6.6 | | | | |
| Approach Delay (s) | 6.9 | 6.6 | | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Delay | | | 6.8 | | | |
| Level of Service | | | A | | | |
| Intersection Capacity Utilization | | | 15.1% | ICU Level of Service | A | |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis4: Langley Avenue & 106th Street










11/13/2018

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Sign Control | | Stop | | | Stop | | | Stop | | | Stop | |
| Traffic Volume (vph) | 5 | 11 | 20 | 3 | 36 | 9 | 11 | 9 | 11 | 5 | 8 | 39 |
| Future Volume (vph) | 5 | 11 | 20 | 3 | 36 | 9 | 11 | 9 | 11 | 5 | 8 | 39 |
| Peak Hour Factor | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Hourly flow rate (vph) | 7 | 15 | 28 | 4 | 50 | 13 | 15 | 13 | 15 | 7 | 11 | 54 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total (vph) | 50 | 67 | 43 | 72 | | | | | | | | |
| Volume Left (vph) | 7 | 4 | 15 | 7 | | | | | | | | |
| Volume Right (vph) | 28 | 13 | 15 | 54 | | | | | | | | |
| Hadj (s) | -0.20 | 0.04 | -0.09 | -0.29 | | | | | | | | |
| Departure Headway (s) | 4.0 | 4.2 | 4.1 | 3.9 | | | | | | | | |
| Degree Utilization, x | 0.06 | 0.08 | 0.05 | 0.08 | | | | | | | | |
| Capacity (veh/h) | 865 | 823 | 834 | 891 | | | | | | | | |
| Control Delay (s) | 7.2 | 7.6 | 7.4 | 7.2 | | | | | | | | |
| Approach Delay (s) | 7.2 | 7.6 | 7.4 | 7.2 | | | | | | | | |
| Approach LOS | A | A | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Delay | | | 7.4 | | | | | | | | | |
| Level of Service | | | A | | | | | | | | | |
| Intersection Capacity Utilization | | | 16.4% | | ICU Level of Service | | | | | A | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

5: Champlian Avenue & 106th Street
















11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | |  |  | |
| Traffic Volume (veh/h) | 32 | 5 | 10 | 76 | 9 | 7 |
| Future Volume (Veh/h) | 32 | 5 | 10 | 76 | 9 | 7 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 |
| Hourly flow rate (vph) | 48 | 8 | 15 | 115 | 14 | 11 |
| Pedestrians | 4 | | | 10 | 4 | |
| Lane Width (ft) | 10.0 | | | 8.0 | 8.0 | |
| Walking Speed (ft/s) | 3.5 | | | 3.5 | 3.5 | |
| Percent Blockage | 0 | | | 1 | 0 | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 60 | | 205 | 66 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 60 | | 205 | 66 |
| tC, single (s) | | | 4.1 | | 6.4 | 6.3 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.2 | | 3.5 | 3.4 |
| p0 queue free % | | | 99 | | 98 | 99 |
| cM capacity (veh/h) | | | 1553 | | 776 | 957 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | | | |
| Volume Total | 56 | 130 | 25 | | | |
| Volume Left | 0 | 15 | 14 | | | |
| Volume Right | 8 | 0 | 11 | | | |
| cSH | 1700 | 1553 | 846 | | | |
| Volume to Capacity | 0.03 | 0.01 | 0.03 | | | |
| Queue Length 95th (ft) | 0 | 1 | 2 | | | |
| Control Delay (s) | 0.0 | 0.9 | 9.4 | | | |
| Lane LOS | | A | A | | | |
| Approach Delay (s) | 0.0 | 0.9 | 9.4 | | | |
| Approach LOS | | | A | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.7 | | | |
| Intersection Capacity Utilization | | | 24.1% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

6: North Parking Lot Access/Alley & 105th Place

















11/13/2018

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| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | | | | |  | | |  | |
| Traffic Volume (veh/h) | 2 | 65 | 17 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 2 | 0 |
| Future Volume (Veh/h) | 2 | 65 | 17 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 2 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Hourly flow rate (vph) | 3 | 87 | 23 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 3 | 0 |
| Pedestrians | | | | | 1 | | | | | | 1 | |
| Lane Width (ft) | | | | | 0.0 | | | | | | 8.0 | |
| Walking Speed (ft/s) | | | | | 3.5 | | | | | | 3.5 | |
| Percent Blockage | | | | | 0 | | | | | | 0 | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1 | | | 110 | | | 106 | 106 | 100 | 111 | 117 | 1 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1 | | | 110 | | | 106 | 106 | 100 | 111 | 117 | 1 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1634 | | | 1493 | | | 874 | 786 | 962 | 864 | 775 | 1089 |
| Direction, Lane # | EB 1 | NB 1 | SB 1 | | | | | | | | | |
| Volume Total | 113 | 6 | 4 | | | | | | | | | |
| Volume Left | 3 | 0 | 1 | | | | | | | | | |
| Volume Right | 23 | 3 | 0 | | | | | | | | | |
| cSH | 1634 | 865 | 796 | | | | | | | | | |
| Volume to Capacity | 0.00 | 0.01 | 0.01 | | | | | | | | | |
| Queue Length 95th (ft) | 0 | 1 | 0 | | | | | | | | | |
| Control Delay (s) | 0.2 | 9.2 | 9.5 | | | | | | | | | |
| Lane LOS | A | A | A | | | | | | | | | |
| Approach Delay (s) | 0.2 | 9.2 | 9.5 | | | | | | | | | |
| Approach LOS | | A | A | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 0.9 | | | | | | | | | |
| Intersection Capacity Utilization | | | 16.4% | ICU Level of Service | | | | A | | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

7: Alley/South Parking Lot Access & 106th Street












11/13/2018

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| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 3 | 36 | 0 | 1 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Future Volume (Veh/h) | 3 | 36 | 0 | 1 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Sign Control | Free | | | Free | | | Stop | | | Stop | | |
| Grade | 0% | | | 0% | | | 0% | | | 0% | | |
| Peak Hour Factor | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| Hourly flow rate (vph) | 4 | 54 | 0 | 1 | 127 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Pedestrians | 9 | | | 3 | | | | | | 79 | | |
| Lane Width (ft) | 8.0 | | | 8.0 | | | | | | 8.0 | | |
| Walking Speed (ft/s) | 3.5 | | | 3.5 | | | | | | 3.5 | | |
| Percent Blockage | 1 | | | 0 | | | | | | 5 | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | None | | | None | | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 206 | | | 54 | | | 201 | 270 | 57 | 273 | 270 | 215 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 206 | | | 54 | | | 201 | 270 | 57 | 273 | 270 | 215 |
| tC, single (s) | 4.1 | | | 4.2 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.3 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1308 | | | 1514 | | | 725 | 605 | 1013 | 621 | 605 | 784 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total | 58 | 128 | 0 | 1 | | | | | | | | |
| Volume Left | 4 | 1 | 0 | 0 | | | | | | | | |
| Volume Right | 0 | 0 | 0 | 1 | | | | | | | | |
| cSH | 1308 | 1514 | 1700 | 784 | | | | | | | | |
| Volume to Capacity | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | | | | | | | | |
| Control Delay (s) | 0.6 | 0.1 | 0.0 | 9.6 | | | | | | | | |
| Lane LOS | A | A | A | A | | | | | | | | |
| Approach Delay (s) | 0.6 | 0.1 | 0.0 | 9.6 | | | | | | | | |
| Approach LOS | | | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | | 0.3 | | | | | | | | |
| Intersection Capacity Utilization | | | | 25.3% | ICU Level of Service | | | A | | | | |
| Analysis Period (min) | | | | 15 | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

1: Cottage Grove Avenue & 106th Street










11/13/2018

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| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 21 | 43 | 466 | 12 | 21 | 472 |
| Future Volume (Veh/h) | 21 | 43 | 466 | 12 | 21 | 472 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 22 | 46 | 496 | 13 | 22 | 502 |
| Pedestrians | 27 | | 4 | | | |
| Lane Width (ft) | 14.0 | | 13.0 | | | |
| Walking Speed (ft/s) | 3.5 | | 3.5 | | | |
| Percent Blockage | 3 | | 0 | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 1073 | 523 | | | 536 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1073 | 523 | | | 536 | |
| tC, single (s) | 6.4 | 6.4 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.4 | | | 2.2 | |
| p0 queue free % | 90 | 91 | | | 98 | |
| cM capacity (veh/h) | 227 | 513 | | | 1011 | |
| Direction, Lane # | WB 1 | NB 1 | NB 2 | SB 1 | SB 2 | |
| Volume Total | 68 | 496 | 13 | 22 | 502 | |
| Volume Left | 22 | 0 | 0 | 22 | 0 | |
| Volume Right | 46 | 0 | 13 | 0 | 0 | |
| cSH | 365 | 1700 | 1700 | 1011 | 1700 | |
| Volume to Capacity | 0.19 | 0.29 | 0.01 | 0.02 | 0.30 | |
| Queue Length 95th (ft) | 17 | 0 | 0 | 2 | 0 | |
| Control Delay (s) | 17.1 | 0.0 | 0.0 | 8.6 | 0.0 | |
| Lane LOS | C | | | A | | |
| Approach Delay (s) | 17.1 | 0.0 | | 0.4 | | |
| Approach LOS | C | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.2 | | | |
| Intersection Capacity Utilization | | | 35.3% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis









