Technical Memorandum

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To: Bryan Brown, City of Canby

Copy: Levi Levasa, Stafford Land Company

From: William R. Farley, PE

Date: January 8, 2019

Subject: Holly Development Concept Plan
Comment Response

This letter is written to respond to comments from DKS regarding the Transportation Impact Study (TIS) prepared on September 13th, 2018, for the Holly Development Concept Plan in Canby, Oregon. Comments provided are restated below in italics with a response immediately following:

A sight distance study needs to be conducted at proposed street connections to N Holly Street and N Locust Street.

Response: A sight distance analysis has been included in the revised Transportation Impact Study (dated January 7th, 2019) starting on page 23. With the exception of the northern access to N Holly Street viewing south, adequate intersection sight distance can be made available at all proposed site access intersections following the removal or maintenance of on-site vegetation.

The northern access to N Holly Street is not expected to meet intersection sight distance standards (which allow for a vehicle to enter the roadway without impeding the flow of through traffic) to the south; however, the available sight distance is adequate for major-street traffic traveling up to 52 mph to slow and accommodate a vehicle entering the roadway. Accordingly, it is anticipated that the intersection will operate safely.

Queuing and stacking analysis needs to be conducted at site access points and at intersections (e.g., left-turn pockets).

Response: A queuing analysis has been provided in the updated January 2019 TIS on page 27. Based on the results of the analysis, queues are not projected to extend back or obstruct turning movements at any adjacent public intersection. Additionally, queues at the proposed access intersections are not expected to exceed more than two vehicles.

A left-turn refuge was projected to be warranted under year 2030 background conditions for the eastbound direction of the intersection of NE Territorial Road at N Locust Street, regardless of the annexation of the subject site. With annexation of the property and with the construction of the development plan, it is anticipated that the left-turn refuge will need to store up to two vehicles to accommodate the projected 95th percentile queue during the evening peak hour.

Provide a summary of any identified transportation improvement projects, applicable street cross-sections, truck routes, local street connectivity recommendations, and access spacing standards as documented in the 2010 TSP.

Response: Summaries of the applicable information from the City's 2010 Transportation System Plan are provided in the updated January 2019 TIS beginning on page 4.

Internal circulation for both autos and pedestrians need to be examined and summarized.

Response: The internal circulation of the site is analyzed in the updated January 2019 TIS beginning on page 6.

Trip distribution for the study was not coordinated with the Canby TSP Travel Forecasting Tool.

Response: The directional trip distribution of site trips to and from the site was revised based on the City of Canby's Travel Forecasting Tool. All analysis results have been updated accordingly within the January 2019 TIS.

If you have any questions, comments, or concerns regarding the updated Transportation Impact Study or its analysis, please don't hesitate in contacting us directly.

Holly Development Concept Plan

Transportation Impact Study

Canby, Oregon

Date:
January 7, 2019

Prepared for:
Levi Levasa
Stafford Land Company

Prepared by:
Daniel Stumpf, EI
William Farley, PE

RENEWS: 12/31/2019

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Executive Summary

1. The proposed Holly Development Concept Plan (DCP) includes properties located north of NE/NW Territorial Road, south of NE/NW 22nd Avenue, west of N Locust Street, and along both sides of N Holly Street near Canby, Oregon. Upon annexation, properties within the Holly DCP area must be rezoned from their existing zoning of *Rural Residential Farm Forest 5-Acre* (RRFF-5) to *Low Density Residential* (R-1) for development as a maximum 240-lot residential subdivision.
2. The trip generation calculations show that under the proposed zoning, the site could reasonably generate up to 178 morning peak hour trips, 238 evening peak hour trips, and 2,266 weekday trips.
3. No significant trends or crash patterns were identified at any of the study intersections that were indicative of safety concerns.
4. Sight distance to the south for the northern access onto N Holly Street is not projected to meet intersection sight distance standards based on the existing 45 mph speed limit; however, stopping sight distance for the intersection will be able to safely accommodate vehicles traveling up to 52 mph.
5. After removal or proper maintenance of any obstructing onsite foliage, adequate sight distance can be made available at all other proposed site access intersections. No sight distance mitigation is necessary or recommended.
6. Left-turn lane warrants are projected to be met for the eastbound approach at the intersection of NE Territorial Road at N Locust Street by the 2030 planning horizon year. No other new turn lanes are necessary or recommended.
7. Due to insufficient main and side-street traffic volumes, traffic signal warrants are not projected to be met at the study intersections along NE/NW Territorial Road under any of the analysis scenarios.
8. All study intersections are currently operating acceptably per their respective jurisdictional standards and are projected to continue operating acceptably through the 2030 planning horizon with the full buildout of the DCP area.
9. Based on a queuing analysis, 95th-percentile queues are not projected to extend back to or obstruct turning movements at any adjacent public intersection. Additionally, queues at proposed access intersections are not expected to exceed more than two vehicles.
10. The future development of the Holly DCP is not projected to degrade the performance of any existing or planned transportation facility below acceptable City of Canby or Clackamas County standards. In addition, the proposal is consistent with the City's Transportation System Plan and Comprehensive Plan. Accordingly, the Transportation Planning Rule is satisfied.

Project Description and Location

Introduction

The proposed Holly Development Concept Plan (DCP) includes properties located north of NE/NW Territorial Road, south of NE/NW 22nd Avenue, west of N Locust Street, and along both sides of N Holly Street near Canby, Oregon. Upon annexation, properties within the Holly DCP area must be rezoned from their existing zoning of *Rural Residential Farm Forest 5-Acre* (RRFF-5) to *Low Density Residential* (R-1) for development as a maximum 240-lot residential subdivision. Based on correspondence with City of Canby staff, the report conducts safety and capacity/level of service analyses at the following intersections:

- N Holly Street at NW Territorial Road;
- N Locust Street at NE Territorial Road; and
- N Locust Street at NE 19th Avenue (future site access).

The purpose of this study is to assess the potential impacts of the proposed DCP and address the transportation analysis requirements of the City of Canby and Oregon's Transportation Planning Rule. The report will identify the potential net increase in site generated traffic and examine the transportation impacts of the added trips at the planning horizon. The report will also include level of service calculations and volume-to-capacity calculations for existing conditions as well as year 2030 traffic conditions, both with and without the development of the proposed DCP. Additionally, a review and assessment of crash history at the study intersections was conducted. Detailed information on traffic counts, trip generation calculations, safety analyses, and level of service calculations is included in the appendix to this report.

Project and Location Description

The project site is located just north of Canby City limits, within the urban growth boundary, in unincorporated Clackamas County, Oregon. The subject site is situated in a developing residential area, with single-family houses to the east and south, and agricultural land-uses to the north and west.

The project site includes 15 tax lots which encompass an approximate total of 57.93 acres. The site is currently developed as low density commercial/residential agricultural land-uses. The DCP will include the construction of 13 future public access intersections onto vicinity roadways: specifically, 5 access intersections onto NE 22nd Avenue, 4 access intersections onto N Holly Street, and 4 access intersections onto N Locust Street.

Vicinity Streets

Development of the proposed DCP is expected to primarily impact four nearby, existing vicinity roadways. Table 1 provides a description of each of the vicinity roadways.

Table 1: Vicinity Roadway Descriptions

Roadway	Jurisdiction	Functional Classification	Cross-Section	Speed	On-street Parking	Bicycle Lanes	Curbs	Sidewalks
NE/NW 22nd Avenue	City of Canby/ Clackamas County	Local Street	2 Lanes/ Gravel	25 mph Statutory	Partially Permitted	None	Partial Both Sides	Partial Both Sides
NE/NW Territorial Road	City of Canby	Arterial/ Neighborhood Connector	2 Lanes	25/35 mph Posted	Partially Permitted	Partial Both Sides	Partial Both Sides	Partial Both Sides
N Holly Street	City of Canby/ Clackamas County	Arterial/ Collector/Local Street	2 Lanes	25/45 mph Posted	Partially Permitted	None	Partial Both Sides	Partial Both Sides
N Locust Street	City of Canby/ Clackamas County	Local Street	2 Lanes	25 mph Posted	Partially Permitted	None	Partial Both Sides	Partial Both Sides

Note: Functional Classification and Jurisdiction based on City of Canby's *Transportation System Plan*.

Study Intersections

A majority of site trips generated by the proposed development are expected to impact three nearby, existing intersections of significance. A summarized description of these intersections is provided in Table 2.

Table 2: Study Intersection Descriptions

Number	Name	Geometry	Traffic Control	Phasing/Stopped Approaches
1	N Holly Street at NW Territorial Road	Four-Legged	Stop-Controlled	All-Way Stop-Controlled
2	N Locust Street at NE Territorial Road	Four-Legged	Stop-Controlled	NB/SB Stop-Controlled
5	N Locust Street at NE 19th Avenue	Three-Legged	Stop-Controlled	WB Stop-Controlled

A vicinity map displaying the project site, vicinity streets, and the study intersections with their associated lane configurations is shown in Figure 1 on page 8.

Transportation System Plan Projects and Standards

At the direction of the City of Canby's consulting engineer, the City's Transportation System Plan (TSP) was referenced to identify the following:

- Relevant transportation improvement projects;
- Applicable street cross-sections;
- Truck routes;
- Local street connectivity recommendations; and
- Access spacing standards.

The following narrative describes each of the above listed points in detail.

Transportation Improvement Projects

There are several transportation improvement projects described in the City's TSP that are planned within the site vicinity. Table 3 below summarizes these planned projects.

Table 3: Transportation Improvement Projects

Category	ID Code	Location	Description	Planning Level Cost
Pedestrian	S7	N Holly Street, between Knights Bridge Road and NW Territorial Road.	Fill in sidewalk gaps.	$550,000
Pedestrian	S8	NW/NE Territorial Road, between N Holly Street and OR-99E	Fill in sidewalk gaps.	$1,230,000
Bicyde	B3	N Holly Street, between NW 22nd Avenue and NW 6th Avenue	Stripe bike lanes (widen as needed)	$663,000
Functional Classification	-	NW/NE Territorial Road, between N Holly Street and OR-99E	Downgrade from Arterial	-
Functional Classification	-	N Holly Street, NW Territorial Road and NW 22nd Avenue	Downgrade from Arterial	-

Street Cross-Sections

Table 4 presents the roadway cross-section standards for NE/NW Territorial Road, NE 22nd Avenue, N Holly Street, and N Locust Street based on the functional classification and jurisdiction of the roadways.

Table 4: Street Cross-Section Standards

Roadway	From	To	Functional Classification	Cross-Section Type	Right of Way	Paved Section
NW Territorial Road	N Holly Street	West	Neighborhood Connector	Neighborhood Route	40' - 64'	36'
NE Territorial Road	N Holly Street	East	Arterial	Arterial (Two-Way Traffic)	60' - 80'	34' - 50'
NE 22nd Avenue	N Holly Street	N Locust Street	Local Street	Alley	20'	20'
N Holly Street	NW Territorial Road	South	Collector	Collector	50' - 80'	34' - 50'
N Locust Street	NE Territorial Road	South	Local Street	Standard Local Street	50' - 62'	34'

Additional information regarding roadway cross-section standards can be found in Figures 7-4, 7-5, and 7-6 of the City's TSP.

Truck Routes

Per Figures 7-2a, 7-2b, and 7-2c of the City's TSP, NE/NW Territorial Road is classified as a truck route between N Holly Street and OR-99E. Additionally, N Holly Street is also classified as a truck route from the northern edge of the City limits to NW 3rd Avenue.

Local Street Connectivity Recommendations

According to the City's TSP, local street connectivity is analyzed in order to reduce potential vehicle miles traveled (VMT) within the City of Canby. The design for specific alignments of roadways are based on the following criteria:

- Pedestrian and bicycle connections should be provided every 330 feet; and
- Vehicle connections should be provided every 600 feet centerline to centerline.

Upon reviewing Figure 7-8 of the TSP, four potential local street connections (bounded by NE 22nd Avenue, NE Territorial Road, N Holly Street, and N Locust Street) were noted: two connections onto N Locust Street, one connection onto NE 22nd Avenue, and one connection onto N Holly Street. Based on a review of the proposed site plan for the DCP, within the same area the proposed DCP will include four connections onto N Locust Street, four connections onto NE 22nd Avenue, and four connections onto N Holly Street.

Given the proposed DCP provides significantly more connections than described in Figure 7-8, no additional recommendations regarding local street connectivity are suggested.

Access Spacing Standards

According to the *Access Management* section of the TSP, the maximum block length shall not exceed 600 feet, or 1,000 feet along an arterial. In addition, Table 5 below describes access spacing standards along City roadways, as referenced from Table 7-2 from the TSP. It should be noted that spacing is measured centerline to centerline and private access onto an arterial roadway may only be granted through a requested variance when access to a lower classification roadway is not feasible.

Table 5: Access Spacing Standards

Street Facility	Roadway Spacing		Driveway Spacing	
	Maximum	Minimum	Maximum	Minimum
Arterial	1,000'	660'	330'	330' or combine
Collector	600'	250'	100'	100' or combine
Neighborhood/Local Street	600'	150'	50'	10'

Internal Circulation

The proposed site plan depicts multiple points of access onto vicinity roadways: five points of access onto NW/NE 22nd Avenue, four points of access onto N Holly Street, and four points of access onto N Locust Street. All accesses are intended to serve residents within proposed DCP area. In addition, residents within the DCP area are provided multiple, redundant routes to and from the nearby vicinity roadways and each planned single-family house, allowing for efficient circulation within the DCP area and reducing the potential for out of direction travel.

Local streets constructed within the City of Canby are required to provide a six-foot sidewalk on both sides of the street. Improvements along portions of the site frontage with NW/NE Territorial Road, NW/NE 22nd Avenue, N Holly Street, and N Locust Street are also anticipated to include new sidewalks. Accordingly, adequate pedestrian facilities are expected to be provided with the proposed development.

Traffic Counts

Intersection Counts

Traffic counts were conducted at the study intersections on Thursday, August 9th, 2018, from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. Data was used from each intersection's respective morning and evening peak hours. To estimate existing traffic volumes at the proposed site access intersections along NE 22nd Avenue, N Holly Street, and N Locust Street, volumes were balanced with the study intersections as well as the intersections of N Holly Street at NW 22nd Avenue and N Locust Street at NE 22nd Avenue, where additional count data was collected.

School Traffic

At the time of conducting traffic counts, local schools were closed for the summer months. In order to reflect typical weekday traffic conditions with school in session, additional volumes were added to the collected count data utilizing the City of Canby's Small Community Model. The modeling data was provided by DKS Associates and is included within the technical appendix to this report.

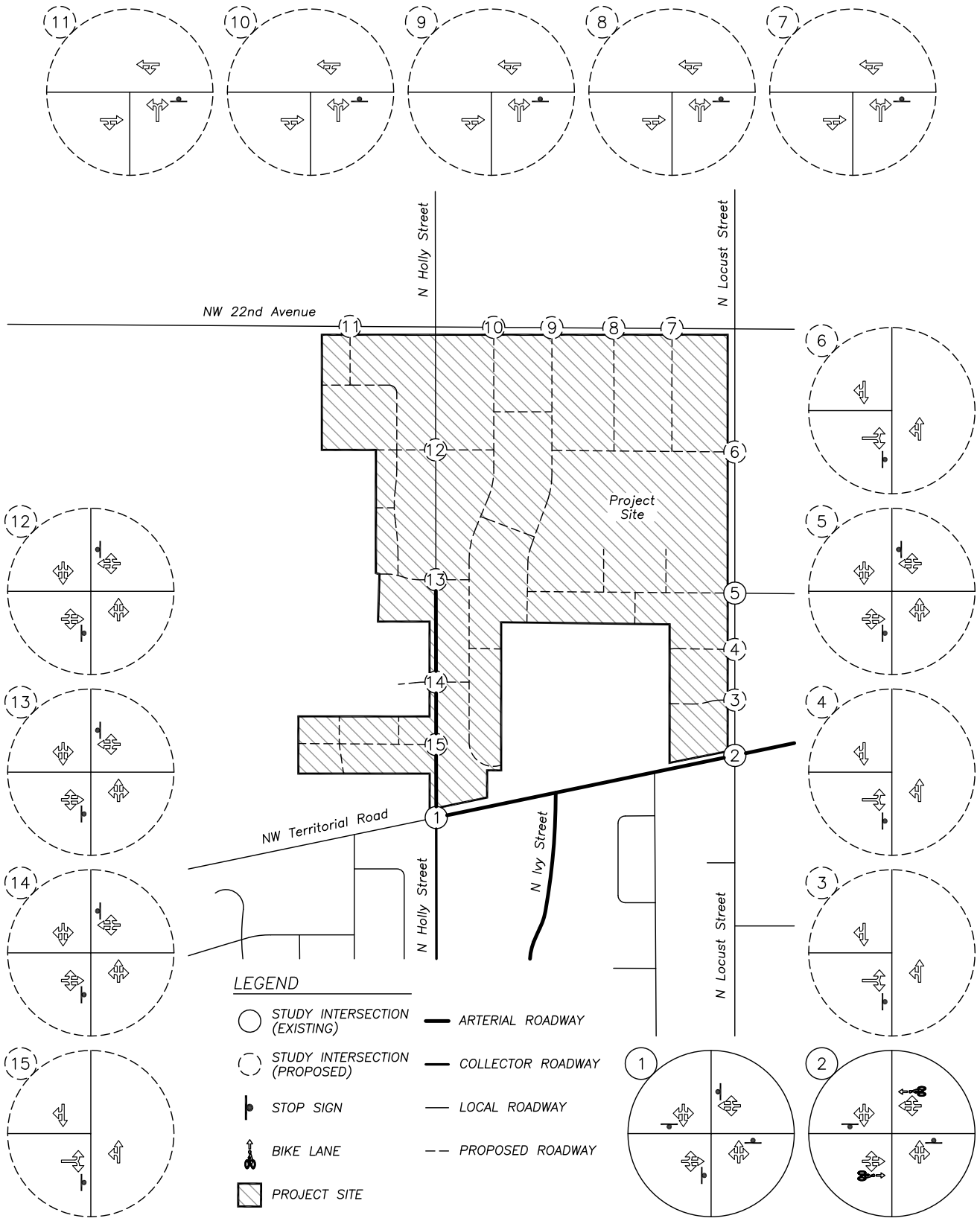
NE/NW Territorial Road Data Collection

Per direction by the City of Canby, 24-hour vehicle volume, classification, and speed data was collected along NE/NW Territorial Road on Thursday, August 9th, 2018. Table 6 summarizes the reported findings of the collected data.

Table 6: Territorial Road Volume Summary

	Classification (Daily Count)								Speed (mph)	
	Bikes	Cars & Trailers	2 Axle (Long)	Buses	2 Axle (6 Tires)	3+ Axle (Single & Multi)	Not Classed	ADT	50th Percentile	85th Percentile
EB	62	2,068	472	4	168	13	57	2,844	28	33
WB	39	1,863	555	7	221	18	78	2,781	31	35
Total	**101**	**3,931**	**1,027**	**11**	**389**	**31**	**135**	**5,625**	**-**	**-**

Figure 2 on page 9 and Figure 3 on page 10 show the existing morning and evening peak hour traffic volumes at the study intersections, respectively.



VICINITY MAP

no scale

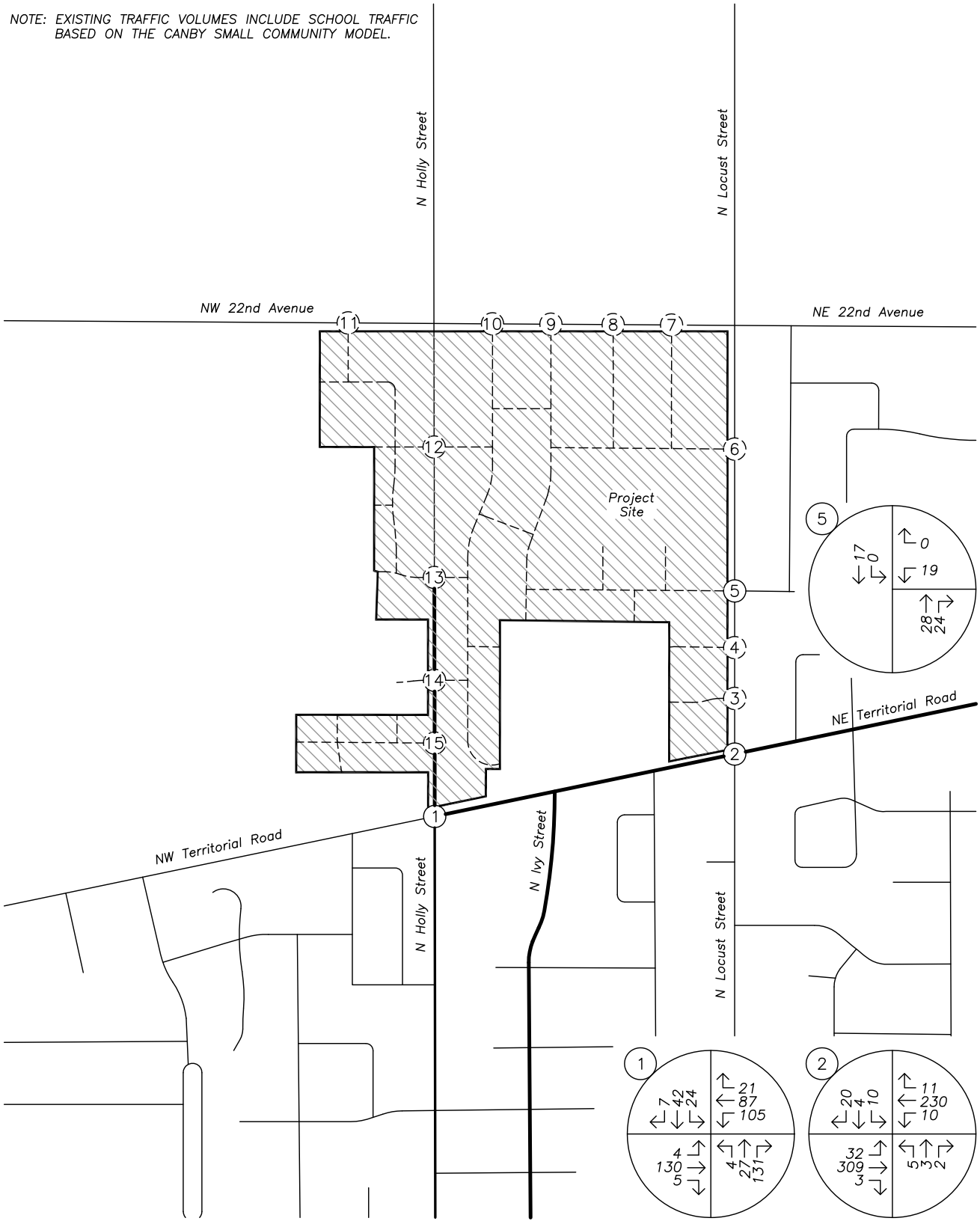
FIGURE 1

NOTE: EXISTING TRAFFIC VOLUMES INCLUDE SCHOOL TRAFFIC BASED ON THE CANBY SMALL COMMUNITY MODEL.