2: Cottage Grove Avenue & 105th Place

11/13/2018

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | |  |  | |  |
| Traffic Volume (veh/h) | 0 | 0 | 486 | 23 | 53 | 493 |
| Future Volume (Veh/h) | 0 | 0 | 486 | 23 | 53 | 493 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 0 | 0 | 523 | 25 | 57 | 530 |
| Pedestrians | 34 | | | | | |
| Lane Width (ft) | 0.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 1201 | 557 | | | 582 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1201 | 557 | | | 582 | |
| 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 | | | 94 | |
| cM capacity (veh/h) | 194 | 534 | | | 992 | |
| Direction, Lane # | NB 1 | NB 2 | SB 1 | | | |
| Volume Total | 523 | 25 | 587 | | | |
| Volume Left | 0 | 0 | 57 | | | |
| Volume Right | 0 | 25 | 0 | | | |
| cSH | 1700 | 1700 | 992 | | | |
| Volume to Capacity | 0.31 | 0.01 | 0.06 | | | |
| Queue Length 95th (ft) | 0 | 0 | 5 | | | |
| Control Delay (s) | 0.0 | 0.0 | 1.5 | | | |
| Lane LOS | | | A | | | |
| Approach Delay (s) | 0.0 | | 1.5 | | | |
| Approach LOS | | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.8 | | | |
| Intersection Capacity Utilization | | | 61.1% | ICU Level of Service | | B |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis3: Langley Avenue & 105th Place

















11/13/2018

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| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | | | |  |
| Sign Control | Stop | | | Stop | Stop | |
| Traffic Volume (vph) | 35 | 39 | 0 | 0 | 0 | 17 |
| Future Volume (vph) | 35 | 39 | 0 | 0 | 0 | 17 |
| Peak Hour Factor | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 |
| Hourly flow rate (vph) | 49 | 55 | 0 | 0 | 0 | 24 |
| Direction, Lane # | EB 1 | NB 1 | | | | |
| Volume Total (vph) | 104 | 24 | | | | |
| Volume Left (vph) | 0 | 0 | | | | |
| Volume Right (vph) | 55 | 24 | | | | |
| Hadj (s) | -0.17 | -0.60 | | | | |
| Departure Headway (s) | 3.8 | 3.5 | | | | |
| Degree Utilization, x | 0.11 | 0.02 | | | | |
| Capacity (veh/h) | 942 | 985 | | | | |
| Control Delay (s) | 7.2 | 6.6 | | | | |
| Approach Delay (s) | 7.2 | 6.6 | | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Delay | | | 7.1 | | | |
| Level of Service | | | A | | | |
| Intersection Capacity Utilization | | | 15.3% | ICU Level of Service | A | |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis










4: Langley Avenue & 106th Street

11/13/2018

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| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Sign Control | | Stop | | | Stop | | | Stop | | | Stop | |
| Traffic Volume (vph) | 3 | 7 | 13 | 26 | 20 | 6 | 10 | 8 | 15 | 2 | 9 | 28 |
| Future Volume (vph) | 3 | 7 | 13 | 26 | 20 | 6 | 10 | 8 | 15 | 2 | 9 | 28 |
| Peak Hour Factor | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| Hourly flow rate (vph) | 5 | 12 | 22 | 45 | 34 | 10 | 17 | 14 | 26 | 3 | 16 | 48 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total (vph) | 39 | 89 | 57 | 67 | | | | | | | | |
| Volume Left (vph) | 5 | 45 | 17 | 3 | | | | | | | | |
| Volume Right (vph) | 22 | 10 | 26 | 48 | | | | | | | | |
| Hadj (s) | -0.31 | 0.13 | -0.11 | -0.29 | | | | | | | | |
| Departure Headway (s) | 3.9 | 4.3 | 4.1 | 4.0 | | | | | | | | |
| Degree Utilization, x | 0.04 | 0.11 | 0.07 | 0.07 | | | | | | | | |
| Capacity (veh/h) | 875 | 805 | 832 | 876 | | | | | | | | |
| Control Delay (s) | 7.1 | 7.8 | 7.4 | 7.3 | | | | | | | | |
| Approach Delay (s) | 7.1 | 7.8 | 7.4 | 7.3 | | | | | | | | |
| Approach LOS | A | A | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Delay | | | | 7.5 | | | | | | | | |
| Level of Service | | | | A | | | | | | | | |
| Intersection Capacity Utilization | | | | 27.9% | ICU Level of Service | A | | | | | | |
| Analysis Period (min) | | | | 15 | | | | | | | | |
















HCM Unsignalized Intersection Capacity Analysis5: Champlian Avenue & 106th Street

11/13/2018

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|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | |  |  | |
| Traffic Volume (veh/h) | 26 | 7 | 6 | 53 | 11 | 3 |
| Future Volume (Veh/h) | 26 | 7 | 6 | 53 | 11 | 3 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 |
| Hourly flow rate (vph) | 46 | 12 | 11 | 93 | 19 | 5 |
| Pedestrians | 10 | | | 34 | 10 | |
| Lane Width (ft) | 10.0 | | | 8.0 | 8.0 | |
| Walking Speed (ft/s) | 3.5 | | | 3.5 | 3.5 | |
| Percent Blockage | 1 | | | 2 | 1 | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 68 | | 187 | 96 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 68 | | 187 | 96 |
| tC, single (s) | | | 4.3 | | 6.4 | 6.2 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.4 | | 3.5 | 3.3 |
| p0 queue free % | | | 99 | | 98 | 99 |
| cM capacity (veh/h) | | | 1434 | | 789 | 939 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | | | |
| Volume Total | 58 | 104 | 24 | | | |
| Volume Left | 0 | 11 | 19 | | | |
| Volume Right | 12 | 0 | 5 | | | |
| cSH | 1700 | 1434 | 816 | | | |
| Volume to Capacity | 0.03 | 0.01 | 0.03 | | | |
| Queue Length 95th (ft) | 0 | 1 | 2 | | | |
| Control Delay (s) | 0.0 | 0.9 | 9.5 | | | |
| Lane LOS | | A | A | | | |
| Approach Delay (s) | 0.0 | 0.9 | 9.5 | | | |
| Approach LOS | | | A | | | |
| Intersection Summary | | | | | | |
| Average Delay | | 1.7 | | | | |
| Intersection Capacity Utilization | | 24.6% | | ICU Level of Service | | A |
| Analysis Period (min) | | 15 | | | | |

HCM Unsignalized Intersection Capacity Analysis 6: North Parking Lot Access/Alley & 105th Place

















11/13/2018

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| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | | | | |  | | |  | |
| Traffic Volume (veh/h) | 6 | 63 | 7 | 0 | 0 | 0 | 0 | 7 | 7 | 4 | 2 | 0 |
| Future Volume (Veh/h) | 6 | 63 | 7 | 0 | 0 | 0 | 0 | 7 | 7 | 4 | 2 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| Hourly flow rate (vph) | 10 | 105 | 12 | 0 | 0 | 0 | 0 | 12 | 12 | 7 | 3 | 0 |
| Pedestrians | | 5 | | | 1 | | | 2 | | | 1 | |
| Lane Width (ft) | | 14.0 | | | 0.0 | | | 8.0 | | | 8.0 | |
| Walking Speed (ft/s) | | 3.5 | | | 3.5 | | | 3.5 | | | 3.5 | |
| Percent Blockage | | 1 | | | 0 | | | 0 | | | 0 | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage veh | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1 | | | 119 | | | 140 | 134 | 114 | 151 | 140 | 6 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1 | | | 119 | | | 140 | 134 | 114 | 151 | 140 | 6 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 99 | | | 100 | | | 100 | 98 | 99 | 99 | 100 | 100 |
| cM capacity (veh/h) | 1634 | | | 1480 | | | 822 | 754 | 943 | 795 | 749 | 1076 |
| Direction, Lane # | EB 1 | NB 1 | SB 1 | | | | | | | | | |
| Volume Total | 127 | 24 | 10 | | | | | | | | | |
| Volume Left | 10 | 0 | 7 | | | | | | | | | |
| Volume Right | 12 | 12 | 0 | | | | | | | | | |
| cSH | 1634 | 838 | 781 | | | | | | | | | |
| Volume to Capacity | 0.01 | 0.03 | 0.01 | | | | | | | | | |
| Queue Length 95th (ft) | 0 | 2 | 1 | | | | | | | | | |
| Control Delay (s) | 0.6 | 9.4 | 9.7 | | | | | | | | | |
| Lane LOS | A | A | A | | | | | | | | | |
| Approach Delay (s) | 0.6 | 9.4 | 9.7 | | | | | | | | | |
| Approach LOS | | A | A | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 2.5 | | | | | | | | | |
| Intersection Capacity Utilization | | | 20.9% | ICU Level of Service | | | | A | | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