TRAFFIC VOLUMES
Existing Conditions
AM Peak Hour

no scale

FIGURE 2



TRAFFIC VOLUMES
Existing Conditions
PM Peak Hour

no scale

FIGURE 3

Site Trips

Trip Generation

The proposed Holly DCP includes properties currently zoned as *Rural Residential Farm Forest 5-Acre* (RRFF-5) by Clackamas County and, upon annexation into the City, would be rezoned to *Low Density Residential* (R-1) in conformance with the City's Comprehensive Plan. To determine the impacts of the proposed change in zoning, a "reasonable worst-case" development scenario for the proposed zone was determined by comparing land use data provided within the *Trip Generation Manual*[1] with the most traffic-intensive uses permitted within the zone.

Typically, when conducting an annexation/zone change analysis, "reasonable worst-case" development scenarios under existing and proposed zones are determined. The net trip generation between both zones is then calculated in order to determine the change in additional trip generation intensity that could impact that nearby transportation system. For the purposes of simplicity as well as maintaining a conservative analysis of potential site trip impacts, no reductions associated with the existing zone's "reasonable worst-case" development scenario were made.

It should be noted that the subject site is located within the City of Canby's urban growth boundary and the City's TSP has accounted for the annexation/zone change. Therefore, impacts associated with the proposed annexation have already been analyzed and acknowledged by the City of Canby.

Proposed R-1 Zone

To determine a "reasonable worst-case" development scenario under the proposed R-1 zoning, City of Canby's Municipal Code *Chapter 16.16 R-1 Low Density Residential Zone*, was referenced and compared to a variety of land-uses provided within the *Trip Generation Manual*. Based on an assessment of permitted uses under the R-1 zone, data from land-use code 210, *Single-Family Detached Housing*, was used to estimate a potential, "reasonable worst-case" development scenario under the proposed zoning. According to the applicant, the maximum number of units that could be developed within the DCP area may include the construction of 240 single-family dwellings. Therefore, a 240-lot subdivision was treated as the "reasonable worst-case" development scenario under the proposed zone.

It should be noted that the final lot count of the DCP will likely be less than the analyzed 240 maximum lot count when developed. Accordingly, the transportation impacts related to the proposed DCP are expected to be less than those analyzed within this study and will be further evaluated in future transportation impact studies.

Analysis Results

The trip generation calculations show that under the proposed zoning, the site could reasonably generate up to 178 morning peak hour trips, 238 evening peak hour trips, and 2,266 weekday trips. The trip generation

[1] Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10th Edition, 2017.

estimates are summarized in Table 7. Detailed trip generation calculations are included in the technical appendix to this report.

Table 7: Trip Generation Summary

	ITE Code	Size	Morning Peak Hour			Evening Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Proposed Conditions									
Single-Family Detached Housing	210	240 units	45	133	178	150	88	238	2,266

Trip Distribution

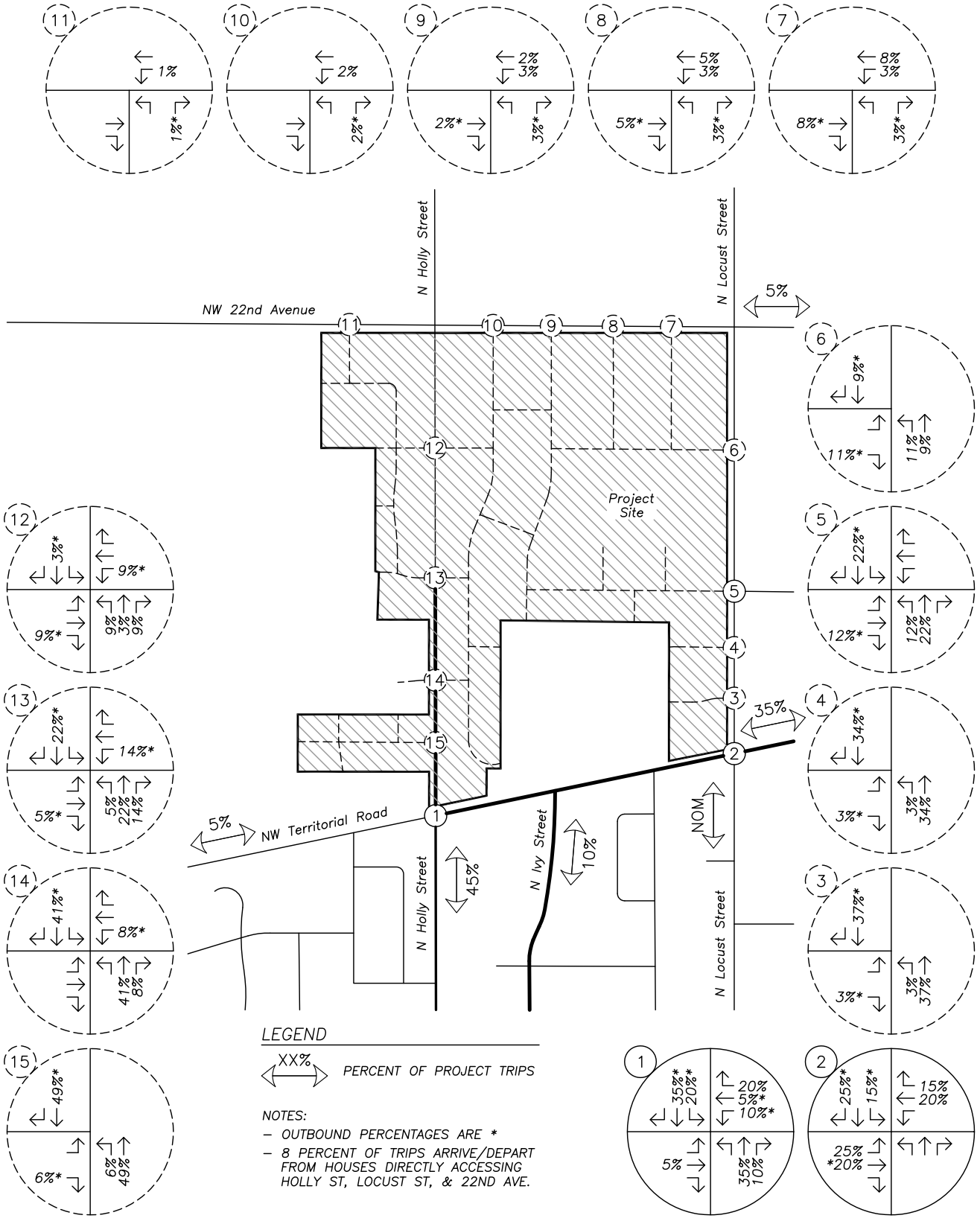
The directional distribution of site trips to/from the project site was estimated based on the City of Canby's TSP Travel Forecasting Tool, for which data was supplied by DKS Associates. The following trip distribution was used for analysis:

- Approximately 45 percent of site trips will travel to/from the south along N Holly Street;
- Approximately 35 percent of site trips will travel to/from the east along NE Territorial Road;
- Approximately 10 percent of site trips will travel to/from the south along N Ivy Street;
- Approximately 5 percent of site trips will travel to/from the east along NE 22nd Avenue; and
- Approximately 5 percent of site trips will travel to/from the west along NW Territorial Road.

Based on the preliminary site plan and locations of proposed accesses, site trips are expected to utilize site accesses as follows:

- Approximately 3 percent of site trips will travel to/from the west at Intersection 3;
- Approximately 3 percent of site trips will travel to/from the west at Intersection 4;
- Approximately 12 percent of site trips will travel to/from the west at Intersection 5;
- Approximately 11 percent of site trips will travel to/from the west at Intersection 6;
- Approximately 3 percent of site trips will travel to/from the south at Intersection 7;
- Approximately 3 percent of site trips will travel to/from the south at Intersection 8;
- Approximately 3 percent of site trips will travel to/from the south at Intersection 9;
- Approximately 2 percent of site trips will travel to/from the south at Intersection 10;
- Approximately 1 percent of site trips will travel to/from the south at Intersection 11;
- Approximately 9 percent of site trips will travel to/from the east at Intersection 12;
- Approximately 9 percent of site trips will travel to/from the west at Intersection 12;
- Approximately 14 percent of site trips will travel to/from the east at Intersection 13;
- Approximately 5 percent of site trips will travel to/from the west at Intersection 13;
- Approximately 8 percent of site trips will travel to/from the east at Intersection 14;
- Approximately 6 percent of site trips will travel to/from the west at Intersection 15; and
- Approximately 8 percent of site trips will travel to/from houses which take direct access to N Holly Street, N Locust Street, and NE/NW 22nd Avenue.

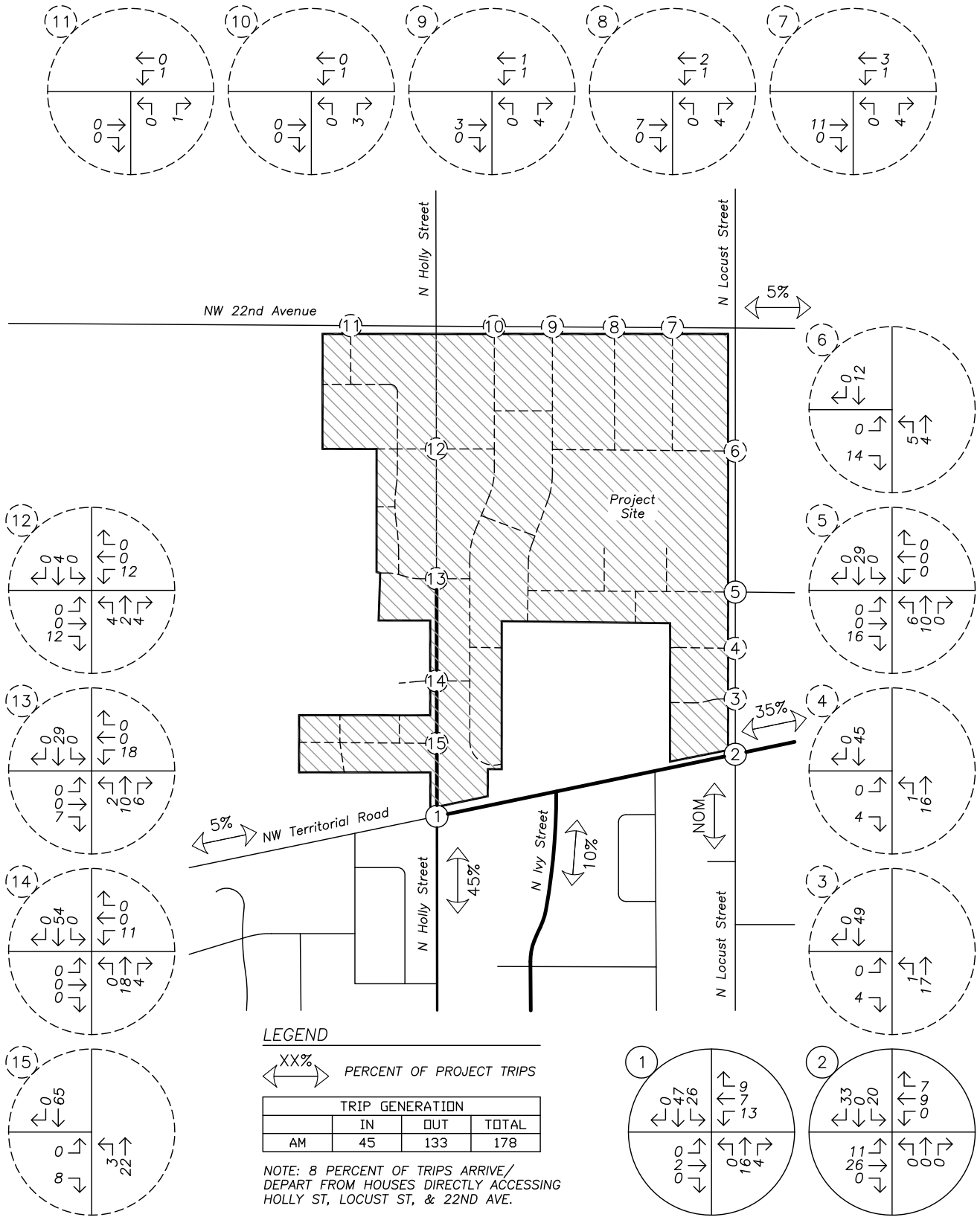
The trip distribution utilized for site trips generated by the subject site are shown in Figure 4 on page 14. The trip assignment for the site trips generated during the morning and evening peak hours is shown in Figure 5 on page 15 and Figure 6 on page 16, respectively.



SITE TRIP DISTRIBUTION
Inbound & Outbound Percentages
AM & PM Peak Hours

no scale

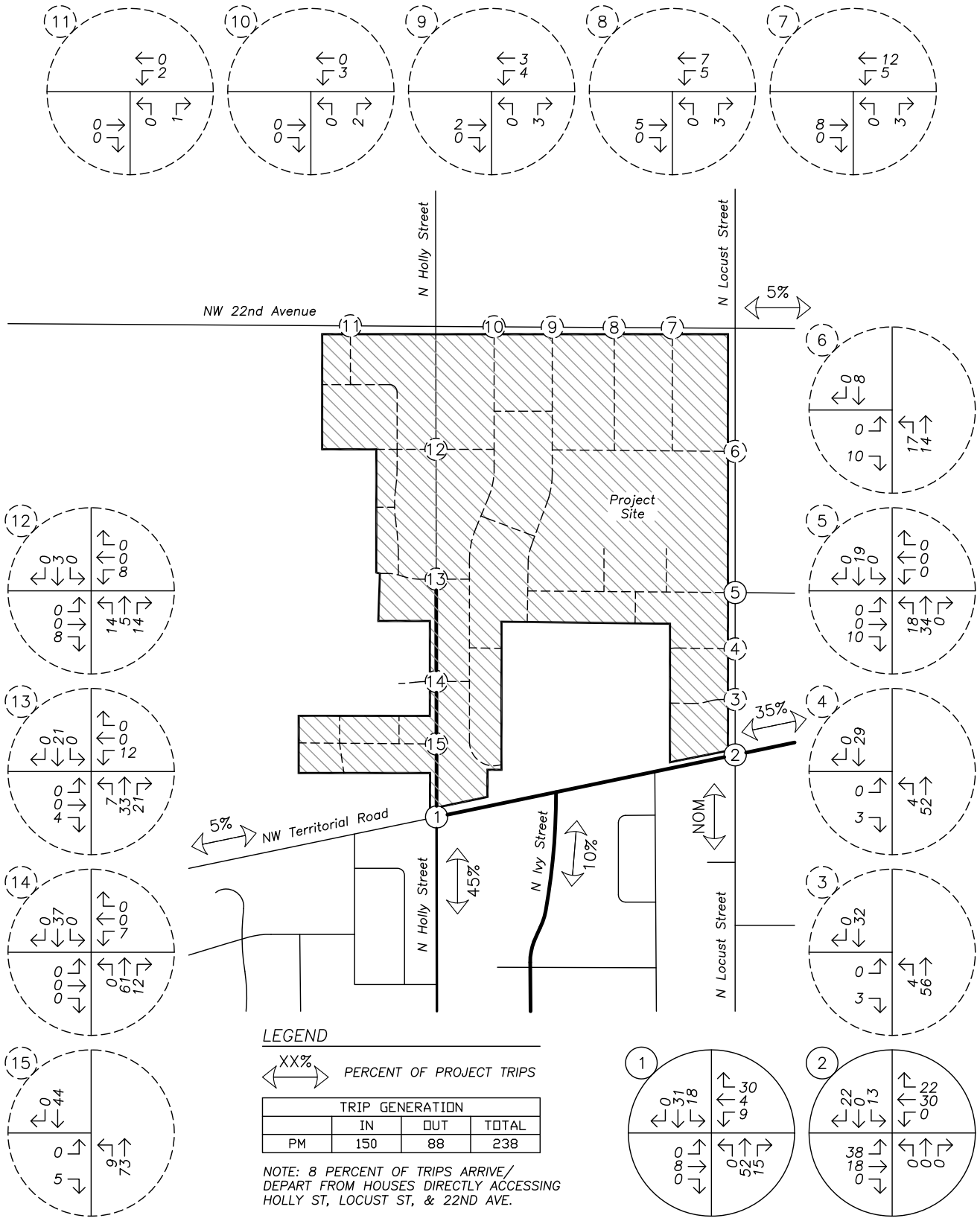
FIGURE 4



SITE TRIP ASSIGNMENT
Reasonable Worst-Case Development Scenario – R-1 Zone
AM Peak Hour

no scale

FIGURE 5



TRIP GENERATION			
	IN	OUT	TOTAL
PM	150	88	238

NOTE: 8 PERCENT OF TRIPS ARRIVE/ DEPART FROM HOUSES DIRECTLY ACCESSING HOLLY ST, LOCUST ST, & 22ND AVE.

SITE TRIP ASSIGNMENT
Reasonable Worst-Case Development Scenario – R-1 Zone
PM Peak Hour

no scale

FIGURE 6

Future Traffic Volumes

2030 Planning Horizon Volumes

To provide analysis of the impact of the proposed DCP on the nearby transportation facilities, an estimate of future traffic volumes is required.

In order to calculate the future traffic volumes, a compounded growth rate of 2.62 percent per year was applied to the measured existing traffic volumes over a 12-year period to approximate the year 2030 planning horizon traffic conditions. The assumed 2.62 percent per year growth rate was calculated based on the expected population growth within the City between 2009 and 2030, as reported in the City of Canby's TSP.

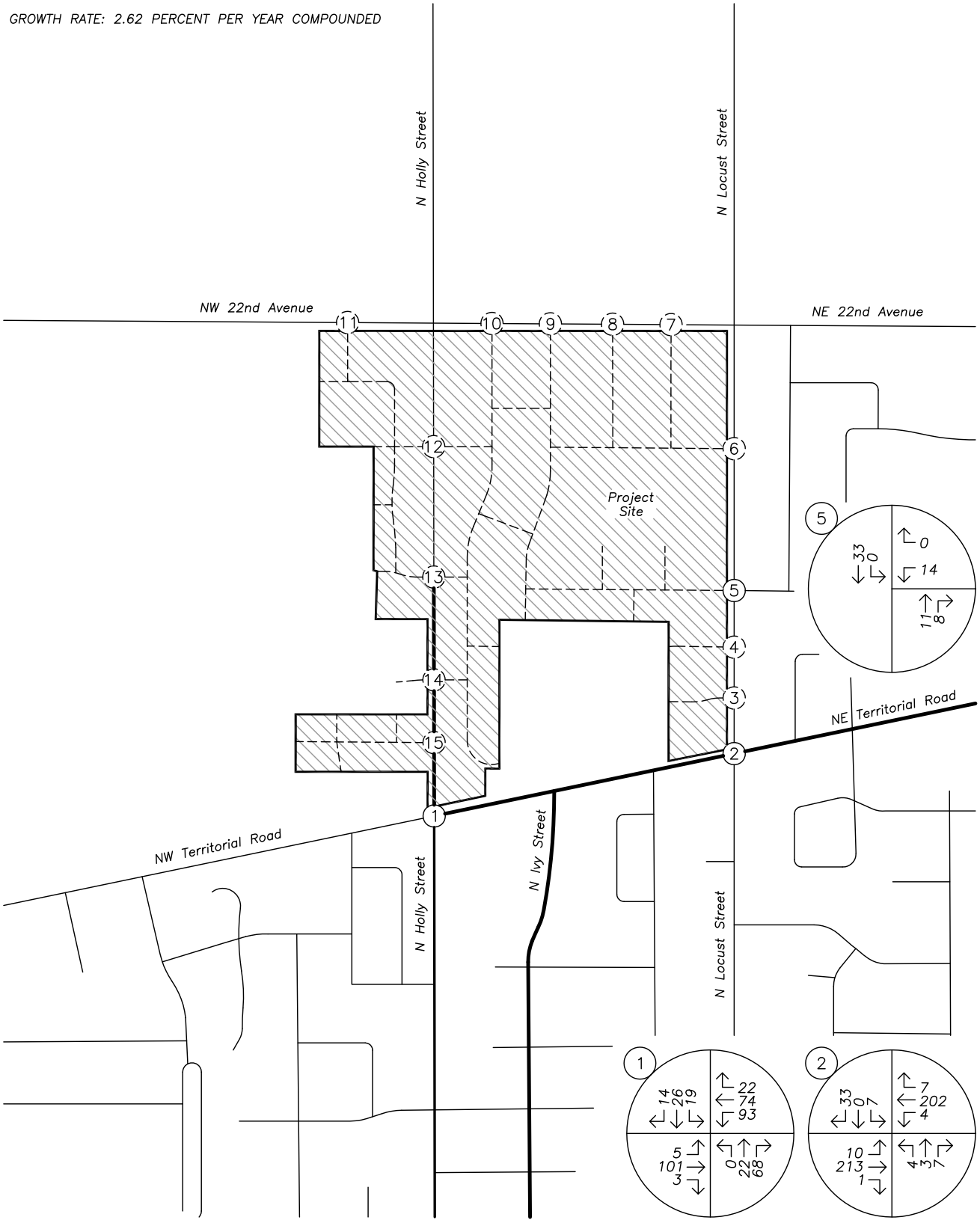
Figure 7 on page 18 and Figure 8 on page 19 show the projected year 2030 planning horizon volumes, without development of the proposed DCP, at the study intersections during the morning and evening peak hours, respectively.