7: Alley/South Parking Lot Access & 106th Street












11/13/2018

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| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 5 | 22 | 2 | 1 | 57 | 0 | 2 | 0 | 1 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 5 | 22 | 2 | 1 | 57 | 0 | 2 | 0 | 1 | 0 | 0 | 0 |
| Sign Control | Free | | | Free | | | Stop | | | Stop | | |
| Grade | 0% | | | 0% | | | 0% | | | 0% | | |
| Peak Hour Factor | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Hourly flow rate (vph) | 10 | 42 | 4 | 2 | 110 | 0 | 4 | 0 | 2 | 0 | 0 | 0 |
| Pedestrians | 12 | | | 21 | | | 3 | | | 45 | | |
| Lane Width (ft) | 8.0 | | | 8.0 | | | 8.0 | | | 8.0 | | |
| Walking Speed (ft/s) | 3.5 | | | 3.5 | | | 3.5 | | | 3.5 | | |
| Percent Blockage | 1 | | | 1 | | | 0 | | | 3 | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | None | | | None | | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 155 | | | 49 | | | 193 | 226 | 68 | 246 | 228 | 167 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 155 | | | 49 | | | 193 | 226 | 68 | 246 | 228 | 167 |
| tC, single (s) | 4.9 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.9 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 99 | | | 100 | | | 99 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1032 | | | 1568 | | | 740 | 649 | 986 | 660 | 647 | 851 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total | 56 | 112 | 6 | 0 | | | | | | | | |
| Volume Left | 10 | 2 | 4 | 0 | | | | | | | | |
| Volume Right | 4 | 0 | 2 | 0 | | | | | | | | |
| cSH | 1032 | 1568 | 807 | 1700 | | | | | | | | |
| Volume to Capacity | 0.01 | 0.00 | 0.01 | 0.00 | | | | | | | | |
| Queue Length 95th (ft) | 1 | 0 | 1 | 0 | | | | | | | | |
| Control Delay (s) | 1.6 | 0.1 | 9.5 | 0.0 | | | | | | | | |
| Lane LOS | A | A | A | A | | | | | | | | |
| Approach Delay (s) | 1.6 | 0.1 | 9.5 | 0.0 | | | | | | | | |
| Approach LOS | | | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 0.9 | | | | | | | | | |
| Intersection Capacity Utilization | | | 26.1% | ICU Level of Service | | | | A | | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

1: Cottage Grove Avenue & 106th Street










11/13/2018

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|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 18 | 35 | 356 | 7 | 11 | 436 |
| Future Volume (Veh/h) | 18 | 35 | 356 | 7 | 11 | 436 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 19 | 37 | 379 | 7 | 12 | 464 |
| Pedestrians | 3 | | 3 | | | |
| Lane Width (ft) | 14.0 | | 13.0 | | | |
| Walking Speed (ft/s) | 3.5 | | 3.5 | | | |
| Percent Blockage | 0 | | 0 | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 873 | 382 | | | 389 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 873 | 382 | | | 389 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 94 | 94 | | | 99 | |
| cM capacity (veh/h) | 318 | 667 | | | 1177 | |
| Direction, Lane # | WB 1 | NB 1 | NB 2 | SB 1 | SB 2 | |
| Volume Total | 56 | 379 | 7 | 12 | 464 | |
| Volume Left | 19 | 0 | 0 | 12 | 0 | |
| Volume Right | 37 | 0 | 7 | 0 | 0 | |
| cSH | 486 | 1700 | 1700 | 1177 | 1700 | |
| Volume to Capacity | 0.12 | 0.22 | 0.00 | 0.01 | 0.27 | |
| Queue Length 95th (ft) | 10 | 0 | 0 | 1 | 0 | |
| Control Delay (s) | 13.4 | 0.0 | 0.0 | 8.1 | 0.0 | |
| Lane LOS | B | | | A | | |
| Approach Delay (s) | 13.4 | 0.0 | | 0.2 | | |
| Approach LOS | B | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.9 | | | |
| Intersection Capacity Utilization | | | 32.9% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis









2: Cottage Grove Avenue & 105th Place

11/13/2018

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | |  |  | |  |
| Traffic Volume (veh/h) | 0 | 0 | 377 | 14 | 36 | 447 |
| Future Volume (Veh/h) | 0 | 0 | 377 | 14 | 36 | 447 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 0 | 0 | 405 | 15 | 39 | 481 |
| Pedestrians | 6 | | | | | |
| Lane Width (ft) | 0.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 970 | 411 | | | 426 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 970 | 411 | | | 426 | |
| 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 | | | 97 | |
| cM capacity (veh/h) | 274 | 645 | | | 1144 | |
| Direction, Lane # | NB 1 | NB 2 | SB 1 | | | |
| Volume Total | 405 | 15 | 520 | | | |
| Volume Left | 0 | 0 | 39 | | | |
| Volume Right | 0 | 15 | 0 | | | |
| cSH | 1700 | 1700 | 1144 | | | |
| Volume to Capacity | 0.24 | 0.01 | 0.03 | | | |
| Queue Length 95th (ft) | 0 | 0 | 3 | | | |
| Control Delay (s) | 0.0 | 0.0 | 1.0 | | | |
| Lane LOS | | | A | | | |
| Approach Delay (s) | 0.0 | | 1.0 | | | |
| Approach LOS | | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.5 | | | |
| Intersection Capacity Utilization | | | 52.0% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

















HCM Unsignalized Intersection Capacity Analysis 3: Langley Avenue & 105th Place

11/13/2018

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| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | | | |  |
| Sign Control | Stop | | | Stop | Stop | |
| Traffic Volume (vph) | 27 | 26 | 0 | 0 | 0 | 12 |
| Future Volume (vph) | 27 | 26 | 0 | 0 | 0 | 12 |
| Peak Hour Factor | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 |
| Hourly flow rate (vph) | 36 | 34 | 0 | 0 | 0 | 16 |
| Direction, Lane # | EB 1 | NB 1 | | | | |
| Volume Total (vph) | 70 | 16 | | | | |
| Volume Left (vph) | 0 | 0 | | | | |
| Volume Right (vph) | 34 | 16 | | | | |
| Hadj (s) | -0.29 | -0.60 | | | | |
| Departure Headway (s) | 3.6 | 3.4 | | | | |
| Degree Utilization, x | 0.07 | 0.02 | | | | |
| Capacity (veh/h) | 978 | 1013 | | | | |
| Control Delay (s) | 6.9 | 6.5 | | | | |
| Approach Delay (s) | 6.9 | 6.5 | | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Delay | | | 6.8 | | | |
| Level of Service | | | A | | | |
| Intersection Capacity Utilization | | | 13.7% | ICU Level of Service | A | |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis 4: Langley Avenue & 106th Street










11/13/2018

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Sign Control | | Stop | | | Stop | | | Stop | | | Stop | |
| Traffic Volume (vph) | 2 | 4 | 12 | 9 | 20 | 3 | 10 | 7 | 11 | 2 | 3 | 21 |
| Future Volume (vph) | 2 | 4 | 12 | 9 | 20 | 3 | 10 | 7 | 11 | 2 | 3 | 21 |
| Peak Hour Factor | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| Hourly flow rate (vph) | 3 | 7 | 21 | 16 | 34 | 5 | 17 | 12 | 19 | 3 | 5 | 36 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total (vph) | 31 | 55 | 48 | 44 | | | | | | | | |
| Volume Left (vph) | 3 | 16 | 17 | 3 | | | | | | | | |
| Volume Right (vph) | 21 | 5 | 19 | 36 | | | | | | | | |
| Hadj (s) | -0.39 | 0.06 | -0.17 | -0.48 | | | | | | | | |
| Departure Headway (s) | 3.8 | 4.2 | 4.0 | 3.7 | | | | | | | | |
| Degree Utilization, x | 0.03 | 0.06 | 0.05 | 0.04 | | | | | | | | |
| Capacity (veh/h) | 928 | 840 | 879 | 957 | | | | | | | | |
| Control Delay (s) | 6.9 | 7.5 | 7.2 | 6.8 | | | | | | | | |
| Approach Delay (s) | 6.9 | 7.5 | 7.2 | 6.8 | | | | | | | | |
| Approach LOS | A | A | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Delay | | | 7.1 | | | | | | | | | |
| Level of Service | | | A | | | | | | | | | |
| Intersection Capacity Utilization | | | 16.6% | | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