2030 Planning Horizon Volumes with Annexation

Peak hour trips calculated to be generated by the proposed DCP, as described earlier within the *Site Trips* section, were added to the projected year 2030 planning horizon volumes to obtain the expected 2030 planning year volumes with the proposed DCP.

It should be noted that the City's TSP already accounts for the proposed DCP area, where projected 2030 planning year traffic volumes at the intersection of N Holly Street at NW Territorial Road are provided in Figure 4-2b of the City's TSP. To maintain consistency with the TSP, as well as provide a conservative assessment of intersection operation, all turning movement volumes at the intersection of N Holly Street at NW Territorial Road were further increased to at least match the minimum volumes reported in the TSP after applying the peak hour trips.

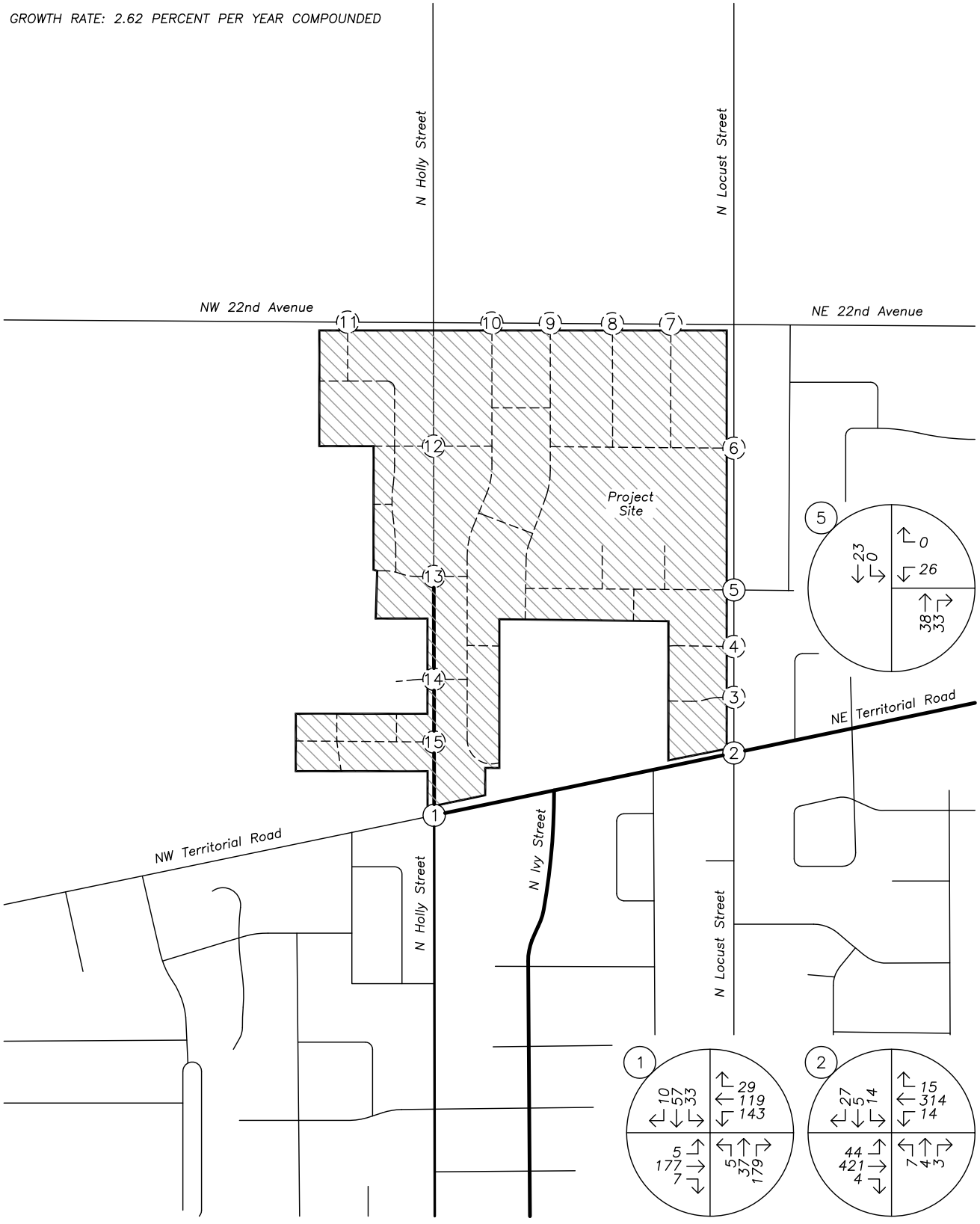
Figure 9 on page 20 and Figure 10 on page 21 show the projected 2030 planning year traffic volumes, with full development of the proposed DCP, at the study intersections during the morning and evening peak hours, respectively.



TRAFFIC VOLUMES
Year 2030 Planning Horizon w/o Annexation
AM Peak Hour

no scale

FIGURE 7

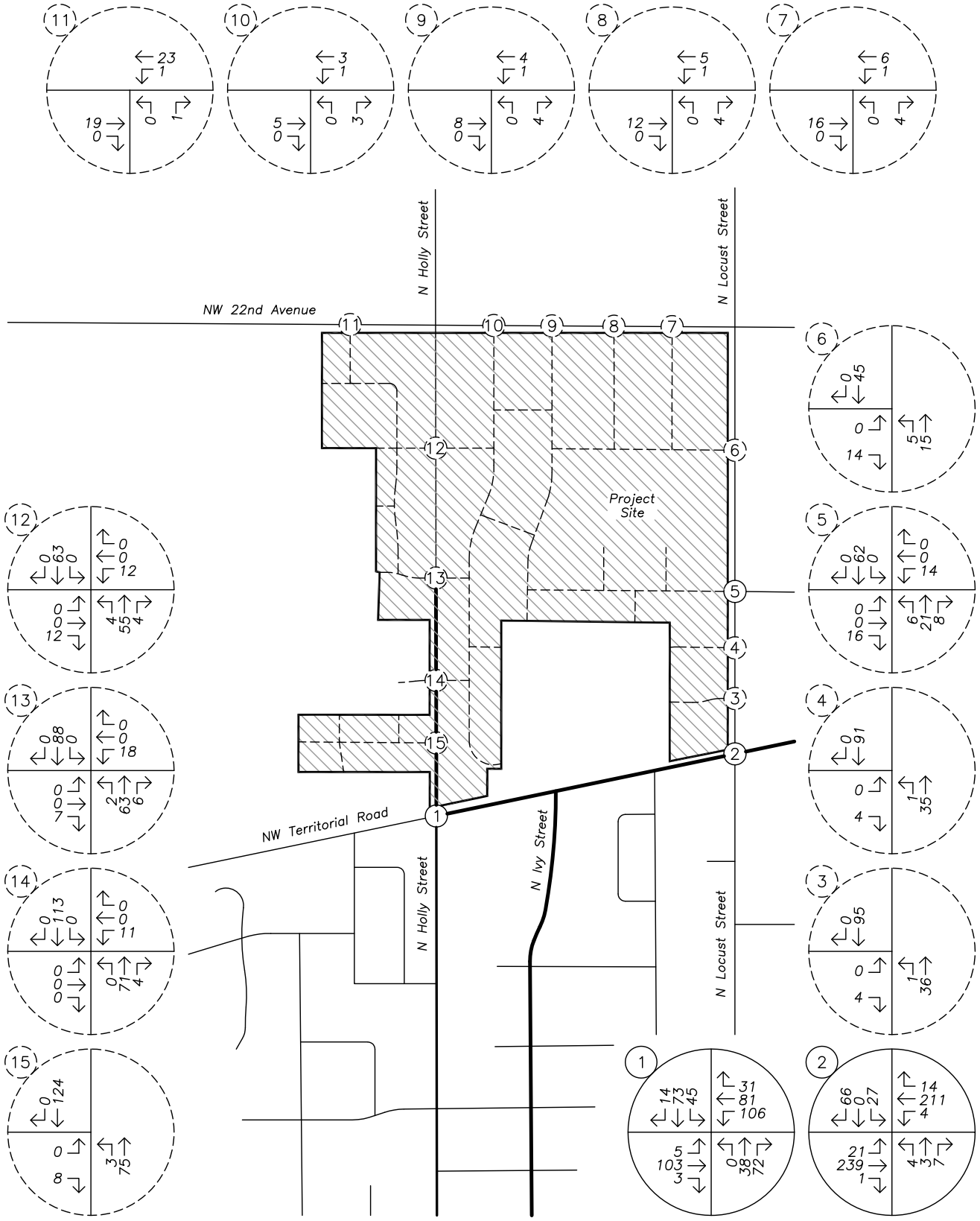


TRAFFIC VOLUMES
Year 2030 Planning Horizon w/o Annexation
PM Peak Hour

no scale

FIGURE 8

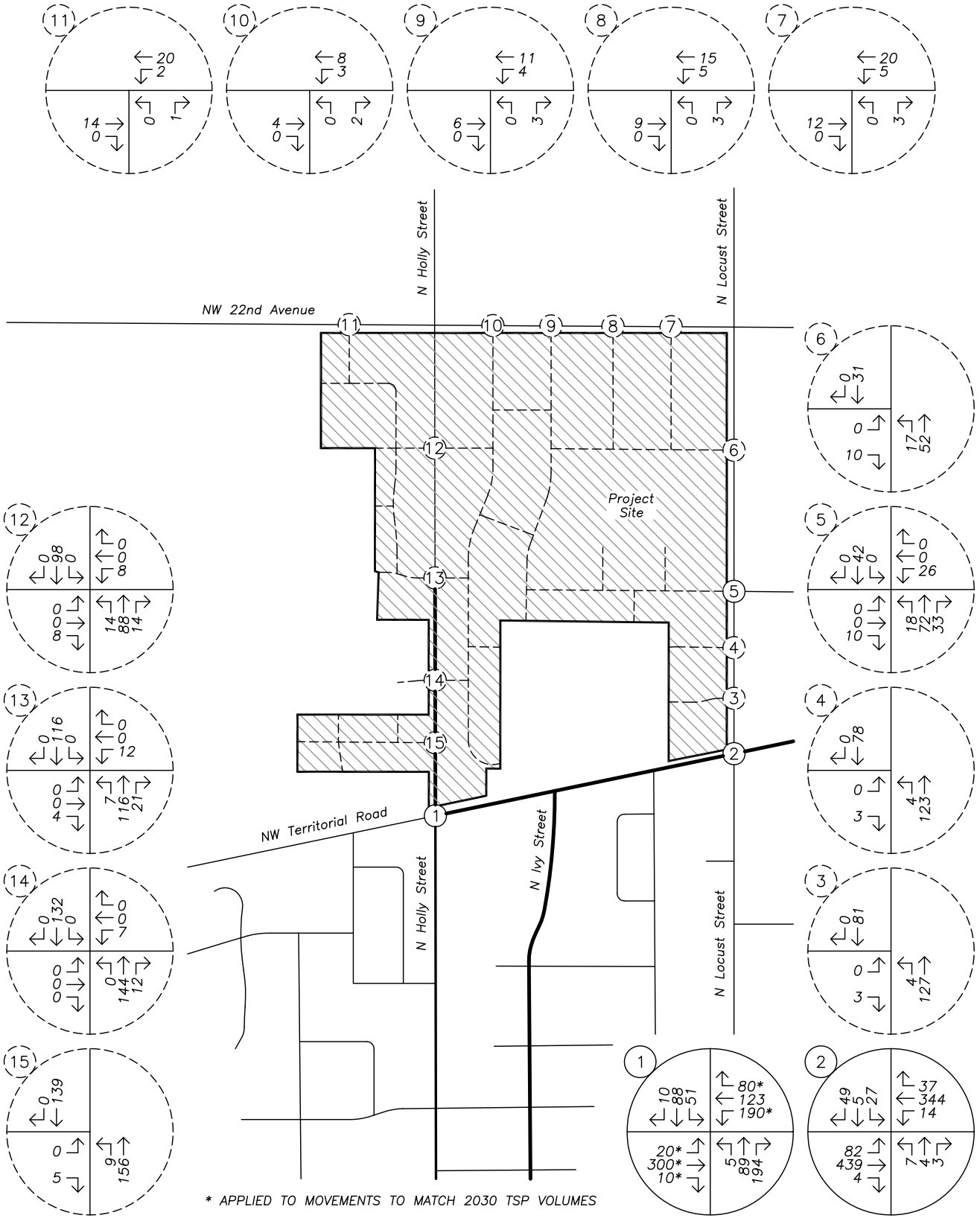
PAGE 19



TRAFFIC VOLUMES
Year 2030 Planning Horizon with Annexation
AM Peak Hour

no scale

FIGURE 9



TRAFFIC VOLUMES
Year 2030 Planning Horizon with Annexation
PM Peak Hour

no scale

FIGURE 10

Safety Analysis

Crash Data Analysis

Using data obtained from the Oregon Department of Transportation's (ODOT) Crash Analysis and Reporting Unit, a review of the most recent available five years of crash history (January 2012 to December 2016) at the study intersections was performed. The crash data was evaluated based on the number of crashes, the type of collisions, the severity of the collisions, and the resulting crash rate for the intersection. Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated using the common assumption that traffic counted during the evening peak period represents 10 percent of the annual average daily traffic (AADT) at the intersection. Crash rates in excess of 1.0 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

N Holly Street at NW Territorial Road

The intersection of N Holly Street at NW Territorial Road had four reported crashes during the analysis period. The crashes consisted of two angle-type collisions, one rear-end collision, and one bicycle related crash. Of the reported crashes, two were classified as "Property Damage Only" (*PDO*), one was classified as "Possible Injury – Complaint of Pain" (*Injury C*), and one was classified as "Non-Incapacitating Injury" (*Injury B*). The crash rate at the intersection was calculated to be 0.37 CMEV.

One of the crashes at the intersection involved a bicyclist. The crash occurred when a north/south traveling bicyclist disregarded an intersection stop sign and collided with a westbound passenger car. The bicyclist sustained injuries consistent with *Injury B* classification.

N Locust Street at NW Territorial Road

The intersection of N Locust Street at NW Territorial Road had five reported crashes during the analysis period. The crashes consisted of three angle-type collisions and two rear-end collisions. Of the reported crashes, two were classified as *PDO*, two were classified as *Injury C*, and one was classified as *Injury B*. The crash rate at the intersection was calculated to be 0.43 CMEV.

N Locust Street at NE 19th Avenue

The intersection of N Locust Street at NE 19th Avenue had no reported crashes during the analysis period.

Based on the most recent five years of available crash data, no significant trends or crash patterns were identified at any of the study intersections that were indicative of safety concerns.

Sight Distance Analysis

Intersection sight distance was measured for the proposed site access intersections along N Holly Street, N Locust Street, and NE/NW 22nd Avenue. Sight distance was evaluated in accordance with standards established in *A Policy on Geometric Design of Highways and Streets*[2]. According to AASHTO, the driver's eye is assumed to be 14.5 feet from the near edge of the nearest travel lane of the intersecting street and at a height of 3.5 feet above the minor-street approach pavement. The vehicle driver's eye-height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement.

Based on posted speed of 25 mph along N Locust Street and 45 mph along N Holly Street, the minimum recommended intersection sight distances for vehicles stopped on the minor-street approaches of these roadways is 280 feet and 500 feet, respectively. Based on an anticipated future statutory residential speed of 25 mph, the minimum recommended intersection sight distance along NE/NW 22nd Avenue is 280 feet.

Site Accesses along N Holly Street

Upon removal or proper maintenance of any obstructing onsite foliage, intersection sight distances along N Holly Street were measured to be adequate to the north and south of each of the four proposed site access locations, with the exception of the northern access (Intersection 12) viewing south. Specifically, sight distance at the northern access was measured to be 474 feet to the south, limited by a crest vertical curve in the roadway.

It should be noted that intersection sight distance is an operational measure, intended to provide sufficient line of sight along the major street so that a driver can enter the roadway without impeding the flow of through traffic. Conversely, stopping sight distance is considered the minimum requirement to ensure safe operation of an intersection. Stopping sight distance is the distance required to allow an oncoming driver to see a hazard in the roadway, react, and then come to a complete stop if necessary to avoid a collision. The calculation of stopping sight distance conservatively assumes a 2.5-second perception-reaction time, a comfortable 11.2 ft/sec^2 rate of deceleration, and account for the less than 2 percent downhill grade on the approach.

The measured 474 feet of sight distance from the northern access is adequate stopping sight distance for traffic traveling up to 52 mph.

Additionally, according to the City of Canby's TSP *Table 7-1: Roadway Classification Changes*, N Holly Street, between NW Territorial Road and NW 22nd Avenue, is planned for a downgrade from its current Arterial classification to a Collector when nearby land use development occurs. It is expected that, to maintain consistency with the posted speeds within the City (as shown in *Figure 3-7 Existing Posted Speed Limits* of the TSP) the downgraded section of N Holly Street will have a revised posted travel speed between 25 mph and 35 mph. Assuming the speed is reposted as 35 mph, the minimum recommended intersection sight distance

[2] American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 6th Edition, 2011.

standard along this roadway would be 390 feet, which is less than the measured 474 feet of existing sight distance.

Site Accesses along N Locust Street

Upon removal or proper maintenance of any obstructing onsite foliage, intersection sight distances along N Locust Street were measured to be in excess of 400 feet to the north and south of each of the four proposed site access locations. Due to the limited variation in the vertical curvature of the roadway, should the location of these proposed accesses change, adequate sight distances will likely be attainable without the need for implementing any offsite mitigation.

Site Accesses along NE/NW 22nd Avenue

Intersection sight distances along NE/NW 22nd Avenue, between N Holly Street and N Locust Street, were measured to be in excess of 400 feet to the east and west of each of the four proposed site access locations. Intersection sight distances for the proposed access located west of N Holly Street were measured to be in excess of 500 feet to the east and west.

Analysis Summary

Based on the sight distance analysis, upon removal or proper maintenance of any obstructing onsite foliage, adequate sight distance can be made available at all proposed site access intersections with the exception of the northern access on N Holly Street viewing south; however, stopping sight distance from the access is adequate for travel speeds up to 52 mph.

Warrant Analysis

Left-turn lane and traffic signal warrants were examined for the study intersections where such treatments would be applicable.

A left-turn refuge lane is primarily a safety consideration for the major-street, removing left-turning vehicles from the through traffic stream. The left-turn lane warrants were examined using methodologies provided within the *National Cooperative Highway Research Program's* (NCHRP) *Report 457*. Turn lane warrants were evaluated based on the number of advancing and opposing vehicles as well as the number of turning vehicles, the travel speed, and the number of through lanes.

Left-turn lane warrants are projected to be met for the eastbound approach at the intersection of NE Territorial Road at N Locust Street by the 2030 planning horizon year during the evening peak hour. No other new turn lanes are necessary or recommended.

Preliminary traffic signal warrants were examined for the unsignalized study intersections along NE/NW Territorial Road to determine whether the installation of a new traffic signal will be warranted at these intersections by the 2030 planning horizon. Due to insufficient main and side-street traffic volumes, traffic signal warrants are not projected to be met at these intersections under any of the analysis scenarios.

Operational Analysis

Intersection Capacity Analysis

A capacity and delay analysis was conducted for each of the study intersections per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual*[3] (HCM). Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

According to the City of Canby's TSP, the following minimum acceptable operation standards apply to intersections under City jurisdiction:

- Signalized and all-way stop-controlled intersections are required to operate at LOS D or better.
- Two-way stop-controlled intersections are required to operate at LOS E or better.

Additionally, the roadways of N Holly Street and N Locust Street (north of NE/NW Territorial Road) as well as NE/NW 22nd Avenue (east of N Locust Street and west of N Holly Street) are under the jurisdiction of Clackamas County. Therefore, intersections along these roadways must operate acceptably per County standards. According to the Clackamas County Comprehensive Plan, *Chapter 5 – Transportation System Plan*, the following operational standards apply to study intersections along these roadways:

- Unsignalized rural intersections (i.e. intersections outside the Portland Metropolitan Urban Growth Boundary) outside of Cities are required to operate at LOS E or better during the morning and evening peak hours.
- Signalized and roundabout rural intersections outside of Cities are required to operate with a v/c ratio of 0.90 or less during the morning and evening peak hours.

The v/c, delay, and LOS results of the capacity analysis are shown in Table 8 for the morning and evening peak hours. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

[3] Transportation Research Board, *Highway Capacity Manual*, 6th Edition, 2016.

Table 8: Intersection Capacity Analysis Summary

	Morning Peak Hour			Evening Peak Hour		
	LOS	**Delay (s)**	**v/c**	**LOS**	**Delay (s)**	**v/c**
1. N Holly Street at NW Territorial Road						
2018 Existing Conditions	A	8	-	A	9	-
2028 Background Conditions	A	9	-	B	12	-
2028 Buildout Conditions	A	10	-	C	24	-
2. N Locust Street at NE Territorial Road						
2018 Existing Conditions	B	11	0.04	B	15	0.07
2028 Background Conditions	B	12	0.06	C	19	0.13
2028 Buildout Conditions	B	13	0.16	C	24	0.26
3. Site Access at N Locust Street						
2028 Buildout Conditions	A	9	0.01	A	9	0.01
4. Site Access at N Locust Street						
2028 Buildout Conditions	A	9	0.01	A	9	0.01
5. N Locust Street at NE 19th Avenue						
2018 Existing Conditions	A	9	0.01	A	9	0.03
2028 Background Conditions	A	9	0.02	A	9	0.04
2028 Buildout Conditions*	A	10	0.02	B	10	0.05
6. Site Access at N Locust Street						
2028 Buildout Conditions	A	9	0.02	A	9	0.01
7. Site Access at NW 22nd Avenue						
2028 Buildout Conditions	A	8	0.01	A	9	0.01
8. Site Access at NW 22nd Avenue						
2028 Buildout Conditions	A	8	0.01	A	9	0.01
9. Site Access at NW 22nd Avenue						
2028 Buildout Conditions	A	8	0.01	A	8	0.01

* Converted from three-legged to four-legged intersection.

Table 8: Intersection Capacity Analysis Summary (Continued)

	Morning Peak Hour			Evening Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
10. Site Access at NW 22nd Avenue						
2028 Buildout Conditions	A	8	0.01	A	8	0.01
11. Site Access at NW 22nd Avenue						
2028 Buildout Conditions	A	9	0.01	A	9	0.01
12. Site Access at N Holly Street						
2028 Buildout Conditions	A	10	0.02	B	10	0.02
13. Site Access at N Holly Street						
2028 Buildout Conditions	A	10	0.03	B	11	0.02
14. Site Access at N Holly Street						
2028 Buildout Conditions	A	10	0.02	B	11	0.01
15. Site Access at N Holly Street						
2028 Buildout Conditions	A	9	0.01	A	9	0.01

Based on the results of the operational analysis, all study intersections are currently operating acceptably per their respective jurisdictional standards and are projected to continue operating acceptably through the 2030 planning horizon with the proposed annexation. No operational mitigation is necessary or recommended.

Queuing Analysis

At the direction of the City of Canby's consulting engineer, a queuing analysis was conducted for the study intersections. The queue lengths for the intersections were projected based on the results of a Synchro/SimTraffic simulation, with the reported values based on the 95th-percentile queue lengths. This means that 95 percent of the time the queue lengths will be less than or equal to the reported values.

The projected 95th-percentile queue lengths reported in the simulation are presented in Table 9 for the morning and evening peak hours. Reported queue lengths were rounded up to the nearest five feet. Detailed queuing analysis worksheets are included in the technical appendix to this report.

Table 9: Queuing Analysis Summary

	Existing Conditions		2030 Planning Horizon		2030 Planning Horizon plus Annexation	
	AM	**PM**	**AM**	**PM**	**AM**	**PM**
1. N Holly St at NW Territorial Rd						
EB Approach	55	65	60	75	60	155
WB Approach	60	65	70	85	75	125
NB Approach	50	60	55	70	60	100
SB Approach	55	45	55	45	50	60
2. N Locust St at NE Territorial Rd						
NB Approach	35	30	40	30	35	30
SB Approach	40	40	45	40	50	50
3. Site Access at N Locust St						
EB Approach	-	-	-	-	25	25
4. Site Access at N Locust St						
EB Approach	-	-	-	-	25	20
5. N Locust St at NE 19th Ave						
EB Approach	-	-	-	-	40	35
WB Approach	35	40	40	45	35	45
6. Site Access at N Locust St						
EB Approach	-	-	-	-	40	35
7. Site Access at NW 22nd Ave						
NB Approach	-	-	-	-	20	25
8. Site Access at NW 22nd Ave						
NB Approach	-	-	-	-	25	20
9. Site Access at NW 22nd Ave						
NB Approach	-	-	-	-	25	25
10. Site Access at NW 22nd Ave						
NB Approach	-	-	-	-	25	20

Table 9: Queuing Analysis Summary (Continued)

	Existing Conditions		2030 Planning Horizon		2030 Planning Horizon plus Annexation	
	AM	**PM**	**AM**	**PM**	**AM**	**PM**
11. Site Access at N Holly St						
NB Approach	-	-	-	-	20	20
12. Site Access at N Holly St						
EB Approach	-	-	-	-	40	35
WB Approach	-	-	-	-	40	35
13. Site Access at N Holly St						
EB Approach	-	-	-	-	30	25
WB Approach	-	-	-	-	40	40
14. Site Access at N Holly St						
EB Approach	-	-	-	-	0	0
WB Approach	-	-	-	-	35	30
15. Site Access at N Holly St						
EB Approach	-	-	-	-	30	25

Based on the queuing analysis, none of the reported 95th-percentile queues are projected to extend back to or obstruct turning movements at any adjacent public intersection. In addition, the largest projected queue at any of the proposed site accesses was approximately 40 feet. Assuming the length of a standard queued vehicle is approximately 25 feet, the longest reported queue at any of the site accesses are not expected to exceed more than two vehicles. Accordingly, no queuing related mitigation is necessary or recommended.

Transportation Planning Rule Analysis

A Transportation Planning Rule (TPR) analysis is required for the proposed DCP due to the annexation of the subject properties into the City of Canby. The TPR is intended to ensure that the transportation system is capable of supporting possible increases in traffic intensity that could result from changes to adopted plans and land-use regulations. The applicable portions of the TPR are quoted in italics below, with responses following.

660-012-0060

(1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

The annexation and zone change of properties within the proposed Holly DCP will not necessitate changes to the functional classification of existing or planned transportation facilities. Accordingly, this section is not triggered.

(b) Change standards implementing a functional classification system; or

The annexation and zone change of properties within the proposed Holly DCP will not change any standards implementing the functional classification system. Accordingly, this section is also not triggered.

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

The annexation and zone change of properties within the proposed Holly DCP is not projected to degrade the performance of any study intersection below acceptable levels of operation per City of Canby and Clackamas County standards. Additionally, the proposed annexation of the DCP area and subsequent zone change have already been accounted for within the City's TSP; therefore, expected vehicle types and levels of

travel/access are consistent with the functional classification of nearby existing/planned transportation facilities.

In addition to section 1 described above, the TPR also includes the following language:

> *(9) Notwithstanding section (1) of this rule, a local government may find that an amendment to a zoning map does not significantly affect an existing or planned transportation facility if all of the following requirements are met.*
>
> *(a) The proposed zoning is consistent with the existing comprehensive plan map designation and the amendment does not change the comprehensive plan map;*
>
> *(b) The local government has an acknowledged TSP and the proposed zoning is consistent with the TSP; and*
>
> *(c) The area subject to the zoning map amendment was not exempted from this rule at the time of an urban growth boundary amendment as permitted in OAR 660-024-0020(1)(d), or the area was exempted from this rule but the local government has a subsequently acknowledged TSP amendment that accounted for urbanization of the area.*

In this instance, the proposed zoning is consistent with the Comprehensive Plan Map designation, the City of Canby has an acknowledged TSP that accounts for future development under the proposed zoning, and the area was not exempted from the rule at the time of the urban growth boundary amendment. Accordingly, the City may find that any proposed annexation and zone change of properties within the Holly DCP is consistent with the City's adopted plans and does not significantly affect any existing or planned transportation facility.

Based on the above TPR analysis, the full buildout of the proposed Holly DCP will not degrade the performance of any existing or planned transportation facility below acceptable City or County standards. In addition, the proposal is consistent with the City's TSP and Comprehensive Plan. Accordingly, the TPR is satisfied.

Conclusions

No significant trends or crash patterns were identified at any of the study intersections that were indicative of safety concerns.

Sight distance to the south for the northern access onto N Holly Street is not projected to meet intersection sight distance standards based on the existing 45 mph speed limit; however, stopping sight distance for the intersection will be able to safely accommodate vehicles traveling up to 52 mph.

After removal or proper maintenance of any obstructing onsite foliage, adequate sight distance can be made available at all other proposed site access intersections. No sight distance mitigation is necessary or recommended.

Left-turn lane warrants are projected to be met for the eastbound approach at the intersection of NE Territorial Road at N Locust Street by the 2030 planning horizon year during the evening peak hour. No other new turn lanes are necessary or recommended.

Due to insufficient main and side-street traffic volumes, traffic signal warrants are not projected to be met at the study intersections along NE/NW Territorial Road under any of the analysis scenarios.

All study intersections are currently operating acceptably per their respective jurisdictional standards and are projected to continue operating acceptably through the 2030 planning horizon with the proposed DCP.

Based on a queuing analysis, 95th-percentile queues are not projected to extend back to or obstruct turning movements at any adjacent public intersection. Additionally, queues at proposed access intersections are not expected to exceed more than two vehicles.

The proposed DCP is not projected to degrade the performance of any existing or planned transportation facility below acceptable City of Canby or Clackamas County standards. In addition, the proposal is consistent with the City's Transportation System Plan and Comprehensive Plan. Accordingly, the Transportation Planning Rule is satisfied.

Appendix

LOT LINE PLAN

DEVELOPMENT CONCEPT PLAN
FOR SW ¼, T3S. R1E. W.M.
TAX LOTS 400 AND 401, OF
TAX MAP 3-1E-28C

STAFFORD
DEVELOPMENT COMPANY, LLC
485 SOUTH STATE STREET
LAKE OSWEGO, OREGON 97034

HOLLY DCP
LOT LINE PLAN

34 of 161

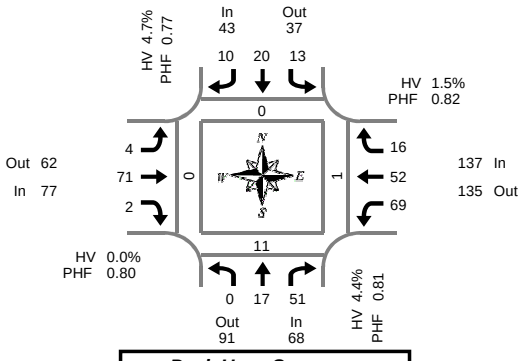
NO	DATE	REVISIONS DESCRIPTION

PLANNING & LAND DESIGN
1862 NE ESTATE DRIVE
HILLSBORO, OREGON 97124
RYAN O'BRIEN
(503)780-4061

SHEET 1 OF 1

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:20 AM to 8:20 AM

N Holly St & Territorial Rd

Thursday, August 09, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	0	3	0	0	3	0	0	0	5	0	0	8	5	0	0	24	0	0	0	0
7:05 AM	2	2	4	0	0	0	0	0	1	4	0	0	4	7	3	0	27	0	3	0	0
7:10 AM	0	1	0	0	0	3	0	0	1	4	0	0	4	7	1	0	21	0	1	0	0
7:15 AM	0	0	6	0	0	0	0	0	1	5	0	0	3	5	1	0	21	0	0	0	0
7:20 AM	0	0	3	0	1	0	0	0	1	9	0	0	6	8	0	0	28	0	3	0	0
7:25 AM	0	2	5	0	2	4	1	0	0	7	0	0	6	5	2	0	34	0	4	0	0
7:30 AM	0	2	4	2	1	2	1	0	0	1	1	0	5	4	1	0	22	0	0	0	0
7:35 AM	0	1	6	0	0	2	1	0	0	7	0	0	12	7	0	0	36	0	1	1	0
7:40 AM	0	1	7	0	0	0	1	0	0	6	0	0	0	9	0	0	24	0	0	0	0
7:45 AM	0	1	2	0	0	3	0	0	0	9	0	0	6	3	1	0	25	0	0	0	0
7:50 AM	0	3	5	0	2	0	2	0	1	8	0	0	2	4	4	0	31	0	1	0	0
7:55 AM	0	2	6	0	1	1	0	0	0	5	0	0	5	2	3	0	25	0	0	0	0
8:00 AM	0	1	3	0	2	2	1	0	0	7	0	0	9	1	4	0	30	0	1	0	0
8:05 AM	0	1	4	0	1	1	2	0	0	4	0	0	2	3	0	1	18	0	1	0	0
8:10 AM	0	1	4	0	2	2	1	3	2	4	0	1	9	2	0	0	27	0	0	0	0
8:15 AM	0	2	2	0	1	3	0	0	0	4	1	0	7	4	1	0	25	0	0	0	0
8:20 AM	0	1	3	0	0	2	0	0	1	7	0	0	6	8	0	0	28	0	1	0	0
8:25 AM	0	2	2	0	1	1	0	0	2	7	0	0	4	1	1	0	21	0	0	0	0
8:30 AM	0	0	5	0	2	2	1	0	0	0	0	0	4	11	1	0	26	0	1	0	0
8:35 AM	0	1	7	0	4	1	0	0	0	3	0	0	6	3	2	1	27	0	1	0	0
8:40 AM	0	2	3	0	3	2	1	0	0	7	0	0	5	5	2	0	30	0	0	0	0
8:45 AM	0	0	6	0	1	1	2	0	2	4	0	0	6	7	2	0	31	0	0	0	0
8:50 AM	0	4	5	0	0	1	0	0	0	3	0	0	8	2	0	0	23	0	0	0	0
8:55 AM	0	3	5	0	3	2	0	0	1	5	0	0	7	5	1	0	32	0	0	0	0
Total Survey	2	33	100	2	27	38	14	3	13	125	2	1	134	118	30	2	636	0	18	1	0

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	2	3	7	0	0	6	0	0	2	13	0	0	16	19	4	0	72	0	4	0	0
7:15 AM	0	2	14	0	3	4	1	0	2	21	0	0	15	18	3	0	83	0	7	0	0
7:30 AM	0	4	17	2	1	4	3	0	0	14	1	0	17	20	1	0	82	0	1	1	0
7:45 AM	0	6	13	0	3	4	2	0	1	22	0	0	13	9	8	0	81	0	1	0	0
8:00 AM	0	3	11	0	5	5	4	3	2	15	0	1	20	6	4	1	75	0	2	0	0
8:15 AM	0	5	7	0	2	6	0	0	3	18	1	0	17	13	2	0	74	0	1	0	0
8:30 AM	0	3	15	0	9	5	2	0	0	10	0	0	15	19	5	1	83	0	2	0	0
8:45 AM	0	7	16	0	4	4	2	0	3	12	0	0	21	14	3	0	86	0	0	0	0
Total Survey	2	33	100	2	27	38	14	3	13	125	2	1	134	118	30	2	636	0	18	1	0

Peak Hour Summary
7:20 AM to 8:20 AM

By Approach	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	68	91	159	2	43	37	80	3	77	62	139	1	137	135	272	1	325	0	11	1	0
%HV	4.4%				4.7%				0.0%				1.5%				2.2%				
PHF	0.81				0.77				0.80				0.82				0.88				

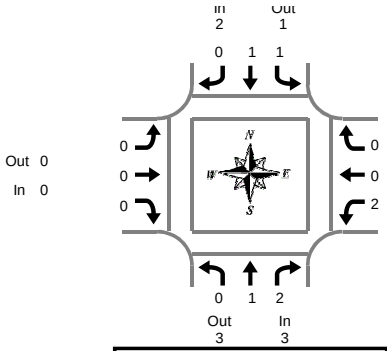
By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	17	51	68	13	20	10	43	4	71	2	77	69	52	16	137	325
%HV	0.0%	5.9%	3.9%	4.4%	7.7%	5.0%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	1.5%	2.2%
PHF	0.00	0.71	0.75	0.81	0.65	0.63	0.63	0.77	0.50	0.77	0.50	0.80	0.75	0.65	0.36	0.82	0.88

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	2	15	51	2	7	18	6	0	5	70	1	0	61	66	16	0	318	0	13	1	0
7:15 AM	0	15	55	2	12	17	10	3	5	72	1	1	65	53	16	1	321	0	11	1	0
7:30 AM	0	18	48	2	11	19	9	3	6	69	2	1	67	48	15	1	312	0	5	1	0
7:45 AM	0	17	46	0	19	20	8	3	6	65	1	1	65	47	19	2	313	0	6	0	0
8:00 AM	0	18	49	0	20	20	8	3	8	55	1	1	73	52	14	2	318	0	5	0	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
7:20 AM to 8:20 AM

N Holly St & Territorial Rd

Thursday, August 09, 2018
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
7:30 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
7:40 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:50 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	2	5	7	1	1	0	2	0	0	0	0	2	2	0	4	13

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
7:30 AM	0	0	2	2	0	1	0	1	0	0	0	0	1	0	0	1	4
7:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
8:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
8:45 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Survey	0	2	5	7	1	1	0	2	0	0	0	0	2	2	0	4	13

Heavy Vehicle Peak Hour Summary
7:20 AM to 8:20 AM

By Approach	Northbound N Holly St			Southbound N Holly St			Eastbound Territorial Rd			Westbound Territorial Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	3	3	6	2	1	3	0	0	0	2	3	5	7
PHF	0.38			0.50			0.00			0.25			0.44

By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	1	2	3	1	1	0	2	0	0	0	0	2	0	0	2	7
PHF	0.00	0.25	0.25	0.38	0.25	0.25	0.00	0.50	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.44

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	3	4	0	1	0	1	0	0	0	0	2	0	0	2	7
7:15 AM	0	1	3	4	0	1	0	1	0	0	0	0	2	0	0	2	7
7:30 AM	0	1	2	3	1	1	0	2	0	0	0	0	1	1	0	2	7
7:45 AM	0	2	0	2	1	0	0	1	0	0	0	0	0	2	0	2	5
8:00 AM	0	1	2	3	1	0	0	1	0	0	0	0	0	2	0	2	6

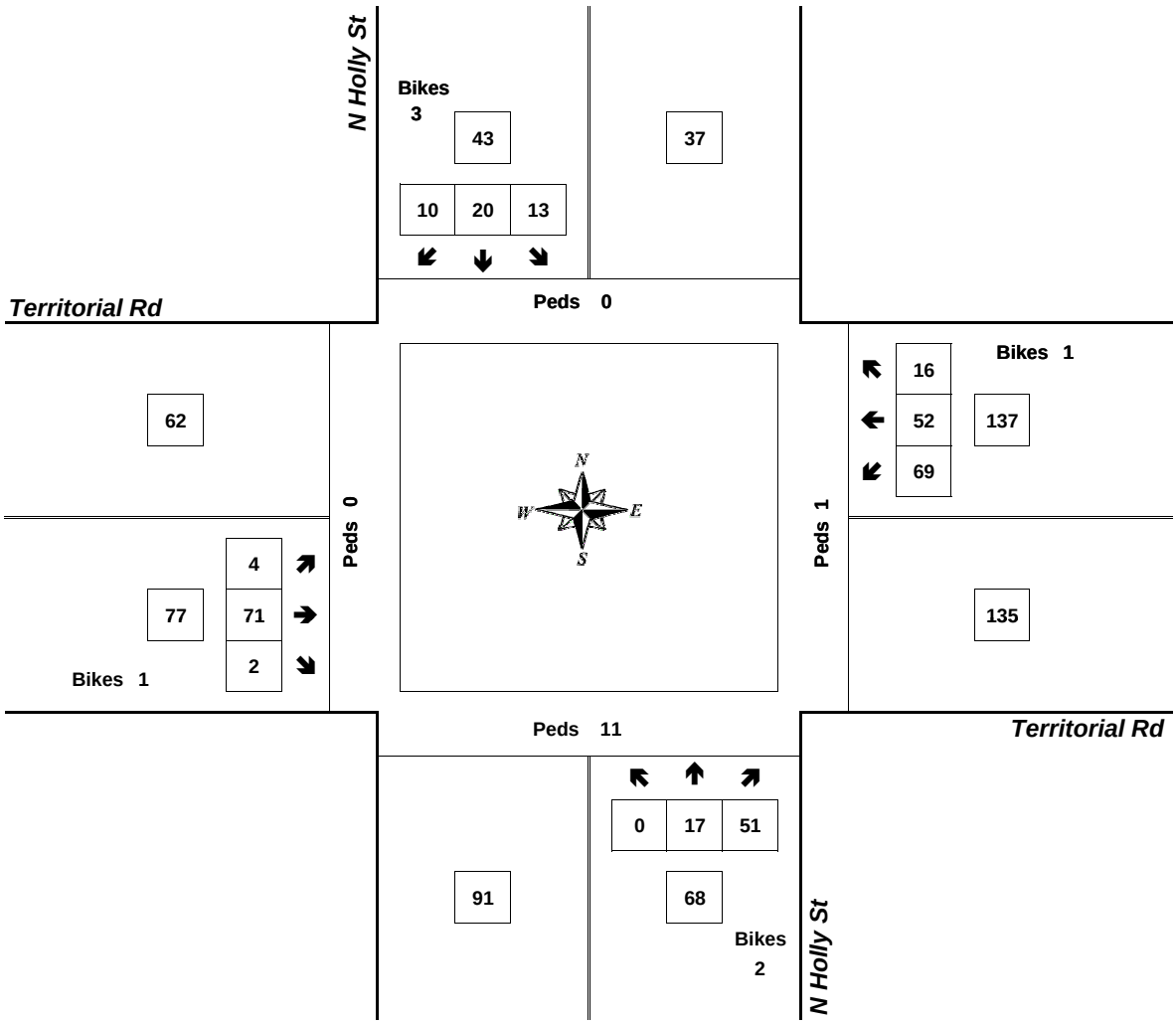
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Holly St & Territorial Rd

7:20 AM to 8:20 AM
Thursday, August 09, 2018

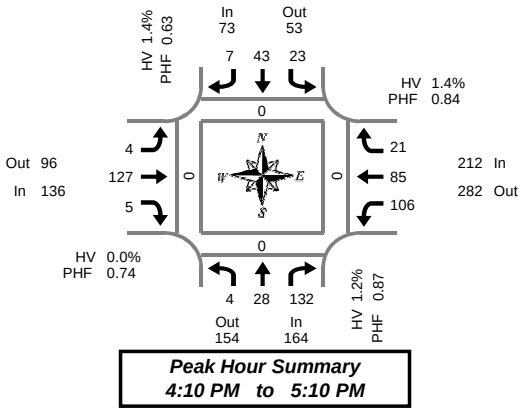


Approach	PHF	HV%	Volume
EB	0.80	0.0%	77
WB	0.82	1.5%	137
NB	0.81	4.4%	68
SB	0.77	4.7%	43
Intersection	0.88	2.2%	325