5: Champlian Avenue & 106th Street
















11/13/2018

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| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | |  |  | |
| Traffic Volume (veh/h) | 12 | 6 | 3 | 49 | 4 | 5 |
| Future Volume (Veh/h) | 12 | 6 | 3 | 49 | 4 | 5 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 14 | 7 | 3 | 56 | 5 | 6 |
| Pedestrians | 3 | | | | 1 | |
| Lane Width (ft) | 10.0 | | | | 8.0 | |
| Walking Speed (ft/s) | 3.5 | | | | 3.5 | |
| Percent Blockage | 0 | | | | 0 | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 22 | | 84 | 18 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 22 | | 84 | 18 |
| tC, single (s) | | | 4.1 | | 6.4 | 6.2 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.2 | | 3.5 | 3.3 |
| p0 queue free % | | | 100 | | 99 | 99 |
| cM capacity (veh/h) | | | 1606 | | 919 | 1065 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | | | |
| Volume Total | 21 | 59 | 11 | | | |
| Volume Left | 0 | 3 | 5 | | | |
| Volume Right | 7 | 0 | 6 | | | |
| cSH | 1700 | 1606 | 993 | | | |
| Volume to Capacity | 0.01 | 0.00 | 0.01 | | | |
| Queue Length 95th (ft) | 0 | 0 | 1 | | | |
| Control Delay (s) | 0.0 | 0.4 | 8.7 | | | |
| Lane LOS | | A | A | | | |
| Approach Delay (s) | 0.0 | 0.4 | 8.7 | | | |
| Approach LOS | | | A | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.3 | | | |
| Intersection Capacity Utilization | | | 15.0% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

6: North Parking Lot Access/Alley & 105th Place

















11/13/2018

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| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | | | | |  | | |  | |
| Traffic Volume (veh/h) | 0 | 47 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 47 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Hourly flow rate (vph) | 0 | 55 | 4 | 0 | 0 | 0 | 0 | 2 | 2 | 5 | 0 | 0 |
| Pedestrians | | | | | | | | 4 | | | | |
| Lane Width (ft) | | | | | | | | 8.0 | | | | |
| Walking Speed (ft/s) | | | | | | | | 3.5 | | | | |
| Percent Blockage | | | | | | | | 0 | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 63 | | | 61 | 61 | 61 | 60 | 63 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 63 | | | 61 | 61 | 61 | 60 | 63 | 0 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 99 | 100 | 100 |
| cM capacity (veh/h) | 1636 | | | 1549 | | | 935 | 832 | 1007 | 935 | 830 | 1091 |
| Direction, Lane # | EB 1 | NB 1 | SB 1 | | | | | | | | | |
| Volume Total | 59 | 4 | 5 | | | | | | | | | |
| Volume Left | 0 | 0 | 5 | | | | | | | | | |
| Volume Right | 4 | 2 | 0 | | | | | | | | | |
| cSH | 1636 | 911 | 935 | | | | | | | | | |
| Volume to Capacity | 0.00 | 0.00 | 0.01 | | | | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | | | | | | | | | |
| Control Delay (s) | 0.0 | 9.0 | 8.9 | | | | | | | | | |
| Lane LOS | | A | A | | | | | | | | | |
| Approach Delay (s) | 0.0 | 9.0 | 8.9 | | | | | | | | | |
| Approach LOS | | A | A | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 1.2 | | | | | | | | | |
| Intersection Capacity Utilization | | | 14.6% | ICU Level of Service | | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

7: Alley/South Parking Lot Access & 106th Street












11/13/2018

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|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 0 | 17 | 0 | 1 | 49 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
| Future Volume (Veh/h) | 0 | 17 | 0 | 1 | 49 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Hourly flow rate (vph) | 0 | 20 | 0 | 1 | 58 | 1 | 0 | 0 | 0 | 1 | 0 | 4 |
| Pedestrians | | | | | | | | | | | | 5 |
| Lane Width (ft) | | | | | | | | | | | | 8.0 |
| Walking Speed (ft/s) | | | | | | | | | | | | 3.5 |
| Percent Blockage | | | | | | | | | | | | 0 |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 64 | | | 20 | | | 84 | 86 | 20 | 86 | 86 | 64 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 64 | | | 20 | | | 84 | 86 | 20 | 86 | 86 | 64 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1546 | | | 1609 | | | 901 | 805 | 1064 | 900 | 805 | 1003 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total | 20 | 60 | 0 | 5 | | | | | | | | |
| Volume Left | 0 | 1 | 0 | 1 | | | | | | | | |
| Volume Right | 0 | 1 | 0 | 4 | | | | | | | | |
| cSH | 1546 | 1609 | 1700 | 981 | | | | | | | | |
| Volume to Capacity | 0.00 | 0.00 | 0.00 | 0.01 | | | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | | | | | | | | |
| Control Delay (s) | 0.0 | 0.1 | 0.0 | 8.7 | | | | | | | | |
| Lane LOS | | A | A | A | | | | | | | | |
| Approach Delay (s) | 0.0 | 0.1 | 0.0 | 8.7 | | | | | | | | |
| Approach LOS | | | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 0.6 | | | | | | | | | |
| Intersection Capacity Utilization | | | 15.0% | ICU Level of Service | | | | | | A | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

1: Cottage Grove Avenue & 106th Street










11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 27 | 87 | 473 | 12 | 29 | 203 |
| Future Volume (Veh/h) | 27 | 87 | 473 | 12 | 29 | 203 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 31 | 99 | 538 | 14 | 33 | 231 |
| Pedestrians | 3 | | | | | |
| Lane Width (ft) | 14.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 838 | 541 | | | 555 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 838 | 541 | | | 555 | |
| tC, single (s) | 6.5 | 6.3 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.6 | 3.4 | | | 2.2 | |
| p0 queue free % | 90 | 81 | | | 97 | |
| cM capacity (veh/h) | 310 | 530 | | | 1002 | |
| Direction, Lane # | WB 1 | NB 1 | NB 2 | SB 1 | SB 2 | |
| Volume Total | 130 | 538 | 14 | 33 | 231 | |
| Volume Left | 31 | 0 | 0 | 33 | 0 | |
| Volume Right | 99 | 0 | 14 | 0 | 0 | |
| cSH | 453 | 1700 | 1700 | 1002 | 1700 | |
| Volume to Capacity | 0.29 | 0.32 | 0.01 | 0.03 | 0.14 | |
| Queue Length 95th (ft) | 29 | 0 | 0 | 3 | 0 | |
| Control Delay (s) | 16.1 | 0.0 | 0.0 | 8.7 | 0.0 | |
| Lane LOS | C | | | A | | |
| Approach Delay (s) | 16.1 | 0.0 | | 1.1 | | |
| Approach LOS | C | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 2.5 | | | |
| Intersection Capacity Utilization | | | 38.4% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

2: Cottage Grove Avenue & 105th Place









11/13/2018

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | |  |  | |  |
| Traffic Volume (veh/h) | 0 | 0 | 529 | 31 | 80 | 232 |
| Future Volume (Veh/h) | 0 | 0 | 529 | 31 | 80 | 232 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Hourly flow rate (vph) | 0 | 0 | 615 | 36 | 93 | 270 |
| Pedestrians | 3 | | | | | |
| Lane Width (ft) | 0.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 1074 | 618 | | | 654 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1074 | 618 | | | 654 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.2 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.3 | |
| p0 queue free % | 100 | 100 | | | 90 | |
| cM capacity (veh/h) | 220 | 493 | | | 905 | |
| Direction, Lane # | NB 1 | NB 2 | SB 1 | | | |
| Volume Total | 615 | 36 | 363 | | | |
| Volume Left | 0 | 0 | 93 | | | |
| Volume Right | 0 | 36 | 0 | | | |
| cSH | 1700 | 1700 | 905 | | | |
| Volume to Capacity | 0.36 | 0.02 | 0.10 | | | |
| Queue Length 95th (ft) | 0 | 0 | 9 | | | |
| Control Delay (s) | 0.0 | 0.0 | 3.3 | | | |
| Lane LOS | | | A | | | |
| Approach Delay (s) | 0.0 | | 3.3 | | | |
| Approach LOS | | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.2 | | | |
| Intersection Capacity Utilization | | | 51.1% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

















3: Langley Avenue & 105th Place

11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | | | |  |
| Sign Control | Stop | | | Stop | Stop | |
| Traffic Volume (vph) | 21 | 74 | 0 | 0 | 0 | 25 |
| Future Volume (vph) | 21 | 74 | 0 | 0 | 0 | 25 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Hourly flow rate (vph) | 27 | 96 | 0 | 0 | 0 | 32 |
| Direction, Lane # | EB 1 | NB 1 | | | | |
| Volume Total (vph) | 123 | 32 | | | | |
| Volume Left (vph) | 0 | 0 | | | | |
| Volume Right (vph) | 96 | 32 | | | | |
| Hadj (s) | -0.42 | -0.60 | | | | |
| Departure Headway (s) | 3.5 | 3.5 | | | | |
| Degree Utilization, x | 0.12 | 0.03 | | | | |
| Capacity (veh/h) | 1001 | 974 | | | | |
| Control Delay (s) | 7.0 | 6.6 | | | | |
| Approach Delay (s) | 7.0 | 6.6 | | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Delay | | | 6.9 | | | |
| Level of Service | | | A | | | |
| Intersection Capacity Utilization | | | 16.6% | ICU Level of Service | A | |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis 4: Langley Avenue & 106th Street










11/13/2018

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Sign Control | | Stop | | | Stop | | | Stop | | | Stop | |
| Traffic Volume (vph) | 6 | 14 | 20 | 3 | 40 | 10 | 13 | 9 | 11 | 5 | 9 | 62 |
| Future Volume (vph) | 6 | 14 | 20 | 3 | 40 | 10 | 13 | 9 | 11 | 5 | 9 | 62 |
| Peak Hour Factor | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 | 0.72 |
| Hourly flow rate (vph) | 8 | 19 | 28 | 4 | 56 | 14 | 18 | 13 | 15 | 7 | 13 | 86 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total (vph) | 55 | 74 | 46 | 106 | | | | | | | | |
| Volume Left (vph) | 8 | 4 | 18 | 7 | | | | | | | | |
| Volume Right (vph) | 28 | 14 | 15 | 86 | | | | | | | | |
| Hadj (s) | -0.15 | 0.04 | -0.06 | -0.34 | | | | | | | | |
| Departure Headway (s) | 4.1 | 4.3 | 4.2 | 3.9 | | | | | | | | |
| Degree Utilization, x | 0.06 | 0.09 | 0.05 | 0.11 | | | | | | | | |
| Capacity (veh/h) | 829 | 791 | 811 | 891 | | | | | | | | |
| Control Delay (s) | 7.4 | 7.7 | 7.5 | 7.4 | | | | | | | | |
| Approach Delay (s) | 7.4 | 7.7 | 7.5 | 7.4 | | | | | | | | |
| Approach LOS | A | A | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Delay | | | 7.5 | | | | | | | | | |
| Level of Service | | | A | | | | | | | | | |
| Intersection Capacity Utilization | | | 18.5% | | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

5: Champlian Avenue & 106th Street
















11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | |  |  | |
| Traffic Volume (veh/h) | 36 | 5 | 10 | 105 | 9 | 7 |
| Future Volume (Veh/h) | 36 | 5 | 10 | 105 | 9 | 7 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 |
| Hourly flow rate (vph) | 55 | 8 | 15 | 159 | 14 | 11 |
| Pedestrians | 4 | | | 11 | 4 | |
| Lane Width (ft) | 10.0 | | | 8.0 | 8.0 | |
| Walking Speed (ft/s) | 3.5 | | | 3.5 | 3.5 | |
| Percent Blockage | 0 | | | 1 | 0 | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 67 | | 256 | 74 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 67 | | 256 | 74 |
| tC, single (s) | | | 4.1 | | 6.4 | 6.3 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.2 | | 3.5 | 3.4 |
| p0 queue free % | | | 99 | | 98 | 99 |
| cM capacity (veh/h) | | | 1543 | | 726 | 946 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | | | |
| Volume Total | 63 | 174 | 25 | | | |
| Volume Left | 0 | 15 | 14 | | | |
| Volume Right | 8 | 0 | 11 | | | |
| cSH | 1700 | 1543 | 809 | | | |
| Volume to Capacity | 0.04 | 0.01 | 0.03 | | | |
| Queue Length 95th (ft) | 0 | 1 | 2 | | | |
| Control Delay (s) | 0.0 | 0.7 | 9.6 | | | |
| Lane LOS | | A | A | | | |
| Approach Delay (s) | 0.0 | 0.7 | 9.6 | | | |
| Approach LOS | | | A | | | |
| Intersection Summary | | | | | | |
| Average Delay | | 1.4 | | | | |
| Intersection Capacity Utilization | | 25.8% | | ICU Level of Service | | A |
| Analysis Period (min) | | 15 | | | | |

HCM Unsignalized Intersection Capacity Analysis

6: North Parking Lot Access/Alley & 105th Place

















11/13/2018

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | | | | |  | | |  | |
| Traffic Volume (veh/h) | 2 | 92 | 17 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 2 | 0 |
| Future Volume (Veh/h) | 2 | 92 | 17 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 2 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Hourly flow rate (vph) | 3 | 123 | 23 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 3 | 0 |
| Pedestrians | | | | | 1 | | | | | | 1 | |
| Lane Width (ft) | | | | | 0.0 | | | | | | 8.0 | |
| Walking Speed (ft/s) | | | | | 3.5 | | | | | | 3.5 | |
| Percent Blockage | | | | | 0 | | | | | | 0 | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1 | | | 146 | | | 142 | 142 | 136 | 147 | 153 | 1 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1 | | | 146 | | | 142 | 142 | 136 | 147 | 153 | 1 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1634 | | | 1448 | | | 828 | 751 | 919 | 819 | 741 | 1089 |
| Direction, Lane # | EB 1 | NB 1 | SB 1 | | | | | | | | | |
| Volume Total | 149 | 6 | 4 | | | | | | | | | |
| Volume Left | 3 | 0 | 1 | | | | | | | | | |
| Volume Right | 23 | 3 | 0 | | | | | | | | | |
| cSH | 1634 | 827 | 759 | | | | | | | | | |
| Volume to Capacity | 0.00 | 0.01 | 0.01 | | | | | | | | | |
| Queue Length 95th (ft) | 0 | 1 | 0 | | | | | | | | | |
| Control Delay (s) | 0.2 | 9.4 | 9.8 | | | | | | | | | |
| Lane LOS | A | A | A | | | | | | | | | |
| Approach Delay (s) | 0.2 | 9.4 | 9.8 | | | | | | | | | |
| Approach LOS | | A | A | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 0.7 | | | | | | | | | |
| Intersection Capacity Utilization | | | 17.8% | ICU Level of Service | | | | | | A | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

7: Alley/South Parking Lot Access & 106th Street












11/13/2018

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 3 | 40 | 0 | 1 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Future Volume (Veh/h) | 3 | 40 | 0 | 1 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| Hourly flow rate (vph) | 4 | 60 | 0 | 1 | 170 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Pedestrians | | 12 | | | 3 | | | | | | 95 | |
| Lane Width (ft) | | 8.0 | | | 8.0 | | | | | | 8.0 | |
| Walking Speed (ft/s) | | 3.5 | | | 3.5 | | | | | | 3.5 | |
| Percent Blockage | | 1 | | | 0 | | | | | | 6 | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 265 | | | 60 | | | 253 | 335 | 63 | 338 | 335 | 277 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 265 | | | 60 | | | 253 | 335 | 63 | 338 | 335 | 277 |
| tC, single (s) | 4.1 | | | 4.2 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.3 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1232 | | | 1506 | | | 664 | 551 | 1005 | 553 | 551 | 715 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total | 64 | 171 | 0 | 1 | | | | | | | | |
| Volume Left | 4 | 1 | 0 | 0 | | | | | | | | |
| Volume Right | 0 | 0 | 0 | 1 | | | | | | | | |
| cSH | 1232 | 1506 | 1700 | 715 | | | | | | | | |
| Volume to Capacity | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | | | | | | | | |
| Control Delay (s) | 0.5 | 0.0 | 0.0 | 10.0 | | | | | | | | |
| Lane LOS | A | A | A | B | | | | | | | | |
| Approach Delay (s) | 0.5 | 0.0 | 0.0 | 10.0 | | | | | | | | |
| Approach LOS | | | A | B | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 0.2 | | | | | | | | | |
| Intersection Capacity Utilization | | | 26.3% | | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