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Holly St & Territorial Rd

Thursday, August 09, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	0	11	0	5	0	0	1	0	8	0	0	17	7	0	0	48	0	0	0	0
4:05 PM	0	0	9	0	1	2	0	0	3	8	0	1	7	6	1	0	37	0	0	0	0
4:10 PM	0	5	11	0	1	1	0	0	0	6	0	0	15	13	1	0	53	0	0	0	0
4:15 PM	0	1	14	0	0	3	2	0	2	8	0	0	10	5	1	0	46	0	0	0	0
4:20 PM	0	2	7	0	6	1	1	0	0	13	0	0	4	11	3	0	48	0	0	0	0
4:25 PM	0	0	10	0	1	3	1	2	0	8	1	0	11	1	1	0	37	0	0	0	0
4:30 PM	0	2	8	0	0	2	0	1	0	13	0	0	13	10	4	0	52	0	0	0	0
4:35 PM	1	6	12	0	4	12	2	0	0	12	0	0	5	4	0	0	58	0	0	0	0
4:40 PM	0	1	14	0	1	2	1	0	0	15	1	0	7	6	1	0	49	0	0	0	0
4:45 PM	1	2	10	0	3	4	0	0	2	16	0	0	9	7	1	0	55	0	0	0	0
4:50 PM	0	0	16	0	1	2	0	0	0	7	2	0	11	3	0	0	42	0	0	0	0
4:55 PM	1	1	5	0	1	4	0	1	0	9	0	0	8	7	2	1	38	0	0	0	0
5:00 PM	1	3	12	0	2	4	0	1	0	10	1	0	6	10	4	0	53	0	0	0	0
5:05 PM	0	5	13	0	3	5	0	0	0	10	0	0	7	8	3	0	54	0	0	0	0
5:10 PM	0	1	14	0	1	0	0	0	0	13	1	0	7	6	4	0	47	0	0	0	0
5:15 PM	0	2	3	0	2	2	0	0	0	10	0	0	9	10	1	0	39	0	0	1	0
5:20 PM	0	2	11	0	5	3	1	1	0	6	0	0	11	8	1	0	48	0	0	0	0
5:25 PM	0	1	11	0	1	0	0	0	1	15	0	0	8	7	2	0	46	0	0	0	0
5:30 PM	0	2	10	0	2	4	0	0	0	10	0	0	8	9	2	0	47	0	0	0	0
5:35 PM	0	2	6	0	4	4	1	0	0	9	1	0	6	10	3	0	46	0	0	0	0
5:40 PM	0	2	8	0	3	4	0	0	3	3	0	0	9	1	1	1	34	0	0	0	0
5:45 PM	0	4	6	0	4	4	0	1	0	5	1	0	7	8	3	0	42	0	2	0	0
5:50 PM	2	4	6	0	2	0	0	0	2	6	0	0	4	5	1	0	32	0	2	0	0
5:55 PM	0	5	6	0	3	6	1	0	0	8	0	0	3	3	2	0	37	0	0	0	0
Total Survey	6	53	233	0	56	72	10	8	13	228	8	1	202	165	42	2	1,088	0	4	1	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	5	31	0	7	3	0	1	3	22	0	1	39	26	2	0	138	0	0	0	0
4:15 PM	0	3	31	0	7	7	4	2	2	29	1	0	25	17	5	0	131	0	0	0	0
4:30 PM	1	9	34	0	5	16	3	1	0	40	1	0	25	20	5	0	159	0	0	0	0
4:45 PM	2	3	31	0	5	10	0	1	2	32	2	0	28	17	3	1	135	0	0	0	0
5:00 PM	1	9	39	0	6	9	0	1	0	33	2	0	20	24	11	0	154	0	0	0	0
5:15 PM	0	5	25	0	8	5	1	1	1	31	0	0	28	25	4	0	133	0	0	1	0
5:30 PM	0	6	24	0	9	12	1	0	3	22	1	0	23	20	6	1	127	0	0	0	0
5:45 PM	2	13	18	0	9	10	1	1	2	19	1	0	14	16	6	0	111	0	4	0	0
Total Survey	6	53	233	0	56	72	10	8	13	228	8	1	202	165	42	2	1,088	0	4	1	0

Peak Hour Summary
4:10 PM to 5:10 PM

By Approach	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	164	154	318	0	73	53	126	5	136	96	232	0	212	282	494	1	585	0	0	0	0
%HV	1.2%				1.4%				0.0%				1.4%				1.0%				
PHF	0.87				0.63				0.74				0.84				0.90				

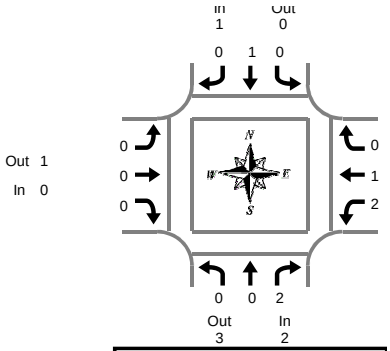
By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	4	28	132	164	23	43	7	73	4	127	5	136	106	85	21	212	585
%HV	0.0%	0.0%	1.5%	1.2%	0.0%	2.3%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	1.9%	1.2%	0.0%	1.4%	1.0%
PHF	0.50	0.78	0.83	0.87	0.72	0.60	0.44	0.63	0.50	0.74	0.42	0.74	0.91	0.73	0.58	0.84	0.90

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	3	20	127	0	24	36	7	5	7	123	4	1	117	80	15	1	563	0	0	0	0
4:15 PM	4	24	135	0	23	42	7	5	4	134	6	0	98	78	24	1	579	0	0	0	0
4:30 PM	4	26	129	0	24	40	4	4	3	136	5	0	101	86	23	1	581	0	0	1	0
4:45 PM	3	23	119	0	28	36	2	3	6	118	5	0	99	86	24	2	549	0	0	1	0
5:00 PM	3	33	106	0	32	36	3	3	6	105	4	0	85	85	27	1	525	0	4	1	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



N Holly St & Territorial Rd

Thursday, August 09, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:10 PM to 5:10 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:40 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	1	2	3	1	2	0	3	1	0	0	1	3	1	0	4	11

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	2	1	0	3	4
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Survey	0	1	2	3	1	2	0	3	1	0	0	1	3	1	0	4	11

Heavy Vehicle Peak Hour Summary
4:10 PM to 5:10 PM

By Approach	Northbound N Holly St			Southbound N Holly St			Eastbound Territorial Rd			Westbound Territorial Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	2	3	5	1	0	1	0	1	1	3	2	5	6
PHF	0.50			0.25			0.00			0.38			0.50

By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	0	2	2	0	1	0	1	0	0	0	0	2	1	0	3	6
PHF	0.00	0.00	0.50	0.50	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.50	0.25	0.00	0.38	0.50

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

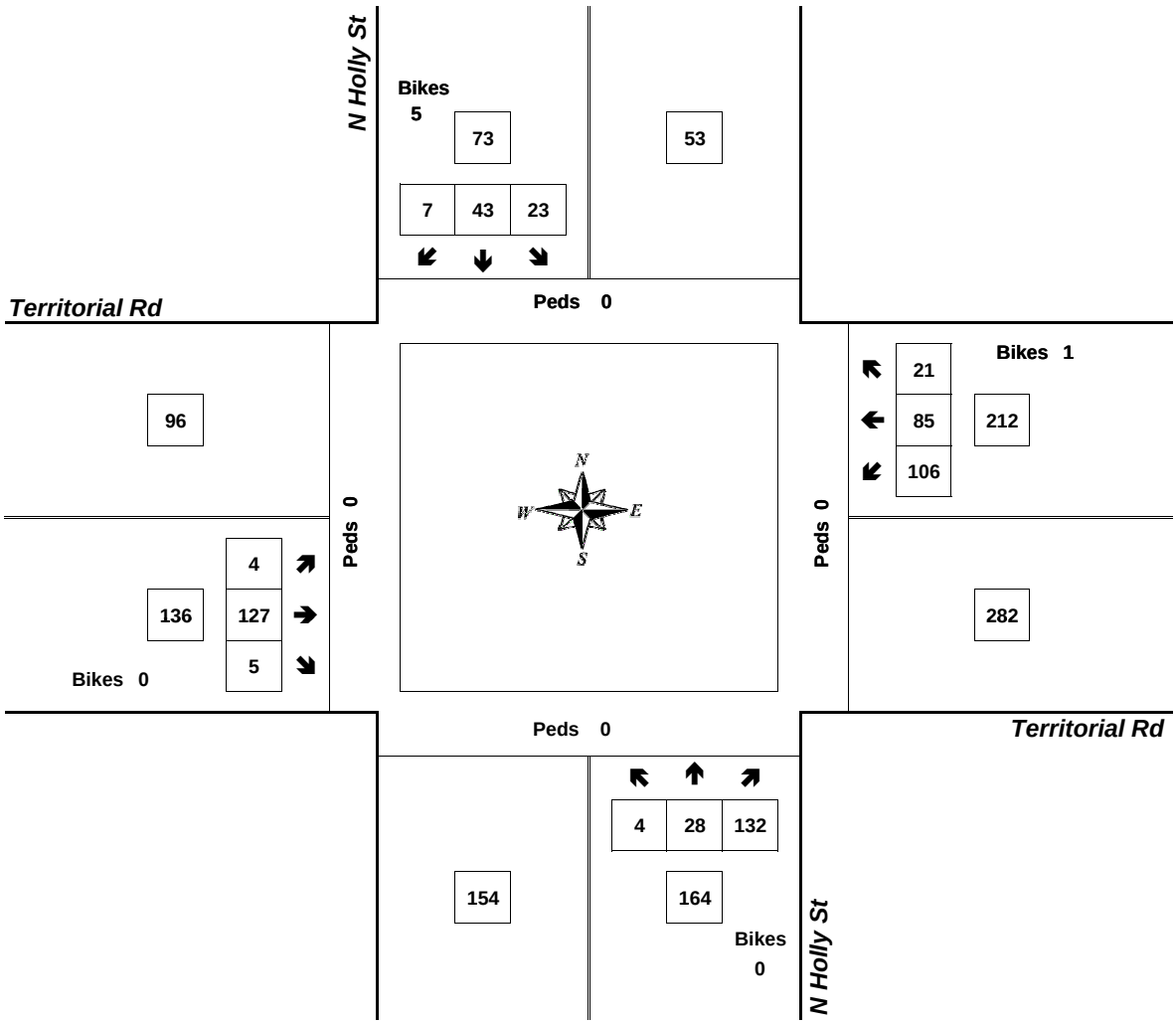
Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	2	2	0	1	0	1	0	0	0	0	3	1	0	4	7
4:15 PM	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1	3
4:30 PM	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
4:45 PM	0	1	1	2	0	1	0	1	1	0	0	1	0	0	0	0	4
5:00 PM	0	1	0	1	1	1	0	2	1	0	0	1	0	0	0	0	4

Peak Hour Summary

Clay Carney
(503) 833-2740

N Holly St & Territorial Rd

4:10 PM to 5:10 PM
Thursday, August 09, 2018

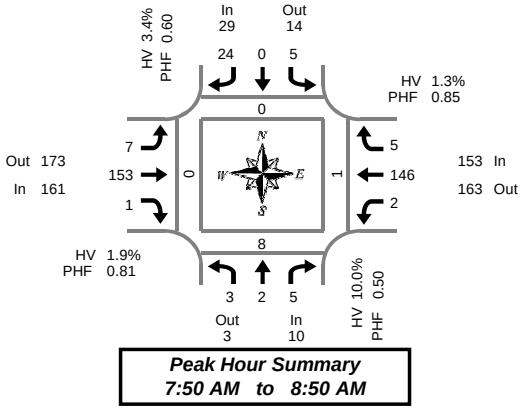


Approach	PHF	HV%	Volume
EB	0.74	0.0%	136
WB	0.84	1.4%	212
NB	0.87	1.2%	164
SB	0.63	1.4%	73
Intersection	0.90	1.0%	585

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:50 AM to 8:50 AM

N Locust St & Territorial Rd

Thursday, August 09, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	0	1	0	1	0	1	0	0	6	0	0	0	13	0	0	22	0	0	0	0
7:05 AM	0	0	1	0	0	0	2	0	0	10	0	0	1	18	0	0	32	0	1	0	0
7:10 AM	0	0	0	0	1	0	1	0	0	6	0	0	0	10	0	0	18	0	0	0	2
7:15 AM	0	0	1	0	0	0	0	0	1	8	0	0	0	8	0	0	18	0	0	0	0
7:20 AM	1	0	0	0	0	1	1	0	1	13	0	0	0	11	0	0	28	0	0	0	0
7:25 AM	1	0	0	0	0	0	2	0	2	16	0	0	0	12	0	0	33	0	2	0	0
7:30 AM	0	0	1	0	1	0	3	0	0	12	0	2	0	10	1	0	28	0	3	0	0
7:35 AM	0	0	0	0	0	1	4	0	0	14	0	0	1	15	0	0	35	0	0	0	0
7:40 AM	0	0	0	0	1	0	2	0	0	14	0	0	0	9	0	0	26	0	0	0	0
7:45 AM	0	0	0	0	0	1	3	0	0	11	0	0	0	9	1	0	25	0	1	0	0
7:50 AM	0	0	0	0	0	0	0	0	1	20	0	0	0	8	1	0	30	0	0	0	0
7:55 AM	1	0	1	0	2	0	1	0	1	13	0	0	0	10	0	0	29	0	1	1	0
8:00 AM	0	0	0	0	1	0	1	0	1	14	0	0	1	16	0	0	34	0	0	0	0
8:05 AM	0	0	0	0	0	0	1	0	3	5	0	0	0	7	2	1	18	0	0	0	0
8:10 AM	0	0	1	0	0	0	3	0	0	7	0	3	0	16	0	0	27	0	1	0	0
8:15 AM	0	1	0	0	0	0	4	0	0	17	0	2	0	14	0	1	36	0	0	0	0
8:20 AM	0	0	0	0	0	0	2	0	1	9	0	0	1	12	0	0	25	0	0	0	0
8:25 AM	0	0	2	1	0	0	1	0	0	12	0	0	0	7	1	1	23	0	2	0	0
8:30 AM	0	0	1	0	0	0	1	0	0	13	0	0	0	19	0	0	34	0	1	0	0
8:35 AM	2	0	0	0	0	0	2	0	0	12	0	0	0	14	1	1	31	0	2	0	0
8:40 AM	0	1	0	0	0	0	1	0	0	12	1	0	0	11	0	0	26	0	1	0	0
8:45 AM	0	0	0	0	2	0	7	0	0	19	0	0	0	12	0	0	40	0	0	0	0
8:50 AM	0	0	1	0	1	0	3	0	0	9	0	0	0	12	1	0	27	0	0	0	0
8:55 AM	1	0	0	0	0	1	1	0	3	11	0	0	0	11	3	0	31	0	0	1	0
Total Survey	6	2	10	1	10	4	47	0	14	283	1	7	4	284	11	4	676	0	15	2	2

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	0	2	0	2	0	4	0	0	22	0	0	1	41	0	0	72	0	1	0	2
7:15 AM	2	0	1	0	0	1	3	0	4	37	0	0	0	31	0	0	79	0	2	0	0
7:30 AM	0	0	1	0	2	1	9	0	0	40	0	2	1	34	1	0	89	0	3	0	0
7:45 AM	1	0	1	0	2	1	4	0	2	44	0	0	0	27	2	0	84	0	2	1	0
8:00 AM	0	0	1	0	1	0	5	0	4	26	0	3	1	39	2	1	79	0	1	0	0
8:15 AM	0	1	2	1	0	0	7	0	1	38	0	2	1	33	1	2	84	0	2	0	0
8:30 AM	2	1	1	0	0	0	4	0	0	37	1	0	0	44	1	1	91	0	4	0	0
8:45 AM	1	0	1	0	3	1	11	0	3	39	0	0	0	35	4	0	98	0	0	1	0
Total Survey	6	2	10	1	10	4	47	0	14	283	1	7	4	284	11	4	676	0	15	2	2

Peak Hour Summary
7:50 AM to 8:50 AM

By Approach	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	10	3	13	1	29	14	43	0	161	173	334	5	153	163	316	4	353	0	8	1	0
%HV	10.0%				3.4%				1.9%				1.3%				2.0%				
PHF	0.50				0.60				0.81				0.85				0.91				

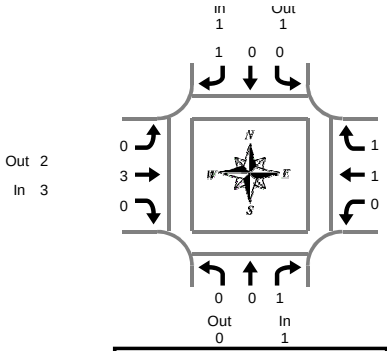
By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	3	2	5	10	5	0	24	29	7	153	1	161	2	146	5	153	353
%HV	0.0%	0.0%	20.0%	10.0%	0.0%	0.0%	4.2%	3.4%	0.0%	2.0%	0.0%	1.9%	0.0%	0.7%	20.0%	1.3%	2.0%
PHF	0.38	0.50	0.42	0.50	0.42	0.00	0.60	0.60	0.35	0.81	0.25	0.81	0.50	0.83	0.63	0.85	0.91

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	3	0	5	0	6	3	20	0	6	143	0	2	2	133	3	0	324	0	8	1	2
7:15 AM	3	0	4	0	5	3	21	0	10	147	0	5	2	131	5	1	331	0	8	1	0
7:30 AM	1	1	5	1	5	2	25	0	7	148	0	7	3	133	6	3	336	0	8	1	0
7:45 AM	3	2	5	1	3	1	20	0	7	145	1	5	2	143	6	4	338	0	9	1	0
8:00 AM	3	2	5	1	4	1	27	0	8	140	1	5	2	151	8	4	352	0	7	1	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Locust St & Territorial Rd

Thursday, August 09, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:50 AM to 8:50 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 AM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
8:50 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	1	1	0	0	1	1	0	7	0	7	0	2	1	3	12

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	1	0	0	1	1	0	2	0	2	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Survey	0	0	1	1	0	0	1	1	0	7	0	7	0	2	1	3	12

Heavy Vehicle Peak Hour Summary
7:50 AM to 8:50 AM

By Approach	Northbound N Locust St			Southbound N Locust St			Eastbound Territorial Rd			Westbound Territorial Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	1	0	1	1	1	2	3	2	5	2	4	6	7
PHF	0.25			0.25			0.38			0.25			0.44

By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	0	1	1	0	0	1	1	0	3	0	3	0	1	1	2	7
PHF	0.00	0.00	0.25	0.25	0.00	0.00	0.25	0.25	0.00	0.38	0.00	0.38	0.00	0.25	0.25	0.25	0.44

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

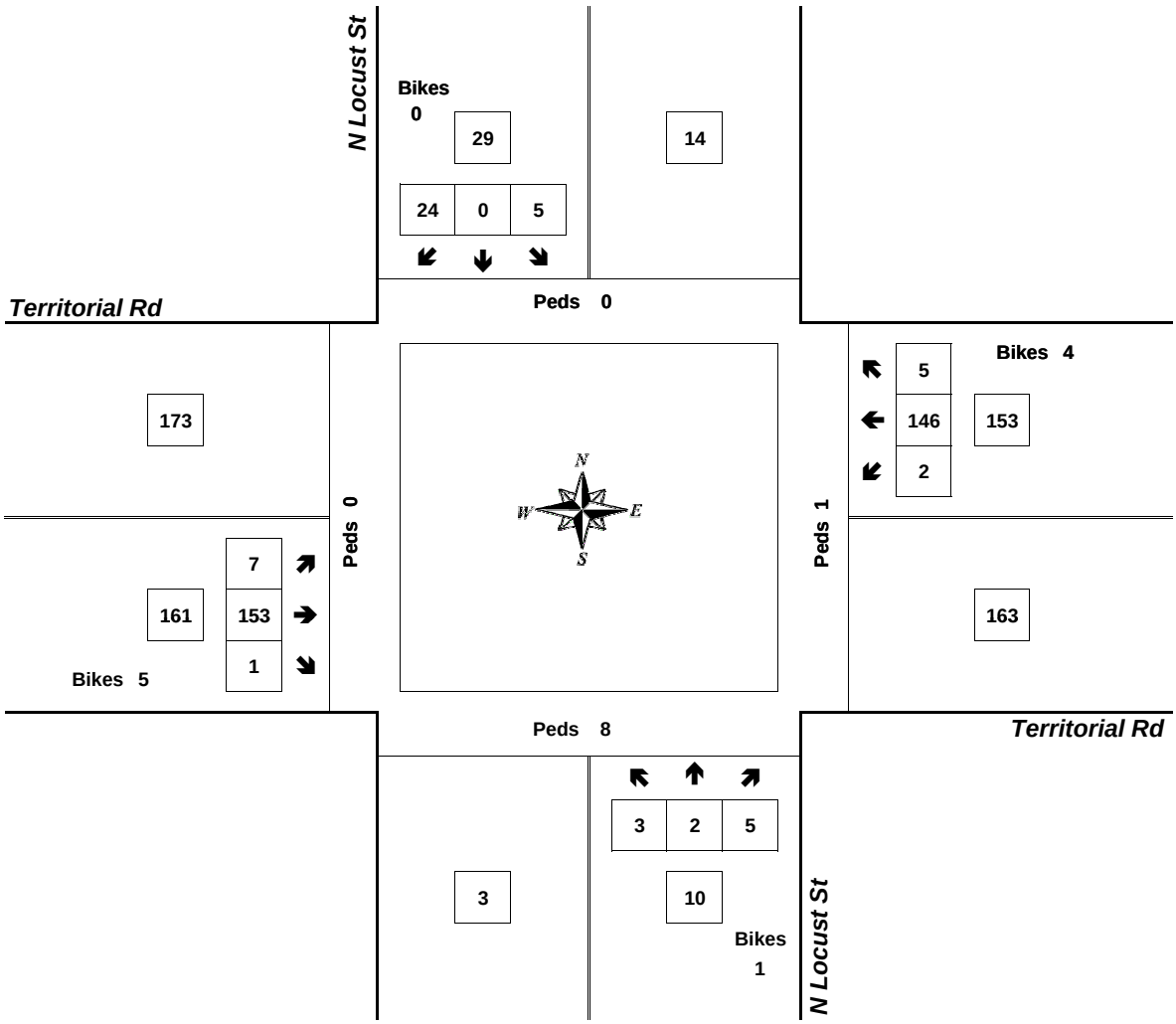
Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	1	0	1	4
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	1	0	1	4
7:30 AM	0	0	1	1	0	0	1	1	0	4	0	4	0	0	0	0	6
7:45 AM	0	0	1	1	0	0	1	1	0	3	0	3	0	1	1	2	7
8:00 AM	0	0	1	1	0	0	1	1	0	4	0	4	0	1	1	2	8

Peak Hour Summary

Clay Carney
(503) 833-2740

N Locust St & Territorial Rd

7:50 AM to 8:50 AM
Thursday, August 09, 2018

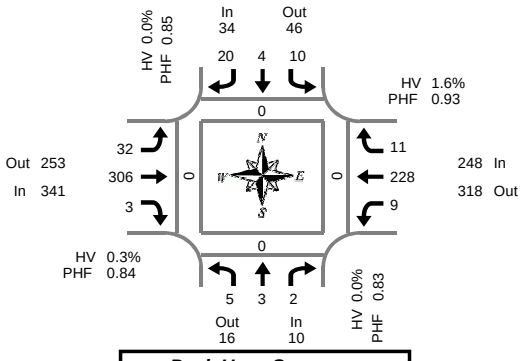


Approach	PHF	HV%	Volume
EB	0.81	1.9%	161
WB	0.85	1.3%	153
NB	0.50	10.0%	10
SB	0.60	3.4%	29
Intersection	0.91	2.0%	353

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:30 PM to 5:30 PM

N Locust St & Territorial Rd

Thursday, August 09, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	0	1	0	1	0	4	0	5	23	1	1	1	21	0	0	57	0	0	0	0
4:05 PM	0	4	1	0	0	0	0	0	1	20	0	2	0	14	0	0	40	0	0	2	0
4:10 PM	0	0	0	0	0	2	1	0	5	16	1	0	2	31	1	0	59	0	0	0	0
4:15 PM	0	0	0	0	0	1	4	0	1	31	0	0	0	14	1	0	52	0	0	0	0
4:20 PM	0	0	0	0	0	1	3	0	5	17	1	0	0	19	1	0	47	0	0	0	0
4:25 PM	0	0	1	0	0	1	1	0	5	17	0	1	0	13	1	0	39	0	0	0	0
4:30 PM	0	1	1	0	0	2	2	0	4	21	0	0	2	32	1	0	66	0	0	0	0
4:35 PM	0	0	0	1	1	0	2	0	3	29	0	1	0	14	0	0	49	0	0	0	0
4:40 PM	1	0	0	0	1	1	1	0	3	28	0	0	3	15	0	0	53	0	0	0	0
4:45 PM	0	1	0	0	2	0	2	0	2	35	1	0	1	18	1	0	63	0	0	0	0
4:50 PM	0	0	0	0	0	0	1	0	3	26	0	0	0	16	0	0	46	0	0	0	0
4:55 PM	2	0	0	0	1	0	3	0	2	14	0	0	1	17	1	0	41	0	0	0	0
5:00 PM	1	0	0	0	1	1	1	0	1	24	0	0	0	22	4	2	55	0	0	0	0
5:05 PM	0	0	0	0	1	0	2	0	5	29	0	0	0	18	1	0	56	0	0	0	0
5:10 PM	0	0	0	0	1	0	0	0	0	36	0	0	1	17	1	0	56	0	0	0	0
5:15 PM	0	1	0	0	0	0	3	0	4	17	0	0	1	22	0	0	48	0	0	0	0
5:20 PM	1	0	1	0	2	0	1	0	2	20	2	0	0	19	0	0	48	0	0	0	0
5:25 PM	0	0	0	0	0	0	2	0	3	27	0	0	0	18	2	0	52	0	0	0	0
5:30 PM	0	0	0	0	0	0	1	0	3	27	0	0	0	25	1	0	57	0	0	0	0
5:35 PM	1	0	1	0	0	0	4	0	2	20	1	0	1	15	0	0	45	0	0	0	0
5:40 PM	0	1	0	0	0	0	1	0	1	14	1	0	0	11	0	2	29	0	0	0	0
5:45 PM	0	0	1	0	0	0	6	0	2	18	0	0	1	23	2	0	53	0	2	2	0
5:50 PM	1	0	0	0	0	0	1	0	3	11	0	0	0	8	1	0	25	0	0	0	0
5:55 PM	0	1	1	0	0	0	1	0	3	16	0	0	2	9	0	0	33	0	0	0	0
Total Survey	7	9	8	1	11	9	47	0	68	536	8	5	16	431	19	4	1,169	0	2	4	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	4	2	0	1	2	5	0	11	59	2	3	3	66	1	0	156	0	0	2	0
4:15 PM	0	0	1	0	0	3	8	0	11	65	1	1	0	46	3	0	138	0	0	0	0
4:30 PM	1	1	1	1	2	3	5	0	10	78	0	1	5	61	1	0	168	0	0	0	0
4:45 PM	2	1	0	0	3	0	6	0	7	75	1	0	2	51	2	0	150	0	0	0	0
5:00 PM	1	0	0	0	3	1	3	0	6	89	0	0	1	57	6	2	167	0	0	0	0
5:15 PM	1	1	1	0	2	0	6	0	9	64	2	0	1	59	2	0	148	0	0	0	0
5:30 PM	1	1	1	0	0	0	6	0	6	61	2	0	1	51	1	2	131	0	0	0	0
5:45 PM	1	1	2	0	0	0	8	0	8	45	0	0	3	40	3	0	111	0	2	2	0
Total Survey	7	9	8	1	11	9	47	0	68	536	8	5	16	431	19	4	1,169	0	2	4	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	10	16	26	1	34	46	80	0	341	253	594	1	248	318	566	2	633	0	0	0	0
%HV	0.0%				0.0%				0.3%				1.6%				0.8%				
PHF	0.83				0.85				0.84				0.93				0.94				

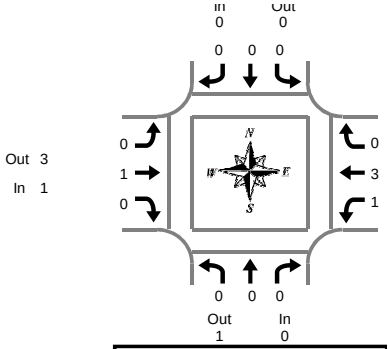
By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	5	3	2	10	10	4	20	34	32	306	3	341	9	228	11	248	633
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	11.1%	1.3%	0.0%	1.6%	0.8%
PHF	0.42	0.75	0.50	0.83	0.63	0.33	0.83	0.85	0.80	0.83	0.38	0.84	0.45	0.93	0.46	0.93	0.94

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	3	6	4	1	6	8	24	0	39	277	4	5	10	224	7	0	612	0	0	2	0
4:15 PM	4	2	2	1	8	7	22	0	34	307	2	2	8	215	12	2	623	0	0	0	0
4:30 PM	5	3	2	1	10	4	20	0	32	306	3	1	9	228	11	2	633	0	0	0	0
4:45 PM	5	3	2	0	8	1	21	0	28	289	5	0	5	218	11	4	596	0	0	0	0
5:00 PM	4	3	4	0	5	1	23	0	29	259	4	0	6	207	12	4	557	0	2	2	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Locust St & Territorial Rd

Thursday, August 09, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:05 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
4:10 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	0	0	0	0	0	5	0	5	1	6	0	7	12

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	3	5
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Survey	0	0	0	0	0	0	0	0	0	5	0	5	1	6	0	7	12

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound N Locust St			Southbound N Locust St			Eastbound Territorial Rd			Westbound Territorial Rd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	1	1	0	0	0	1	3	4	4	1	5	5
PHF	0.00			0.00			0.25			0.50			0.63

By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	0	0	0	0	0	0	0	0	1	0	1	1	3	0	4	5
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.25	0.38	0.00	0.50	0.63

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

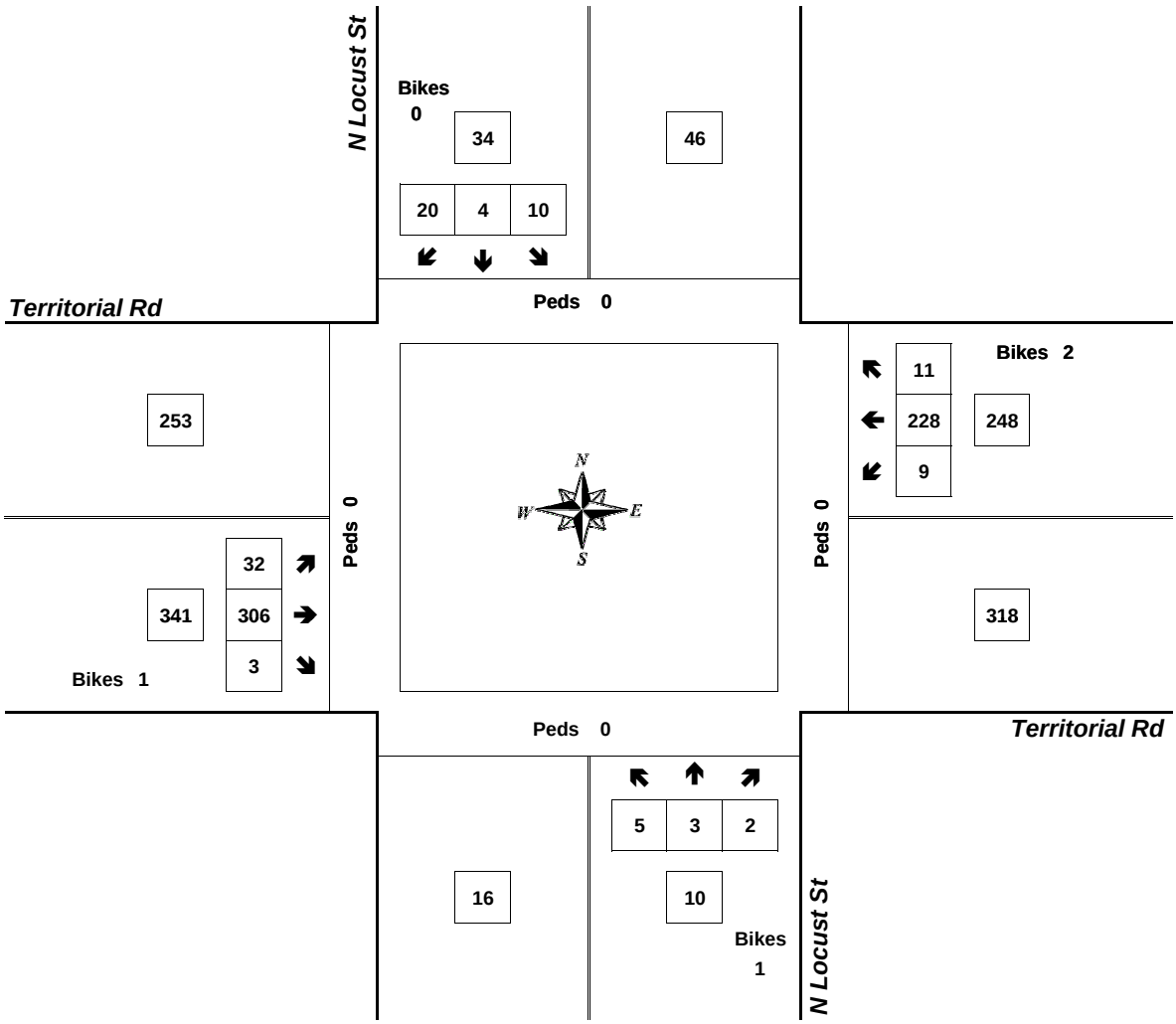
Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound Territorial Rd				Westbound Territorial Rd				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	6	0	6	10
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	3	5
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	3	0	4	5
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2

Peak Hour Summary

Clay Carney
(503) 833-2740

N Locust St & Territorial Rd

4:30 PM to 5:30 PM
Thursday, August 09, 2018

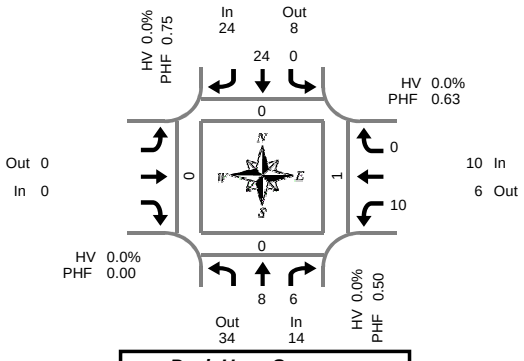


Approach	PHF	HV%	Volume
EB	0.84	0.3%	341
WB	0.93	1.6%	248
NB	0.83	0.0%	10
SB	0.85	0.0%	34
Intersection	0.94	0.8%	633

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:25 AM to 8:25 AM

N Locust St & NE 19th Ave

Thursday, August 09, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T	Bikes				Bikes		L	R	Bikes			North	South	East	West
7:00 AM	0	0	0		0	1	0				0		1	0	0		2	0	0	0	0
7:05 AM	0	0	0		0	1	0				0		1	0	0		2	0	0	0	0
7:10 AM	0	0	0		0	0	0				0		1	0	0		1	0	0	0	0
7:15 AM	0	1	0		0	0	0				0		1	0	0		2	0	0	0	0
7:20 AM	0	0	0		0	1	0				0		0	0	0		1	0	0	0	0
7:25 AM	2	0	0		0	1	0				0		2	0	0		5	0	0	0	0
7:30 AM	1	1	0		0	2	0				0		2	0	0		6	0	0	0	0
7:35 AM	0	0	0		0	4	0				0		0	0	0		4	0	0	0	0
7:40 AM	0	0	0		0	2	0				0		1	0	0		3	0	0	0	0
7:45 AM	1	0	0		0	2	0				0		1	0	0		4	0	0	0	0
7:50 AM	0	1	0		0	2	0				0		0	0	0		3	0	0	0	0
7:55 AM	0	0	0		0	2	0				0		1	0	0		3	0	0	1	0
8:00 AM	2	0	0		0	2	0				0		0	0	0		4	0	0	0	0
8:05 AM	1	2	0		0	1	0				0		0	0	0		4	0	0	0	0
8:10 AM	1	1	0		0	1	0				0		0	0	0		3	0	0	0	0
8:15 AM	0	1	0		0	3	0				0		3	0	0		7	0	0	0	0
8:20 AM	0	0	1		0	2	0				0		0	0	0		2	0	0	0	0
8:25 AM	1	0	1		0	0	0				0		0	0	0		1	0	0	0	0
8:30 AM	1	1	0		0	1	0				0		1	0	0		4	0	0	0	0
8:35 AM	1	0	0		0	3	0				0		0	0	0		4	0	0	0	0
8:40 AM	1	0	0		0	1	0				0		0	0	0		2	0	0	0	0
8:45 AM	0	0	0		0	3	0				0		4	0	0		7	0	0	0	0
8:50 AM	1	0	0		0	3	0				0		2	0	0		6	0	0	0	0
8:55 AM	3	0	0		0	1	0				0		0	0	0		4	0	0	0	0
Total Survey	16	8	2		0	39	0				0		21	0	0		84	0	0	1	0

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T	Bikes				Bikes		L	R	Bikes			North	South	East	West
7:00 AM	0	0	0		0	2	0				0		3	0	0		5	0	0	0	0
7:15 AM	2	1	0		0	2	0				0		3	0	0		8	0	0	0	0
7:30 AM	1	1	0		0	8	0				0		3	0	0		13	0	0	0	0
7:45 AM	1	1	0		0	6	0				0		2	0	0		10	0	0	1	0
8:00 AM	4	3	0		0	4	0				0		0	0	0		11	0	0	0	0
8:15 AM	1	1	2		0	5	0				0		3	0	0		10	0	0	0	0
8:30 AM	3	1	0		0	5	0				0		1	0	0		10	0	0	0	0
8:45 AM	4	0	0		0	7	0				0		6	0	0		17	0	0	0	0
Total Survey	16	8	2		0	39	0				0		21	0	0		84	0	0	1	0

Peak Hour Summary
7:25 AM to 8:25 AM

By Approach	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	14	34	48	1	24	8	32	0	0	0	0	0	10	6	16	0	48	0	0	1	0
%HV	0.0%				0.0%				0.0%				0.0%				0.0%				
PHF	0.50				0.75				0.00				0.63				0.80				

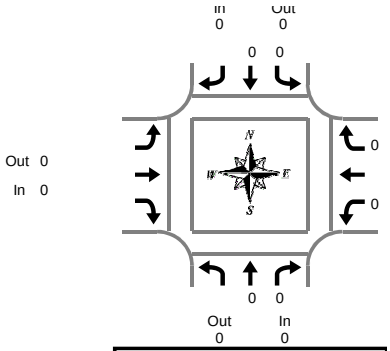
By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	8	6	14		0	24		24				0	10		0	10	48
%HV	NA	0.0%	0.0%	0.0%	0.0%	0.0%	NA	0.0%	NA	NA	NA	0.0%	0.0%	NA	0.0%	0.0%	0.0%
PHF		0.50	0.38	0.50	0.00	0.75		0.75				0.00	0.63		0.00	0.63	0.80

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T	Bikes				Bikes		L	R	Bikes			North	South	East	West
7:00 AM	4	3	0		0	18	0				0		11	0	0		36	0	0	1	0
7:15 AM	8	6	0		0	20	0				0		8	0	0		42	0	0	1	0
7:30 AM	7	6	2		0	23	0				0		8	0	0		44	0	0	1	0
7:45 AM	9	6	2		0	20	0				0		6	0	0		41	0	0	1	0
8:00 AM	12	5	2		0	21	0				0		10	0	0		48	0	0	0	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



N Locust St & NE 19th Ave

Thursday, August 09, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:25 AM to 8:25 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total
		T	R	Total	L	T		Total				Total	L		R	Total	
7:00 AM		0	0	0	0	0		0				0	0		0	0	0
7:05 AM		0	0	0	0	0		0				0	0		0	0	0
7:10 AM		0	0	0	0	0		0				0	0		0	0	0
7:15 AM		0	0	0	0	0		0				0	0		0	0	0
7:20 AM		0	0	0	0	0		0				0	0		0	0	0
7:25 AM		0	0	0	0	0		0				0	0		0	0	0
7:30 AM		0	0	0	0	0		0				0	0		0	0	0
7:35 AM		0	0	0	0	0		0				0	0		0	0	0
7:40 AM		0	0	0	0	0		0				0	0		0	0	0
7:45 AM		0	0	0	0	0		0				0	0		0	0	0
7:50 AM		0	0	0	0	0		0				0	0		0	0	0
7:55 AM		0	0	0	0	0		0				0	0		0	0	0
8:00 AM		0	0	0	0	0		0				0	0		0	0	0
8:05 AM		0	0	0	0	0		0				0	0		0	0	0
8:10 AM		0	0	0	0	0		0				0	0		0	0	0
8:15 AM		0	0	0	0	0		0				0	0		0	0	0
8:20 AM		0	0	0	0	0		0				0	0		0	0	0
8:25 AM		0	0	0	0	0		0				0	0		0	0	0
8:30 AM		0	0	0	0	0		0				0	1		0	1	1
8:35 AM		1	0	1	0	0		0				0	0		0	0	1
8:40 AM		0	0	0	0	0		0				0	0		0	0	0
8:45 AM		0	0	0	0	0		0				0	0		0	0	0
8:50 AM		0	0	0	0	0		0				0	0		0	0	0
8:55 AM		0	0	0	0	0		0				0	0		0	0	0
Total Survey		1	0	1	0	0		0				0	1		0	1	2

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total
		T	R	Total	L	T		Total				Total	L		R	Total	
7:00 AM		0	0	0	0	0		0				0	0		0	0	0
7:15 AM		0	0	0	0	0		0				0	0		0	0	0
7:30 AM		0	0	0	0	0		0				0	0		0	0	0
7:45 AM		0	0	0	0	0		0				0	0		0	0	0
8:00 AM		0	0	0	0	0		0				0	0		0	0	0
8:15 AM		0	0	0	0	0		0				0	0		0	0	0
8:30 AM		1	0	1	0	0		0				0	1		0	1	2
8:45 AM		0	0	0	0	0		0				0	0		0	0	0
Total Survey		1	0	1	0	0		0				0	1		0	1	2

Heavy Vehicle Peak Hour Summary
7:25 AM to 8:25 AM

By Approach	Northbound N Locust St			Southbound N Locust St			Eastbound NE 19th Ave			Westbound NE 19th Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.00			0.00			0.00			0.00			0.00

By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Total
		T	R	Total	L	T		Total				Total	L		R	Total	
Volume		0	0	0	0	0		0				0	0		0	0	0
PHF		0.00	0.00	0.00	0.00	0.00		0.00				0.00	0.00		0.00	0.00	0.00

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

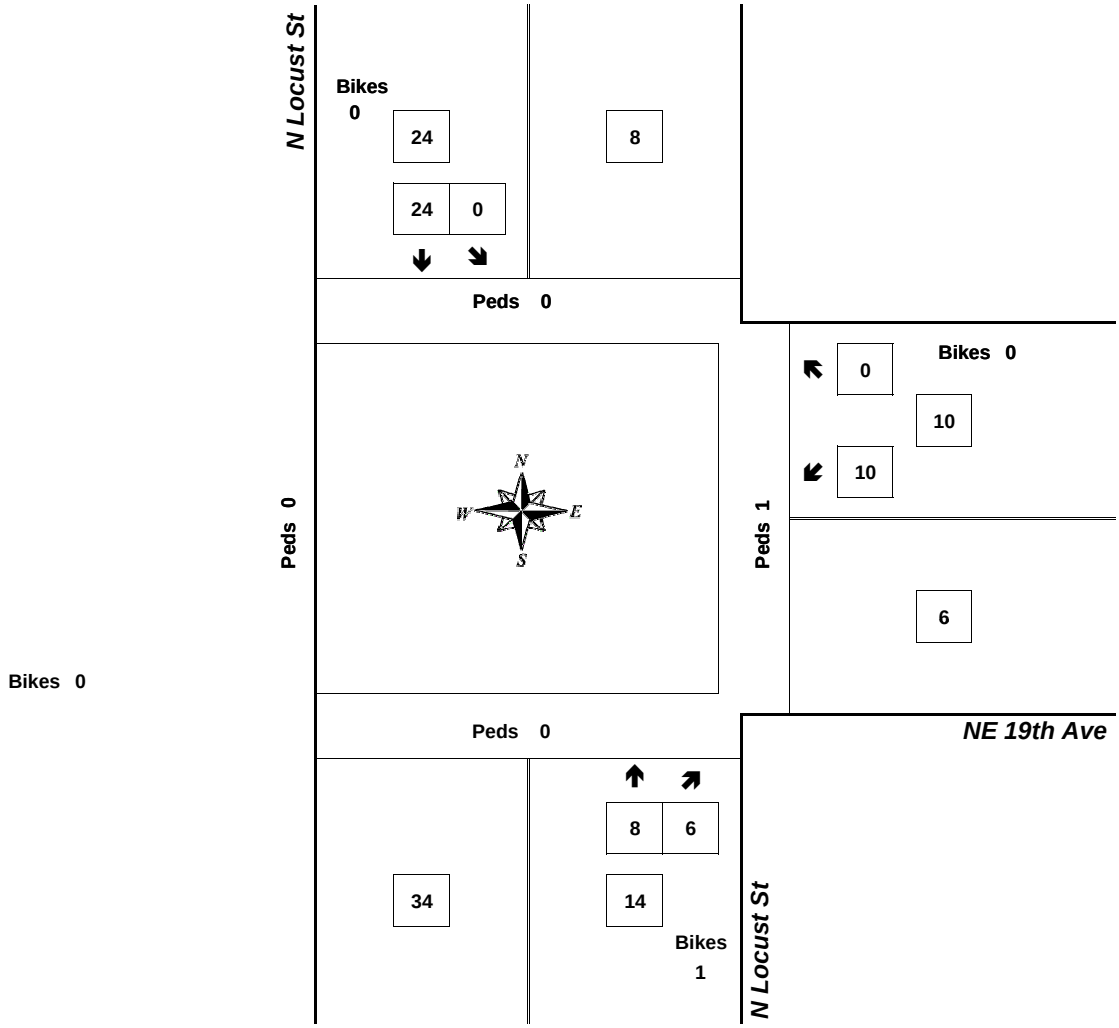
Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total
		T	R	Total	L	T		Total				Total	L		R	Total	
7:00 AM		0	0	0	0	0		0				0	0		0	0	0
7:15 AM		0	0	0	0	0		0				0	0		0	0	0
7:30 AM		0	0	0	0	0		0				0	0		0	0	0
7:45 AM		1	0	1	0	0		0				0	1		0	1	2
8:00 AM		1	0	1	0	0		0				0	1		0	1	2