1: Cottage Grove Avenue & 106th Street










11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 32 | 59 | 489 | 13 | 22 | 486 |
| Future Volume (Veh/h) | 32 | 59 | 489 | 13 | 22 | 486 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 34 | 63 | 520 | 14 | 23 | 517 |
| Pedestrians | 32 | | 5 | | | |
| Lane Width (ft) | 14.0 | | 13.0 | | | |
| Walking Speed (ft/s) | 3.5 | | 3.5 | | | |
| Percent Blockage | 4 | | 1 | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 1120 | 552 | | | 566 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1120 | 552 | | | 566 | |
| tC, single (s) | 6.4 | 6.4 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.4 | | | 2.2 | |
| p0 queue free % | 84 | 87 | | | 98 | |
| cM capacity (veh/h) | 211 | 491 | | | 980 | |
| Direction, Lane # | WB 1 | NB 1 | NB 2 | SB 1 | SB 2 | |
| Volume Total | 97 | 520 | 14 | 23 | 517 | |
| Volume Left | 34 | 0 | 0 | 23 | 0 | |
| Volume Right | 63 | 0 | 14 | 0 | 0 | |
| cSH | 335 | 1700 | 1700 | 980 | 1700 | |
| Volume to Capacity | 0.29 | 0.31 | 0.01 | 0.02 | 0.30 | |
| Queue Length 95th (ft) | 29 | 0 | 0 | 2 | 0 | |
| Control Delay (s) | 20.0 | 0.0 | 0.0 | 8.8 | 0.0 | |
| Lane LOS | C | | | A | | |
| Approach Delay (s) | 20.0 | 0.0 | | 0.4 | | |
| Approach LOS | C | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.8 | | | |
| Intersection Capacity Utilization | | | 37.8% | | ICU Level of Service | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

2: Cottage Grove Avenue & 105th Place









11/13/2018

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | |  |  | |  |
| Traffic Volume (veh/h) | 0 | 0 | 515 | 33 | 68 | 508 |
| Future Volume (Veh/h) | 0 | 0 | 515 | 33 | 68 | 508 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 0 | 0 | 554 | 35 | 73 | 546 |
| Pedestrians | 41 | | | | | |
| Lane Width (ft) | 0.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 1287 | 595 | | | 630 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1287 | 595 | | | 630 | |
| 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 | | | 92 | |
| cM capacity (veh/h) | 169 | 508 | | | 952 | |
| Direction, Lane # | NB 1 | NB 2 | SB 1 | | | |
| Volume Total | 554 | 35 | 619 | | | |
| Volume Left | 0 | 0 | 73 | | | |
| Volume Right | 0 | 35 | 0 | | | |
| cSH | 1700 | 1700 | 952 | | | |
| Volume to Capacity | 0.33 | 0.02 | 0.08 | | | |
| Queue Length 95th (ft) | 0 | 0 | 6 | | | |
| Control Delay (s) | 0.0 | 0.0 | 2.0 | | | |
| Lane LOS | | | A | | | |
| Approach Delay (s) | 0.0 | | 2.0 | | | |
| Approach LOS | | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.0 | | | |
| Intersection Capacity Utilization | | | 64.3% | ICU Level of Service | | C |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

3: Langley Avenue & 105th Place

















11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | | | |  |
| Sign Control | Stop | | | Stop | Stop | |
| Traffic Volume (vph) | 36 | 63 | 0 | 0 | 0 | 18 |
| Future Volume (vph) | 36 | 63 | 0 | 0 | 0 | 18 |
| Peak Hour Factor | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 |
| Hourly flow rate (vph) | 51 | 89 | 0 | 0 | 0 | 25 |
| Direction, Lane # | EB 1 | NB 1 | | | | |
| Volume Total (vph) | 140 | 25 | | | | |
| Volume Left (vph) | 0 | 0 | | | | |
| Volume Right (vph) | 89 | 25 | | | | |
| Hadj (s) | -0.24 | -0.60 | | | | |
| Departure Headway (s) | 3.7 | 3.6 | | | | |
| Degree Utilization, x | 0.14 | 0.02 | | | | |
| Capacity (veh/h) | 958 | 959 | | | | |
| Control Delay (s) | 7.3 | 6.7 | | | | |
| Approach Delay (s) | 7.3 | 6.7 | | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Delay | | | 7.2 | | | |
| Level of Service | | | A | | | |
| Intersection Capacity Utilization | | | 16.7% | ICU Level of Service | A | |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis










4: Langley Avenue & 106th Street

11/13/2018

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Sign Control | | Stop | | | Stop | | | Stop | | | Stop | |
| Traffic Volume (vph) | 3 | 9 | 13 | 26 | 22 | 7 | 12 | 8 | 15 | 2 | 10 | 51 |
| Future Volume (vph) | 3 | 9 | 13 | 26 | 22 | 7 | 12 | 8 | 15 | 2 | 10 | 51 |
| Peak Hour Factor | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| Hourly flow rate (vph) | 5 | 16 | 22 | 45 | 38 | 12 | 21 | 14 | 26 | 3 | 17 | 88 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total (vph) | 43 | 95 | 61 | 108 | | | | | | | | |
| Volume Left (vph) | 5 | 45 | 21 | 3 | | | | | | | | |
| Volume Right (vph) | 22 | 12 | 26 | 88 | | | | | | | | |
| Hadj (s) | -0.28 | 0.12 | -0.07 | -0.33 | | | | | | | | |
| Departure Headway (s) | 4.1 | 4.4 | 4.2 | 3.9 | | | | | | | | |
| Degree Utilization, x | 0.05 | 0.12 | 0.07 | 0.12 | | | | | | | | |
| Capacity (veh/h) | 837 | 772 | 807 | 876 | | | | | | | | |
| Control Delay (s) | 7.3 | 8.0 | 7.6 | 7.5 | | | | | | | | |
| Approach Delay (s) | 7.3 | 8.0 | 7.6 | 7.5 | | | | | | | | |
| Approach LOS | A | A | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Delay | | | | 7.6 | | | | | | | | |
| Level of Service | | | | A | | | | | | | | |
| Intersection Capacity Utilization | | | | 29.6% | ICU Level of Service | | A | | | | | |
| Analysis Period (min) | | | | 15 | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis 5: Champlian Avenue & 106th Street
















11/13/2018

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|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | |  |  | |
| Traffic Volume (veh/h) | 28 | 7 | 6 | 80 | 11 | 3 |
| Future Volume (Veh/h) | 28 | 7 | 6 | 80 | 11 | 3 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 |
| Hourly flow rate (vph) | 49 | 12 | 11 | 140 | 19 | 5 |
| Pedestrians | 12 | | | 41 | 12 | |
| Lane Width (ft) | 10.0 | | | 8.0 | 8.0 | |
| Walking Speed (ft/s) | 3.5 | | | 3.5 | 3.5 | |
| Percent Blockage | 1 | | | 3 | 1 | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 73 | | 241 | 108 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 73 | | 241 | 108 |
| tC, single (s) | | | 4.3 | | 6.4 | 6.2 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.4 | | 3.5 | 3.3 |
| p0 queue free % | | | 99 | | 97 | 99 |
| cM capacity (veh/h) | | | 1426 | | 733 | 920 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | | | |
| Volume Total | 61 | 151 | 24 | | | |
| Volume Left | 0 | 11 | 19 | | | |
| Volume Right | 12 | 0 | 5 | | | |
| cSH | 1700 | 1426 | 765 | | | |
| Volume to Capacity | 0.04 | 0.01 | 0.03 | | | |
| Queue Length 95th (ft) | 0 | 1 | 2 | | | |
| Control Delay (s) | 0.0 | 0.6 | 9.9 | | | |
| Lane LOS | | A | A | | | |
| Approach Delay (s) | 0.0 | 0.6 | 9.9 | | | |
| Approach LOS | | | A | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.4 | | | |
| Intersection Capacity Utilization | | | 26.6% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

6: North Parking Lot Access/Alley & 105th Place

















11/13/2018

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|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | | | | |  | | |  | |
| Traffic Volume (veh/h) | 6 | 88 | 7 | 0 | 0 | 0 | 0 | 7 | 7 | 4 | 2 | 0 |
| Future Volume (Veh/h) | 6 | 88 | 7 | 0 | 0 | 0 | 0 | 7 | 7 | 4 | 2 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 |
| Hourly flow rate (vph) | 10 | 147 | 12 | 0 | 0 | 0 | 0 | 12 | 12 | 7 | 3 | 0 |
| Pedestrians | | 6 | | | 1 | | | 2 | | | 1 | |
| Lane Width (ft) | | 14.0 | | | 0.0 | | | 8.0 | | | 8.0 | |
| Walking Speed (ft/s) | | 3.5 | | | 3.5 | | | 3.5 | | | 3.5 | |
| Percent Blockage | | 1 | | | 0 | | | 0 | | | 0 | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 1 | | | 161 | | | 182 | 176 | 156 | 193 | 182 | 7 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 1 | | | 161 | | | 182 | 176 | 156 | 193 | 182 | 7 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 99 | | | 100 | | | 100 | 98 | 99 | 99 | 100 | 100 |
| cM capacity (veh/h) | 1634 | | | 1429 | | | 770 | 715 | 894 | 746 | 710 | 1073 |
| Direction, Lane # | EB 1 | NB 1 | SB 1 | | | | | | | | | |
| Volume Total | 169 | 24 | 10 | | | | | | | | | |
| Volume Left | 10 | 0 | 7 | | | | | | | | | |
| Volume Right | 12 | 12 | 0 | | | | | | | | | |
| cSH | 1634 | 795 | 735 | | | | | | | | | |
| Volume to Capacity | 0.01 | 0.03 | 0.01 | | | | | | | | | |
| Queue Length 95th (ft) | 0 | 2 | 1 | | | | | | | | | |
| Control Delay (s) | 0.5 | 9.7 | 10.0 | | | | | | | | | |
| Lane LOS | A | A | A | | | | | | | | | |
| Approach Delay (s) | 0.5 | 9.7 | 10.0 | | | | | | | | | |
| Approach LOS | | A | A | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 2.0 | | | | | | | | | |
| Intersection Capacity Utilization | | | 22.3% | | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