Peak Hour Summary

Clay Carney
(503) 833-2740

N Locust St & NE 19th Ave

7:25 AM to 8:25 AM
Thursday, August 09, 2018

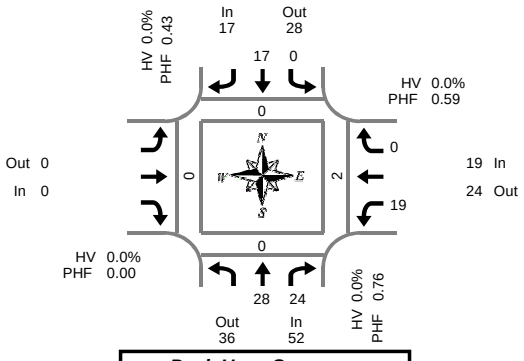


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.63	0.0%	10
NB	0.50	0.0%	14
SB	0.75	0.0%	24
Intersection	0.80	0.0%	48

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:10 PM to 5:10 PM

N Locust St & NE 19th Ave

Thursday, August 09, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T	Bikes				Bikes		L	R	Bikes			North	South	East	West
4:00 PM	0	1	0		0	2	0				0		0	0	0		3	0	0	0	0
4:05 PM	3	2	0		0	3	0				0		0	0	0		8	0	0	0	0
4:10 PM	2	3	0		0	0	0				0		2	0	0		7	0	0	0	0
4:15 PM	2	3	0		0	0	1				0		1	0	0		6	0	0	0	0
4:20 PM	2	1	0		0	7	0				0		0	0	0		10	0	0	0	0
4:25 PM	5	2	0		0	1	0				0		1	0	0		9	0	0	1	0
4:30 PM	3	1	0		0	2	0				0		2	0	0		8	0	0	0	0
4:35 PM	2	4	0		0	1	0				0		2	0	0		9	0	0	0	0
4:40 PM	1	2	0		0	1	0				0		2	0	0		6	0	0	0	0
4:45 PM	0	3	0		0	0	0				0		4	0	0		7	0	0	1	0
4:50 PM	4	1	0		0	0	0				0		0	1	0		5	0	0	0	0
4:55 PM	1	1	0		0	3	0				0		2	0	0		7	0	0	0	0
5:00 PM	1	3	0		0	0	0				0		1	0	1		5	0	0	0	0
5:05 PM	5	0	0		0	2	0				0		2	0	0		9	0	0	0	0
5:10 PM	4	0	0		0	2	0				0		0	0	0		6	0	0	0	0
5:15 PM	2	2	0		0	1	0				0		1	0	0		6	0	0	0	0
5:20 PM	0	2	0		0	1	0				0		2	0	0		5	0	0	0	0
5:25 PM	2	3	0		0	0	0				0		2	0	0		7	0	0	0	0
5:30 PM	1	2	0		0	0	0				0		1	0	0		4	0	0	0	0
5:35 PM	2	1	0		0	1	0				0		3	0	0		7	0	0	0	0
5:40 PM	3	0	0		0	1	0				0		0	1	0		5	0	0	0	0
5:45 PM	2	2	0		0	2	0				0		2	0	0		8	0	0	2	0
5:50 PM	1	2	0		0	1	0				0		2	0	0		6	0	0	0	0
5:55 PM	2	1	0		0	0	0				0		0	0	0		3	0	0	0	0
Total Survey	50	42	0		0	31	1				0		32	1	2		156	0	0	4	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T	Bikes				Bikes		L	R	Bikes			North	South	East	West
4:00 PM	5	6	0		0	5	0				0		2	0	0		18	0	0	0	0
4:15 PM	9	6	0		0	8	1				0		2	0	0		25	0	0	1	0
4:30 PM	6	7	0		0	4	0				0		6	0	0		23	0	0	0	0
4:45 PM	5	5	0		0	3	0				0		6	0	1		19	0	0	1	0
5:00 PM	10	3	0		0	4	0				0		3	0	1		20	0	0	0	0
5:15 PM	4	7	0		0	2	0				0		5	0	0		18	0	0	0	0
5:30 PM	6	3	0		0	2	0				0		4	1	0		16	0	0	0	0
5:45 PM	5	5	0		0	3	0				0		4	0	0		17	0	0	2	0
Total Survey	50	42	0		0	31	1				0		32	1	2		156	0	0	4	0

Peak Hour Summary
4:10 PM to 5:10 PM

By Approach	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	52	36	88	0	17	28	45	1	0	0	0	0	19	24	43	2	88	0	0	2	0
%HV		0.0%				0.0%				0.0%				0.0%			0.0%				
PHF		0.76				0.43				0.00				0.59			0.81				

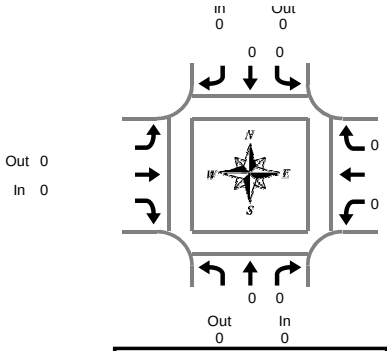
By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	28	24	52		0	17		17				0	19		0	19	88
%HV	0.0%	0.0%	0.0%		0.0%	0.0%	NA	0.0%	NA	NA	NA	0.0%	0.0%	NA	0.0%	0.0%	0.0%
PHF	0.70	0.67	0.76		0.00	0.43		0.43				0.00	0.59		0.00	0.59	0.81

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T	Bikes				Bikes		L	R	Bikes			North	South	East	West
4:00 PM	25	24	0		0	20	1				0		16	0	1		85	0	0	2	0
4:15 PM	30	21	0		0	19	1				0		17	0	2		87	0	0	2	0
4:30 PM	25	22	0		0	13	0				0		20	0	2		80	0	0	1	0
4:45 PM	25	18	0		0	11	0				0		18	1	2		73	0	0	1	0
5:00 PM	25	18	0		0	11	0				0		16	1	1		71	0	0	2	0

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Locust St & NE 19th Ave

Thursday, August 09, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:10 PM to 5:10 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total
		T	R	Total	L	T		Total				Total	L		R	Total	
4:00 PM		0	0	0	0	0		0				0	0		0	0	0
4:05 PM		0	0	0	0	0		0				0	0		0	0	0
4:10 PM		0	0	0	0	0		0				0	0		0	0	0
4:15 PM		0	0	0	0	0		0				0	0		0	0	0
4:20 PM		0	0	0	0	0		0				0	0		0	0	0
4:25 PM		0	0	0	0	0		0				0	0		0	0	0
4:30 PM		0	0	0	0	0		0				0	0		0	0	0
4:35 PM		0	0	0	0	0		0				0	0		0	0	0
4:40 PM		0	0	0	0	0		0				0	0		0	0	0
4:45 PM		0	0	0	0	0		0				0	0		0	0	0
4:50 PM		0	0	0	0	0		0				0	0		0	0	0
4:55 PM		0	0	0	0	0		0				0	0		0	0	0
5:00 PM		0	0	0	0	0		0				0	0		0	0	0
5:05 PM		0	0	0	0	0		0				0	0		0	0	0
5:10 PM		0	0	0	0	0		0				0	0		0	0	0
5:15 PM		0	0	0	0	0		0				0	0		0	0	0
5:20 PM		0	0	0	0	0		0				0	0		0	0	0
5:25 PM		0	0	0	0	0		0				0	0		0	0	0
5:30 PM		0	0	0	0	0		0				0	0		0	0	0
5:35 PM		0	0	0	0	0		0				0	0		0	0	0
5:40 PM		0	0	0	0	0		0				0	0		0	0	0
5:45 PM		0	0	0	0	0		0				0	0		0	0	0
5:50 PM		0	0	0	0	0		0				0	0		0	0	0
5:55 PM		0	0	0	0	0		0				0	0		0	0	0
Total Survey		0	0	0	0	0		0				0	0		0	0	0

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total
		T	R	Total	L	T		Total				Total	L		R	Total	
4:00 PM		0	0	0	0	0		0				0	0		0	0	0
4:15 PM		0	0	0	0	0		0				0	0		0	0	0
4:30 PM		0	0	0	0	0		0				0	0		0	0	0
4:45 PM		0	0	0	0	0		0				0	0		0	0	0
5:00 PM		0	0	0	0	0		0				0	0		0	0	0
5:15 PM		0	0	0	0	0		0				0	0		0	0	0
5:30 PM		0	0	0	0	0		0				0	0		0	0	0
5:45 PM		0	0	0	0	0		0				0	0		0	0	0
Total Survey		0	0	0	0	0		0				0	0		0	0	0

Heavy Vehicle Peak Hour Summary
4:10 PM to 5:10 PM

By Approach	Northbound N Locust St			Southbound N Locust St			Eastbound NE 19th Ave			Westbound NE 19th Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.00			0.00			0.00			0.00			0.00

By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Total
		T	R	Total	L	T		Total				Total	L		R	Total	
Volume		0	0	0	0	0		0				0	0		0	0	0
PHF		0.00	0.00	0.00	0.00	0.00		0.00				0.00	0.00		0.00	0.00	0.00

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

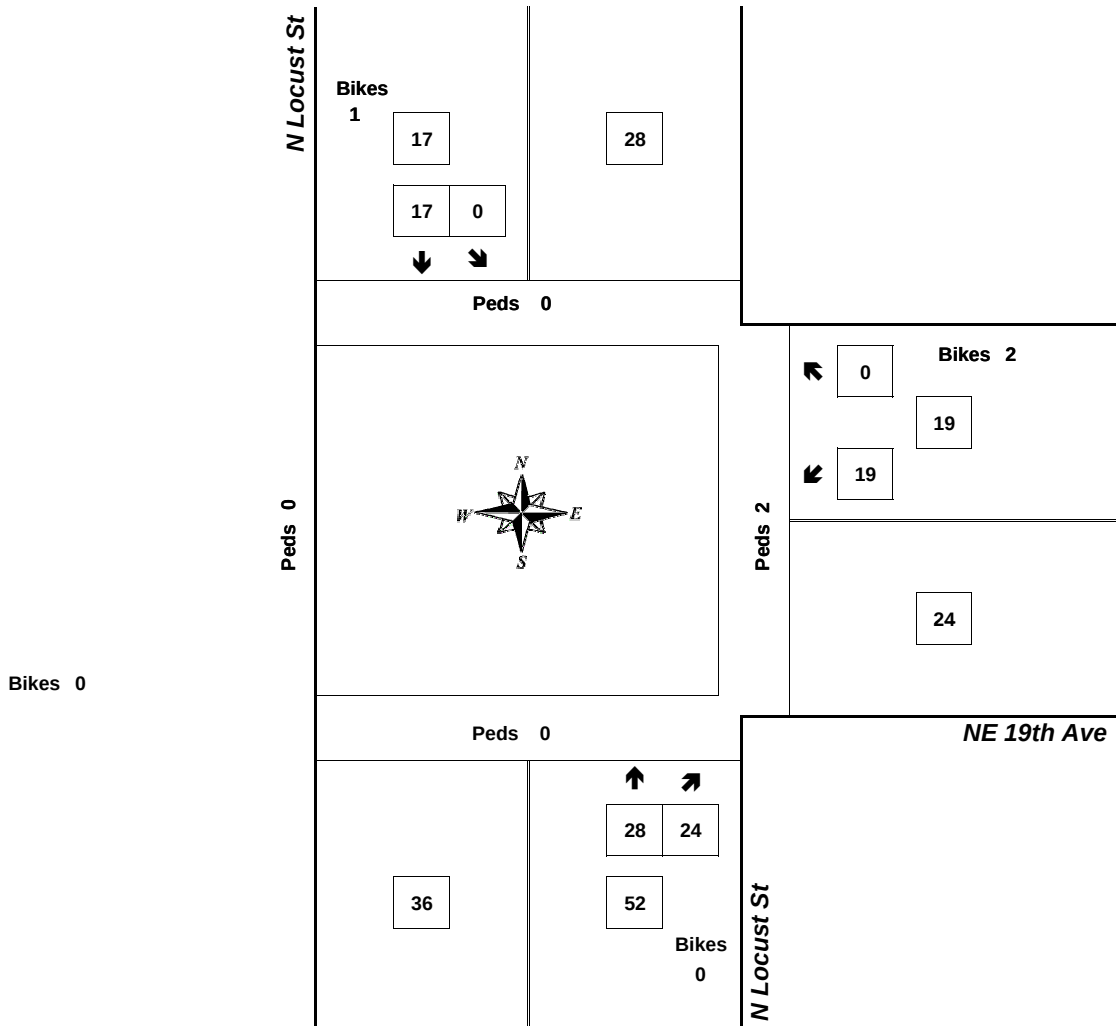
Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 19th Ave				Westbound NE 19th Ave				Interval Total
		T	R	Total	L	T		Total				Total	L		R	Total	
4:00 PM		0	0	0	0	0		0				0	0		0	0	0
4:15 PM		0	0	0	0	0		0				0	0		0	0	0
4:30 PM		0	0	0	0	0		0				0	0		0	0	0
4:45 PM		0	0	0	0	0		0				0	0		0	0	0
5:00 PM		0	0	0	0	0		0				0	0		0	0	0

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

N Locust St & NE 19th Ave

4:10 PM to 5:10 PM
Thursday, August 09, 2018

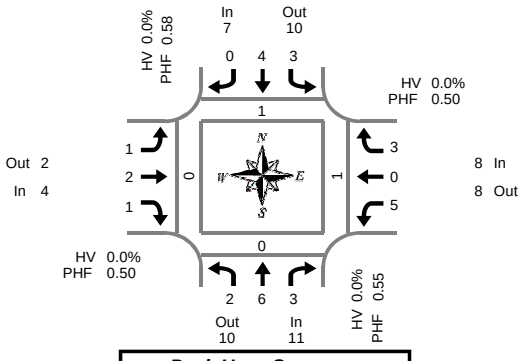


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.59	0.0%	19
NB	0.76	0.0%	52
SB	0.43	0.0%	17
Intersection	0.81	0.0%	88

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:15 AM to 8:15 AM

N Locust St & NE 22nd Ave

Thursday, August 09, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
7:20 AM	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	1	0	1	0
7:25 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
7:30 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	2	0	5	0	0	0	0
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
7:40 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
7:45 AM	0	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	4	0	0	0	0
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 AM	0	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	4	0	0	0	0
8:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
8:05 AM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0
8:10 AM	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0
8:25 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
8:40 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
8:55 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Total Survey	4	6	5	2	4	4	0	0	1	2	1	1	7	1	4	1	39	1	1	1	1

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0
7:15 AM	1	3	0	0	0	0	0	0	0	1	0	1	1	0	0	0	6	1	0	1	0
7:30 AM	0	2	0	0	1	1	0	0	0	0	0	0	2	0	2	0	8	0	0	0	0
7:45 AM	0	1	1	0	1	1	0	0	0	1	1	0	1	0	1	0	8	0	0	0	0
8:00 AM	1	0	2	0	1	2	0	0	1	0	0	0	1	0	0	0	8	0	0	0	0
8:15 AM	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0
8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1
8:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	3	0	0	0	0
Total Survey	4	6	5	2	4	4	0	0	1	2	1	1	7	1	4	1	39	1	1	1	1

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	11	10	21	0	7	10	17	0	4	2	6	1	8	8	16	0	30	1	0	1	0
%HV	0.0%				0.0%				0.0%				0.0%				0.0%				
PHF	0.55				0.58				0.50				0.50				0.75				

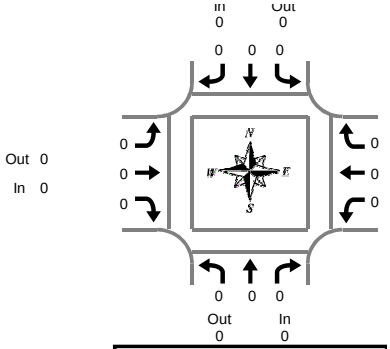
By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	6	3	11	3	4	0	7	1	2	1	4	5	0	3	8	30
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PHF	0.50	0.38	0.38	0.55	0.38	0.50	0.00	0.58	0.25	0.50	0.25	0.50	0.42	0.00	0.38	0.50	0.75

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	1	6	1	0	3	2	0	0	0	2	1	1	4	0	4	0	24	1	0	1	0
7:15 AM	2	6	3	0	3	4	0	0	1	2	1	1	5	0	3	0	30	1	0	1	0
7:30 AM	2	3	3	2	3	4	0	0	1	1	1	0	5	0	3	1	26	0	0	0	0
7:45 AM	3	1	4	2	2	3	0	0	1	1	1	0	3	0	1	1	20	0	1	0	1
8:00 AM	3	0	4	2	1	2	0	0	1	0	0	0	3	1	0	1	15	0	1	0	1

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



N Locust St & NE 22nd Ave

Thursday, August 09, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:15 AM to 8:15 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Heavy Vehicle Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound N Locust St			Southbound N Locust St			Eastbound NE 22nd Ave			Westbound NE 22nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.00			0.00			0.00			0.00			0.00

By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

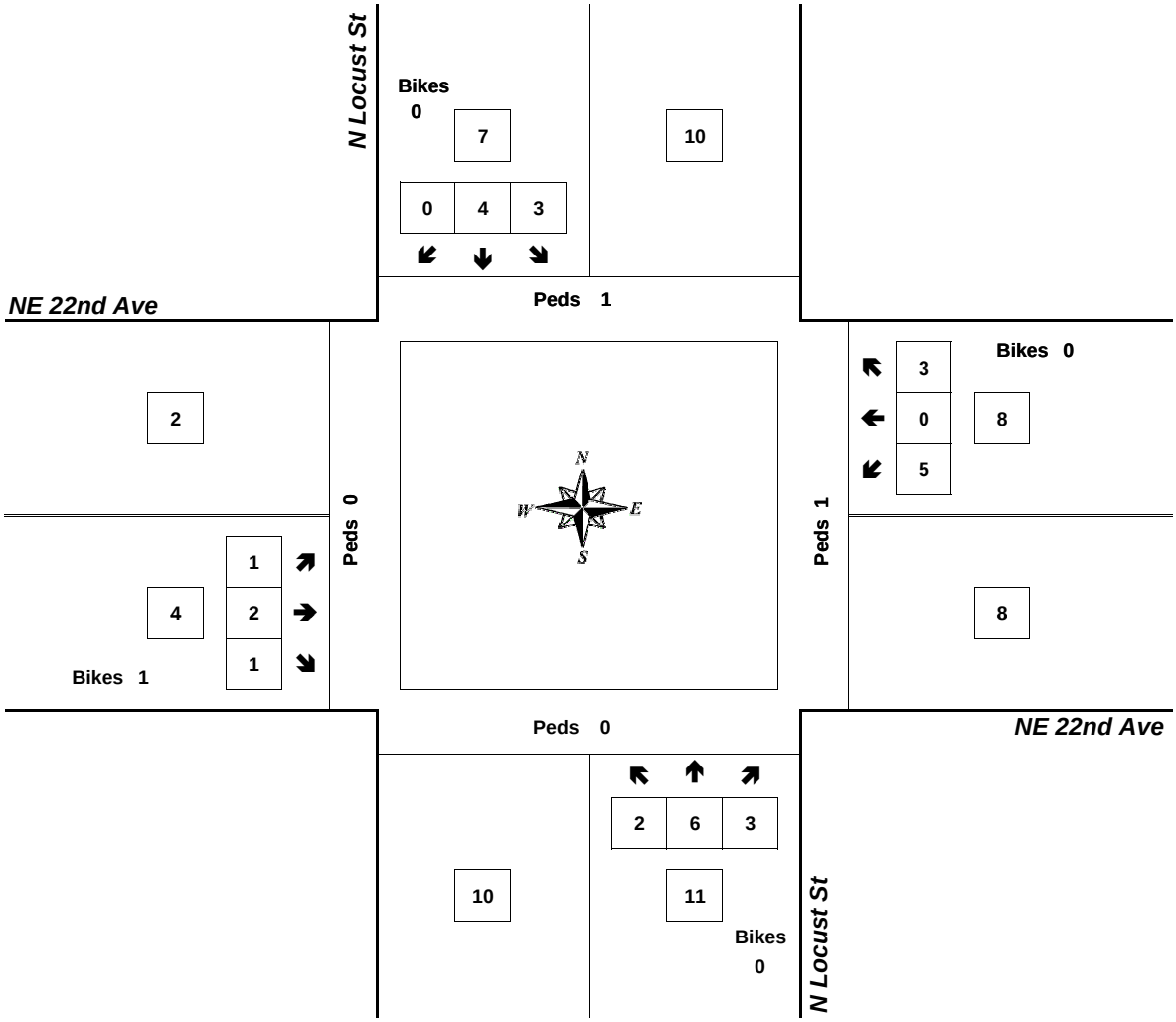
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Locust St & NE 22nd Ave