7: Alley/South Parking Lot Access & 106th Street












11/13/2018

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| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 5 | 24 | 2 | 1 | 84 | 0 | 2 | 0 | 1 | 0 | 0 | 0 |
| Future Volume (Veh/h) | 5 | 24 | 2 | 1 | 84 | 0 | 2 | 0 | 1 | 0 | 0 | 0 |
| Sign Control | Free | | | Free | | | Stop | | | Stop | | |
| Grade | 0% | | | 0% | | | 0% | | | 0% | | |
| Peak Hour Factor | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 |
| Hourly flow rate (vph) | 10 | 46 | 4 | 2 | 162 | 0 | 4 | 0 | 2 | 0 | 0 | 0 |
| Pedestrians | 14 | | | 25 | | | 3 | | | 54 | | |
| Lane Width (ft) | 8.0 | | | 8.0 | | | 8.0 | | | 8.0 | | |
| Walking Speed (ft/s) | 3.5 | | | 3.5 | | | 3.5 | | | 3.5 | | |
| Percent Blockage | 1 | | | 2 | | | 0 | | | 3 | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | None | | | None | | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 216 | | | 53 | | | 251 | 291 | 76 | 315 | 293 | 230 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 216 | | | 53 | | | 251 | 291 | 76 | 315 | 293 | 230 |
| tC, single (s) | 4.9 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.9 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 99 | | | 100 | | | 99 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 967 | | | 1563 | | | 674 | 593 | 973 | 586 | 592 | 779 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total | 60 | 164 | 6 | 0 | | | | | | | | |
| Volume Left | 10 | 2 | 4 | 0 | | | | | | | | |
| Volume Right | 4 | 0 | 2 | 0 | | | | | | | | |
| cSH | 967 | 1563 | 751 | 1700 | | | | | | | | |
| Volume to Capacity | 0.01 | 0.00 | 0.01 | 0.00 | | | | | | | | |
| Queue Length 95th (ft) | 1 | 0 | 1 | 0 | | | | | | | | |
| Control Delay (s) | 1.5 | 0.1 | 9.8 | 0.0 | | | | | | | | |
| Lane LOS | A | A | A | A | | | | | | | | |
| Approach Delay (s) | 1.5 | 0.1 | 9.8 | 0.0 | | | | | | | | |
| Approach LOS | | | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | | 0.7 | | | | | | | | |
| Intersection Capacity Utilization | | | | 27.5% | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | | 15 | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

1: Cottage Grove Avenue & 106th Street










11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 21 | 39 | 369 | 7 | 11 | 450 |
| Future Volume (Veh/h) | 21 | 39 | 369 | 7 | 11 | 450 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Hourly flow rate (vph) | 22 | 41 | 393 | 7 | 12 | 479 |
| Pedestrians | 3 | | 3 | | | |
| Lane Width (ft) | 14.0 | | 13.0 | | | |
| Walking Speed (ft/s) | 3.5 | | 3.5 | | | |
| Percent Blockage | 0 | | 0 | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 902 | 396 | | | 403 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 902 | 396 | | | 403 | |
| tC, single (s) | 6.4 | 6.2 | | | 4.1 | |
| tC, 2 stage (s) | | | | | | |
| tF (s) | 3.5 | 3.3 | | | 2.2 | |
| p0 queue free % | 93 | 94 | | | 99 | |
| cM capacity (veh/h) | 306 | 656 | | | 1163 | |
| Direction, Lane # | WB 1 | NB 1 | NB 2 | SB 1 | SB 2 | |
| Volume Total | 63 | 393 | 7 | 12 | 479 | |
| Volume Left | 22 | 0 | 0 | 12 | 0 | |
| Volume Right | 41 | 0 | 7 | 0 | 0 | |
| cSH | 468 | 1700 | 1700 | 1163 | 1700 | |
| Volume to Capacity | 0.13 | 0.23 | 0.00 | 0.01 | 0.28 | |
| Queue Length 95th (ft) | 12 | 0 | 0 | 1 | 0 | |
| Control Delay (s) | 13.9 | 0.0 | 0.0 | 8.1 | 0.0 | |
| Lane LOS | B | | | A | | |
| Approach Delay (s) | 13.9 | 0.0 | | 0.2 | | |
| Approach LOS | B | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 1.0 | | | |
| Intersection Capacity Utilization | | | 33.9% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis









2: Cottage Grove Avenue & 105th Place

11/13/2018

| |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | |  |  | |  |
| Traffic Volume (veh/h) | 0 | 0 | 393 | 15 | 40 | 461 |
| Future Volume (Veh/h) | 0 | 0 | 393 | 15 | 40 | 461 |
| Sign Control | Stop | | Free | | | Free |
| Grade | 0% | | 0% | | | 0% |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Hourly flow rate (vph) | 0 | 0 | 423 | 16 | 43 | 496 |
| Pedestrians | 7 | | | | | |
| Lane Width (ft) | 0.0 | | | | | |
| Walking Speed (ft/s) | 3.5 | | | | | |
| Percent Blockage | 0 | | | | | |
| Right turn flare (veh) | | | | | | |
| Median type | | | None | | | None |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | 1012 | 430 | | | 446 | |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | 1012 | 430 | | | 446 | |
| 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 | | | 96 | |
| cM capacity (veh/h) | 257 | 629 | | | 1125 | |
| Direction, Lane # | NB 1 | NB 2 | SB 1 | | | |
| Volume Total | 423 | 16 | 539 | | | |
| Volume Left | 0 | 0 | 43 | | | |
| Volume Right | 0 | 16 | 0 | | | |
| cSH | 1700 | 1700 | 1125 | | | |
| Volume to Capacity | 0.25 | 0.01 | 0.04 | | | |
| Queue Length 95th (ft) | 0 | 0 | 3 | | | |
| Control Delay (s) | 0.0 | 0.0 | 1.1 | | | |
| Lane LOS | | | A | | | |
| Approach Delay (s) | 0.0 | | 1.1 | | | |
| Approach LOS | | | | | | |
| Intersection Summary | | | | | | |
| Average Delay | | | 0.6 | | | |
| Intersection Capacity Utilization | | | 53.8% | ICU Level of Service | | A |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis3: Langley Avenue & 105th Place

















11/13/2018

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|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | | | |  |
| Sign Control | Stop | | | Stop | Stop | |
| Traffic Volume (vph) | 28 | 30 | 0 | 0 | 0 | 12 |
| Future Volume (vph) | 28 | 30 | 0 | 0 | 0 | 12 |
| Peak Hour Factor | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 |
| Hourly flow rate (vph) | 37 | 39 | 0 | 0 | 0 | 16 |
| Direction, Lane # | EB 1 | NB 1 | | | | |
| Volume Total (vph) | 76 | 16 | | | | |
| Volume Left (vph) | 0 | 0 | | | | |
| Volume Right (vph) | 39 | 16 | | | | |
| Hadj (s) | -0.31 | -0.60 | | | | |
| Departure Headway (s) | 3.6 | 3.4 | | | | |
| Degree Utilization, x | 0.08 | 0.02 | | | | |
| Capacity (veh/h) | 983 | 1009 | | | | |
| Control Delay (s) | 6.9 | 6.5 | | | | |
| Approach Delay (s) | 6.9 | 6.5 | | | | |
| Approach LOS | A | A | | | | |
| Intersection Summary | | | | | | |
| Delay | | | 6.8 | | | |
| Level of Service | | | A | | | |
| Intersection Capacity Utilization | | | 13.7% | ICU Level of Service | A | |
| Analysis Period (min) | | | 15 | | | |