7:15 AM to 8:15 AM
Thursday, August 09, 2018

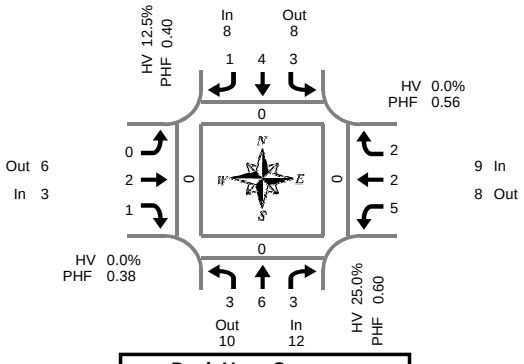


Approach	PHF	HV%	Volume
EB	0.50	0.0%	4
WB	0.50	0.0%	8
NB	0.55	0.0%	11
SB	0.58	0.0%	7
Intersection	0.75	0.0%	30

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



N Locust St & NE 22nd Ave

Thursday, August 09, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:00 PM to 5:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	1	0	0	0	1	0	0	0	0	1	0	2	0	0	1	5	0	0	0	0
4:05 PM	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
4:10 PM	0	0	0	0	2	0	1	0	0	0	0	1	0	1	0	0	4	0	0	0	0
4:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	2	0	0	0	5	0	0	0	0
4:20 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0
4:25 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	0	0
4:35 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	3	0	0	0	0
5:05 PM	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
5:10 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:20 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	4	1	0	1	0
5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
5:50 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:55 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0
Total Survey	5	10	7	0	7	5	1	0	0	4	2	1	8	4	2	1	55	1	0	1	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	2	2	1	0	2	1	1	0	0	0	1	1	2	1	0	1	13	0	0	0	0
4:15 PM	1	3	1	0	0	3	0	0	0	0	0	0	2	0	1	0	11	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	0	0	0	0
4:45 PM	0	1	1	0	1	0	0	0	0	0	0	0	0	1	1	0	5	0	0	0	0
5:00 PM	1	1	2	0	2	0	0	0	0	1	1	0	0	1	0	0	9	0	0	0	0
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	1	1	0	0	4	0	0	0	0
5:30 PM	0	2	2	0	0	0	0	0	0	0	0	0	1	0	0	0	5	1	0	1	0
5:45 PM	1	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0	5	0	0	0	0
Total Survey	5	10	7	0	7	5	1	0	0	4	2	1	8	4	2	1	55	1	0	1	0

Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	12	10	22	0	8	8	16	0	3	6	9	1	9	8	17	1	32	0	0	0	0
%HV	25.0%				12.5%				0.0%				0.0%				12.5%				
PHF	0.60				0.40				0.38				0.56				0.62				

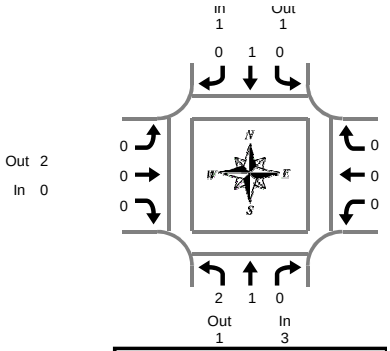
By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	3	6	3	12	3	4	1	8	0	2	1	3	5	2	2	9	32
%HV	66.7%	16.7%	0.0%	25.0%	0.0%	25.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%
PHF	0.38	0.50	0.75	0.60	0.38	0.33	0.25	0.40	0.00	0.25	0.25	0.38	0.63	0.50	0.50	0.56	0.62

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	3	6	3	0	3	4	1	0	0	2	1	1	5	2	2	1	32	0	0	0	0
4:15 PM	2	5	4	0	3	3	0	0	0	3	1	0	3	2	2	0	28	0	0	0	0
4:30 PM	1	2	3	0	5	0	0	0	0	3	1	0	2	3	1	0	21	0	0	0	0
4:45 PM	1	4	5	0	5	0	0	0	0	1	1	0	2	3	1	0	23	1	0	1	0
5:00 PM	2	4	4	0	4	1	0	0	0	2	1	0	3	2	0	0	23	1	0	1	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



N Locust St & NE 22nd Ave

Thursday, August 09, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:00 PM to 5:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:05 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Survey	2	1	0	3	0	2	0	2	0	0	0	0	0	1	0	1	6

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Survey	2	1	0	3	0	2	0	2	0	0	0	0	0	1	0	1	6

Heavy Vehicle Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound N Locust St			Southbound N Locust St			Eastbound NE 22nd Ave			Westbound NE 22nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	3	1	4	1	1	2	0	2	2	0	0	0	4
PHF	0.25			0.25			0.00			0.00			0.33

By Movement	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	1	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
PHF	0.25	0.25	0.00	0.25	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Locust St				Southbound N Locust St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	1	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2

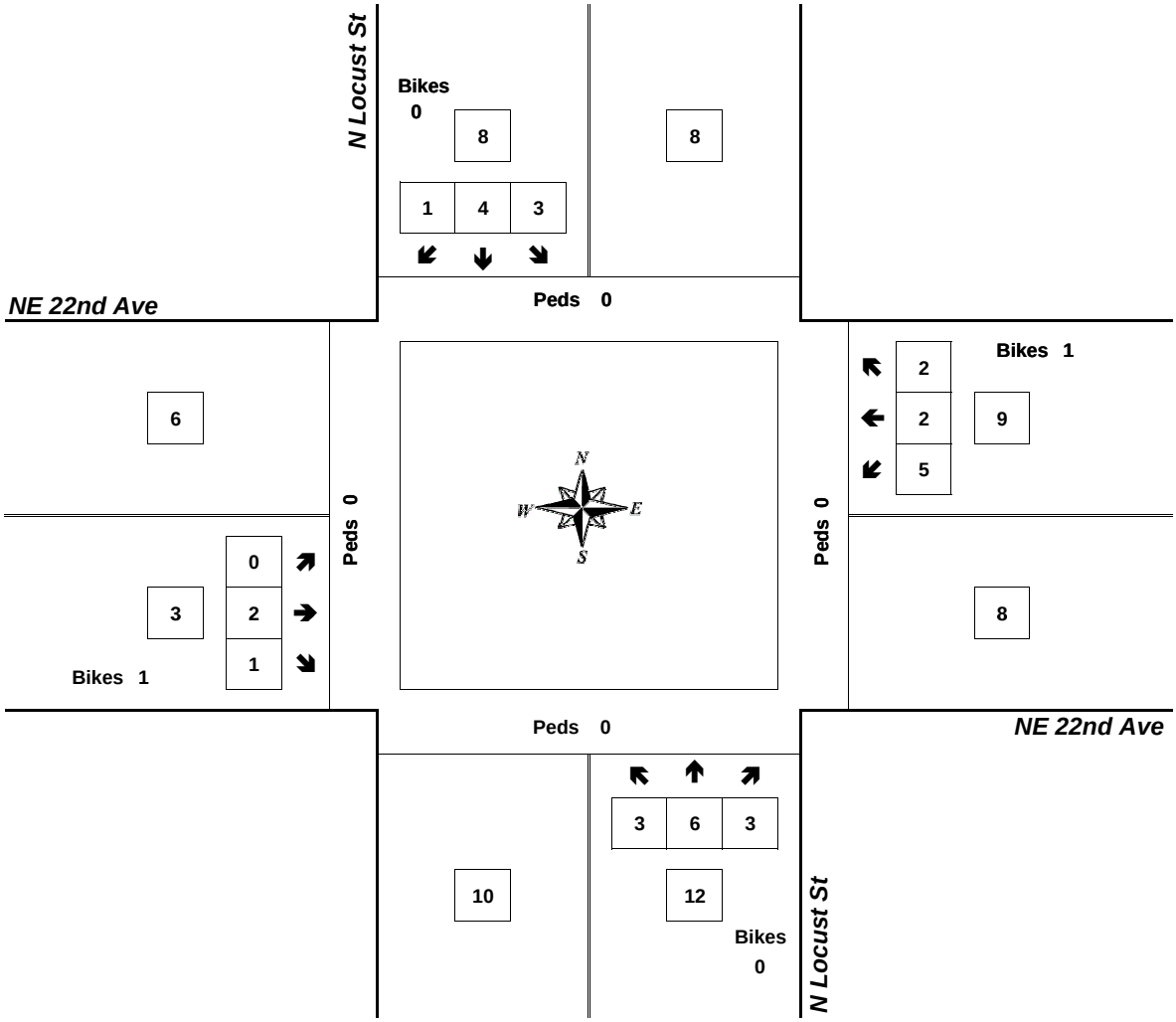
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Locust St & NE 22nd Ave

4:00 PM to 5:00 PM
Thursday, August 09, 2018

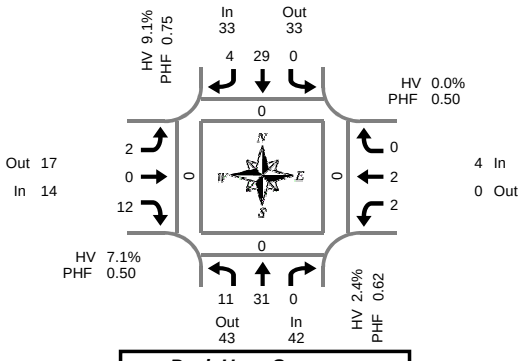


Approach	PHF	HV%	Volume
EB	0.38	0.0%	3
WB	0.56	0.0%	9
NB	0.60	25.0%	12
SB	0.40	12.5%	8
Intersection	0.62	12.5%	32

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
8:00 AM to 9:00 AM

N Holly St & NE 22nd Ave

Thursday, August 09, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	3	0	0	0	0
7:05 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0
7:10 AM	0	5	0	0	0	1	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0
7:20 AM	3	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	7	0	0	0	0
7:25 AM	0	4	0	0	0	5	0	0	0	0	1	0	1	0	0	0	11	1	0	1	0
7:30 AM	3	2	0	0	0	3	0	0	0	0	1	0	0	0	0	0	9	0	1	0	0
7:35 AM	0	2	0	0	0	4	1	0	1	0	1	0	1	0	0	0	10	0	0	0	0
7:40 AM	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0
7:45 AM	1	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0
7:50 AM	1	3	0	0	0	1	0	0	0	0	4	0	0	0	0	0	9	0	0	0	0
7:55 AM	1	6	0	0	1	0	0	0	0	0	1	0	0	0	0	0	9	0	0	0	0
8:00 AM	2	2	0	0	0	1	1	0	0	0	2	0	0	0	0	0	8	0	0	0	0
8:05 AM	3	2	0	1	0	3	2	0	0	0	0	0	0	0	0	0	10	0	0	0	0
8:10 AM	1	0	0	0	0	1	0	3	0	0	3	0	0	0	0	0	5	0	0	0	0
8:15 AM	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
8:20 AM	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0
8:25 AM	0	4	0	0	0	1	0	1	0	0	0	0	1	1	0	0	7	0	0	0	0
8:30 AM	0	2	0	0	0	3	0	0	0	0	2	0	0	0	0	0	7	0	0	0	0
8:35 AM	0	2	0	0	0	4	0	0	1	0	1	0	0	0	0	0	8	0	0	0	0
8:40 AM	0	3	0	0	0	2	0	0	0	0	3	0	0	0	0	0	8	0	0	0	0
8:45 AM	1	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0
8:50 AM	1	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0
8:55 AM	1	4	0	0	0	3	1	0	0	0	1	0	1	1	0	0	12	0	0	0	0
Total Survey	21	60	0	1	2	47	7	4	3	0	23	1	5	3	1	0	172	1	1	2	0

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	9	0	0	0	2	0	0	0	0	2	0	1	0	0	0	14	0	0	1	0
7:15 AM	3	7	0	0	1	5	0	0	0	0	1	1	1	1	1	0	20	1	0	1	0
7:30 AM	4	4	0	0	0	8	3	0	1	0	2	0	1	0	0	0	23	0	1	0	0
7:45 AM	3	9	0	0	1	3	0	0	0	0	6	0	0	0	0	0	22	0	0	0	0
8:00 AM	6	4	0	1	0	5	3	3	0	0	5	0	0	0	0	0	23	0	0	0	0
8:15 AM	2	6	0	0	0	5	0	1	1	0	0	0	1	1	0	0	16	0	0	0	0
8:30 AM	0	7	0	0	0	9	0	0	1	0	6	0	0	0	0	0	23	0	0	0	0
8:45 AM	3	14	0	0	0	10	1	0	0	0	1	0	1	1	0	0	31	0	0	0	0
Total Survey	21	60	0	1	2	47	7	4	3	0	23	1	5	3	1	0	172	1	1	2	0

Peak Hour Summary
8:00 AM to 9:00 AM

By Approach	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	42	43	85	1	33	33	66	4	14	17	31	0	4	0	4	0	93	0	0	0	0
%HV	2.4%				9.1%				7.1%				0.0%				5.4%				
PHF	0.62				0.75				0.50				0.50				0.75				

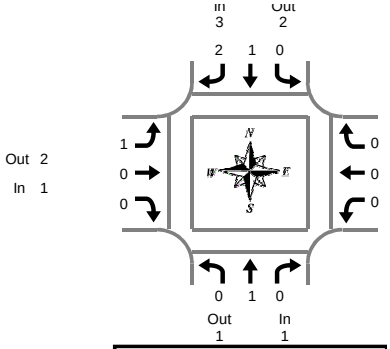
By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	11	31	0	42	0	29	4	33	2	0	12	14	2	2	0	4	93
%HV	0.0%	3.2%	0.0%	2.4%	0.0%	3.4%	50.0%	9.1%	50.0%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	5.4%
PHF	0.46	0.55	0.00	0.62	0.00	0.66	0.33	0.75	0.50	0.00	0.50	0.50	0.50	0.50	0.00	0.50	0.75

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	10	29	0	0	2	18	3	0	1	0	11	1	3	1	1	0	79	1	1	2	0
7:15 AM	16	24	0	1	2	21	6	3	1	0	14	1	2	1	1	0	88	1	1	1	0
7:30 AM	15	23	0	1	1	21	6	4	2	0	13	0	2	1	0	0	84	0	1	0	0
7:45 AM	11	26	0	1	1	22	3	4	2	0	17	0	1	1	0	0	84	0	0	0	0
8:00 AM	11	31	0	1	0	29	4	4	2	0	12	0	2	2	0	0	93	0	0	0	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



N Holly St & NE 22nd Ave

Thursday, August 09, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
8:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:20 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:35 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:50 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:55 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:20 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:55 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Survey	1	4	0	5	0	3	2	5	1	0	0	1	0	0	0	0	11

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
7:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
8:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Survey	1	4	0	5	0	3	2	5	1	0	0	1	0	0	0	0	11

Heavy Vehicle Peak Hour Summary
8:00 AM to 9:00 AM

By Approach	Northbound N Holly St			Southbound N Holly St			Eastbound NE 22nd Ave			Westbound NE 22nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	1	1	2	3	2	5	1	2	3	0	0	0	5
PHF	0.25			0.38			0.25			0.00			0.63

By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	1	0	1	0	1	2	3	1	0	0	1	0	0	0	0	5
PHF	0.00	0.25	0.00	0.25	0.00	0.25	0.50	0.38	0.25	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.63

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	1	3	0	4	0	2	0	2	0	0	0	0	0	0	0	0	6
7:15 AM	1	3	0	4	0	2	1	3	0	0	0	0	0	0	0	0	7
7:30 AM	0	2	0	2	0	3	1	4	1	0	0	1	0	0	0	0	7
7:45 AM	0	3	0	3	0	1	1	2	1	0	0	1	0	0	0	0	6
8:00 AM	0	1	0	1	0	1	2	3	1	0	0	1	0	0	0	0	5

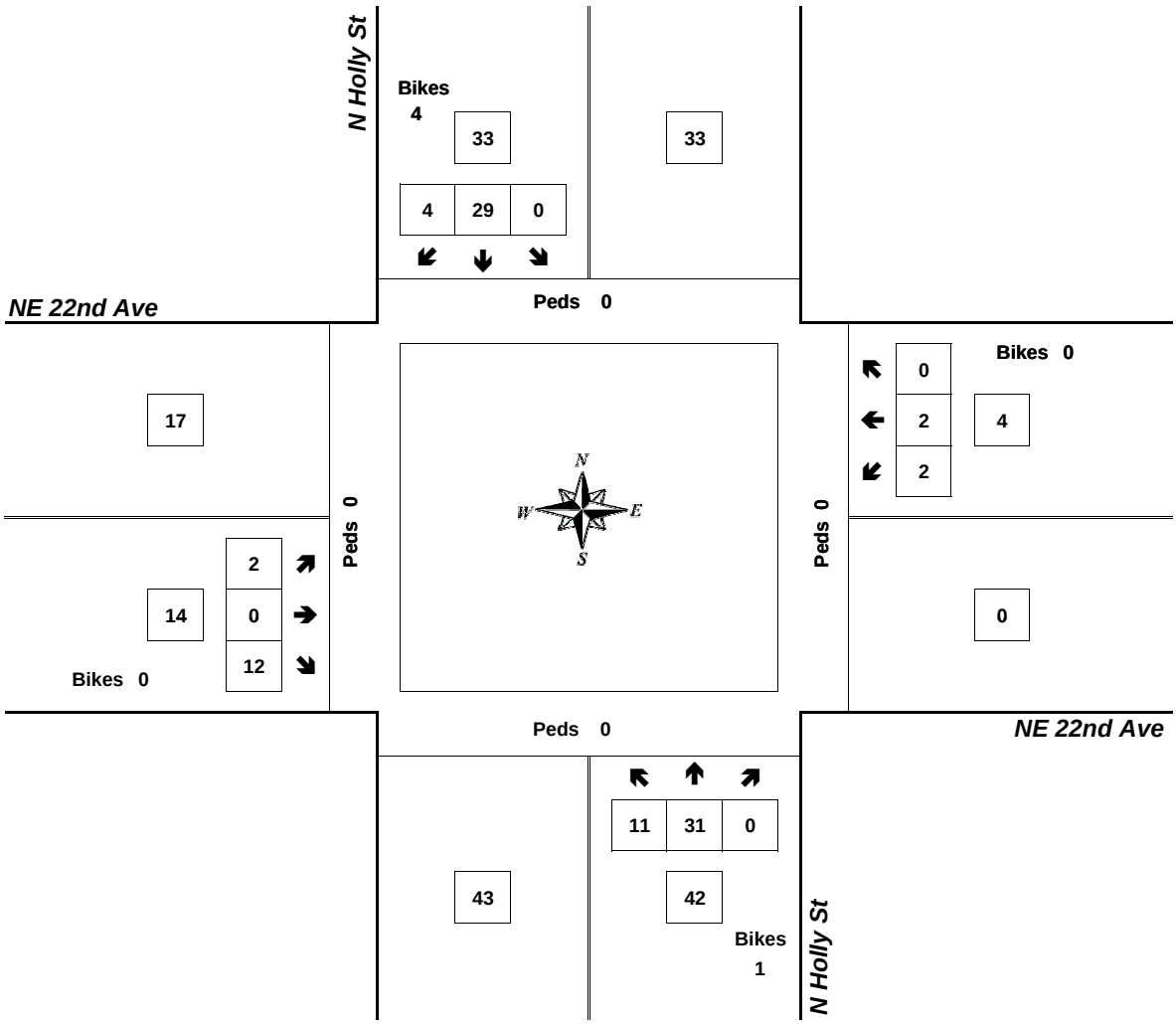
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Holly St & NE 22nd Ave

8:00 AM to 9:00 AM
Thursday, August 09, 2018

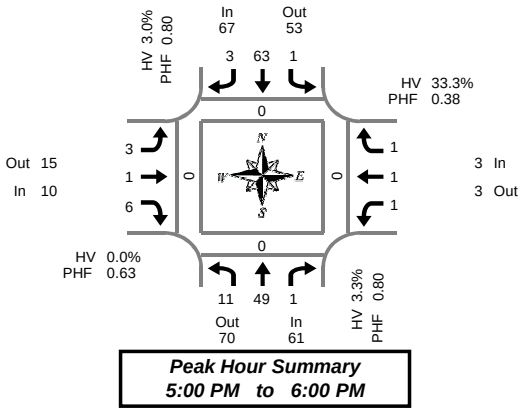


Approach	PHF	HV%	Volume
EB	0.50	7.1%	14
WB	0.50	0.0%	4
NB	0.62	2.4%	42
SB	0.75	9.1%	33
Intersection	0.75	5.4%	93

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
5:00 PM to 6:00 PM

N Holly St & NE 22nd Ave

Thursday, August 09, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	1	0	0	0	3	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0
4:05 PM	0	2	0	0	0	6	0	1	0	0	1	0	1	0	2	0	12	0	0	0	0
4:10 PM	0	4	0	0	0	1	0	0	0	0	1	0	0	1	0	0	7	0	0	0	0
4:15 PM	1	4	0	0	0	2	0	0	0	0	1	0	0	0	0	0	8	0	0	0	0
4:20 PM	3	2	0	0	0	10	0	0	1	0	0	2	0	0	0	0	16	0	0	0	0
4:25 PM	1	1	0	0	0	1	0	0	0	0	1	0	0	1	0	0	5	0	0	0	0
4:30 PM	3	2	0	0	0	5	1	1	0	1	2	0	0	0	0	0	14	0	0	0	2
4:35 PM	3	5	1	0	0	9	0	0	0	1	3	0	0	0	0	0	22	0	0	0	2
4:40 PM	1	0	1	0	0	9	0	0	2	0	2	0	0	0	0	0	15	0	0	0	0
4:45 PM	0	4	0	0	0	7	0	0	1	0	0	0	0	0	0	0	12	0	0	0	0
4:50 PM	1	0	0	0	0	3	0	1	0	0	1	0	0	0	0	0	5	0	0	0	0
4:55 PM	0	2	0	0	0	3	0	0	0	0	0	0	0	1	0	0	6	0	0	0	0
5:00 PM	0	3	0	0	1	5	0	1	1	0	1	0	0	0	0	0	11	0	0	0	0
5:05 PM	1	8	0	0	0	3	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0
5:10 PM	2	3	0	0	0	7	0	0	1	0	0	0	0	0	1	0	14	0	0	0	0
5:15 PM