HCM Unsignalized Intersection Capacity Analysis

4: Langley Avenue & 106th Street










11/13/2018

| |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Sign Control | | Stop | | | Stop | | | Stop | | | Stop | |
| Traffic Volume (vph) | 2 | 4 | 12 | 9 | 23 | 3 | 10 | 7 | 11 | 2 | 3 | 25 |
| Future Volume (vph) | 2 | 4 | 12 | 9 | 23 | 3 | 10 | 7 | 11 | 2 | 3 | 25 |
| Peak Hour Factor | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| Hourly flow rate (vph) | 3 | 7 | 21 | 16 | 40 | 5 | 17 | 12 | 19 | 3 | 5 | 43 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total (vph) | 31 | 61 | 48 | 51 | | | | | | | | |
| Volume Left (vph) | 3 | 16 | 17 | 3 | | | | | | | | |
| Volume Right (vph) | 21 | 5 | 19 | 43 | | | | | | | | |
| Hadj (s) | -0.39 | 0.05 | -0.17 | -0.49 | | | | | | | | |
| Departure Headway (s) | 3.8 | 4.2 | 4.0 | 3.6 | | | | | | | | |
| Degree Utilization, x | 0.03 | 0.07 | 0.05 | 0.05 | | | | | | | | |
| Capacity (veh/h) | 921 | 837 | 873 | 956 | | | | | | | | |
| Control Delay (s) | 6.9 | 7.5 | 7.2 | 6.8 | | | | | | | | |
| Approach Delay (s) | 6.9 | 7.5 | 7.2 | 6.8 | | | | | | | | |
| Approach LOS | A | A | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Delay | | | 7.2 | | | | | | | | | |
| Level of Service | | | A | | | | | | | | | |
| Intersection Capacity Utilization | | | 17.0% | | ICU Level of Service | | | | A | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

5: Champlian Avenue & 106th Street
















11/13/2018

| | | | | | | |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | | |  |  | |
| Traffic Volume (veh/h) | 12 | 6 | 3 | 56 | 4 | 5 |
| Future Volume (Veh/h) | 12 | 6 | 3 | 56 | 4 | 5 |
| Sign Control | Free | | | Free | Stop | |
| Grade | 0% | | | 0% | 0% | |
| Peak Hour Factor | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Hourly flow rate (vph) | 14 | 7 | 3 | 64 | 5 | 6 |
| Pedestrians | 3 | | | | 1 | |
| Lane Width (ft) | 10.0 | | | | 8.0 | |
| Walking Speed (ft/s) | 3.5 | | | | 3.5 | |
| Percent Blockage | 0 | | | | 0 | |
| Right turn flare (veh) | | | | | | |
| Median type | None | | | None | | |
| Median storage (veh) | | | | | | |
| Upstream signal (ft) | | | | | | |
| pX, platoon unblocked | | | | | | |
| vC, conflicting volume | | | 22 | | 92 | 18 |
| vC1, stage 1 conf vol | | | | | | |
| vC2, stage 2 conf vol | | | | | | |
| vCu, unblocked vol | | | 22 | | 92 | 18 |
| tC, single (s) | | | 4.1 | | 6.4 | 6.2 |
| tC, 2 stage (s) | | | | | | |
| tF (s) | | | 2.2 | | 3.5 | 3.3 |
| p0 queue free % | | | 100 | | 99 | 99 |
| cM capacity (veh/h) | | | 1606 | | 909 | 1065 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | | | |
| Volume Total | 21 | 67 | 11 | | | |
| Volume Left | 0 | 3 | 5 | | | |
| Volume Right | 7 | 0 | 6 | | | |
| cSH | 1700 | 1606 | 988 | | | |
| Volume to Capacity | 0.01 | 0.00 | 0.01 | | | |
| Queue Length 95th (ft) | 0 | 0 | 1 | | | |
| Control Delay (s) | 0.0 | 0.3 | 8.7 | | | |
| Lane LOS | | A | A | | | |
| Approach Delay (s) | 0.0 | 0.3 | 8.7 | | | |
| Approach LOS | | | A | | | |
| Intersection Summary | | | | | | |
| Average Delay | | 1.2 | | | | |
| Intersection Capacity Utilization | | 15.4% | ICU Level of Service | A | | |
| Analysis Period (min) | | 15 | | | | |

HCM Unsignalized Intersection Capacity Analysis

6: North Parking Lot Access/Alley & 105th Place

















11/13/2018

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| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | | | | |  | | |  | |
| Traffic Volume (veh/h) | 0 | 52 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 0 | 0 |
| Future Volume (Veh/h) | 0 | 52 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 0 | 0 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Hourly flow rate (vph) | 0 | 61 | 4 | 0 | 0 | 0 | 0 | 2 | 2 | 5 | 0 | 0 |
| Pedestrians | | | | | | | | 4 | | | | |
| Lane Width (ft) | | | | | | | | 8.0 | | | | |
| Walking Speed (ft/s) | | | | | | | | 3.5 | | | | |
| Percent Blockage | | | | | | | | 0 | | | | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 0 | | | 69 | | | 67 | 67 | 67 | 66 | 69 | 0 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 0 | | | 69 | | | 67 | 67 | 67 | 66 | 69 | 0 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 99 | 100 | 100 |
| cM capacity (veh/h) | 1636 | | | 1541 | | | 927 | 825 | 1000 | 927 | 823 | 1091 |
| Direction, Lane # | EB 1 | NB 1 | SB 1 | | | | | | | | | |
| Volume Total | 65 | 4 | 5 | | | | | | | | | |
| Volume Left | 0 | 0 | 5 | | | | | | | | | |
| Volume Right | 4 | 2 | 0 | | | | | | | | | |
| cSH | 1636 | 904 | 927 | | | | | | | | | |
| Volume to Capacity | 0.00 | 0.00 | 0.01 | | | | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | | | | | | | | | |
| Control Delay (s) | 0.0 | 9.0 | 8.9 | | | | | | | | | |
| Lane LOS | | A | A | | | | | | | | | |
| Approach Delay (s) | 0.0 | 9.0 | 8.9 | | | | | | | | | |
| Approach LOS | | A | A | | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 1.1 | | | | | | | | | |
| Intersection Capacity Utilization | | | 14.6% | ICU Level of Service | | | | A | | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

HCM Unsignalized Intersection Capacity Analysis

7: Alley/South Parking Lot Access & 106th Street

11/13/2018

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|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  | | |  | | |  | |
| Traffic Volume (veh/h) | 0 | 17 | 0 | 1 | 56 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
| Future Volume (Veh/h) | 0 | 17 | 0 | 1 | 56 | 1 | 0 | 0 | 0 | 1 | 0 | 3 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |
| Grade | | 0% | | | 0% | | | 0% | | | 0% | |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Hourly flow rate (vph) | 0 | 20 | 0 | 1 | 67 | 1 | 0 | 0 | 0 | 1 | 0 | 4 |
| Pedestrians | | | | | | | | | | | 6 | |
| Lane Width (ft) | | | | | | | | | | | 8.0 | |
| Walking Speed (ft/s) | | | | | | | | | | | 3.5 | |
| Percent Blockage | | | | | | | | | | | 0 | |
| Right turn flare (veh) | | | | | | | | | | | | |
| Median type | | None | | | None | | | | | | | |
| Median storage (veh) | | | | | | | | | | | | |
| Upstream signal (ft) | | | | | | | | | | | | |
| pX, platoon unblocked | | | | | | | | | | | | |
| vC, conflicting volume | 74 | | | 20 | | | 94 | 96 | 20 | 96 | 96 | 74 |
| vC1, stage 1 conf vol | | | | | | | | | | | | |
| vC2, stage 2 conf vol | | | | | | | | | | | | |
| vCu, unblocked vol | 74 | | | 20 | | | 94 | 96 | 20 | 96 | 96 | 74 |
| tC, single (s) | 4.1 | | | 4.1 | | | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| tC, 2 stage (s) | | | | | | | | | | | | |
| tF (s) | 2.2 | | | 2.2 | | | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 |
| p0 queue free % | 100 | | | 100 | | | 100 | 100 | 100 | 100 | 100 | 100 |
| cM capacity (veh/h) | 1533 | | | 1609 | | | 888 | 794 | 1064 | 886 | 795 | 990 |
| Direction, Lane # | EB 1 | WB 1 | NB 1 | SB 1 | | | | | | | | |
| Volume Total | 20 | 69 | 0 | 5 | | | | | | | | |
| Volume Left | 0 | 1 | 0 | 1 | | | | | | | | |
| Volume Right | 0 | 1 | 0 | 4 | | | | | | | | |
| cSH | 1533 | 1609 | 1700 | 967 | | | | | | | | |
| Volume to Capacity | 0.00 | 0.00 | 0.00 | 0.01 | | | | | | | | |
| Queue Length 95th (ft) | 0 | 0 | 0 | 0 | | | | | | | | |
| Control Delay (s) | 0.0 | 0.1 | 0.0 | 8.7 | | | | | | | | |
| Lane LOS | | A | A | A | | | | | | | | |
| Approach Delay (s) | 0.0 | 0.1 | 0.0 | 8.7 | | | | | | | | |
| Approach LOS | | | A | A | | | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| Average Delay | | | 0.5 | | | | | | | | | |
| Intersection Capacity Utilization | | | 15.5% | ICU Level of Service | | | | | | A | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |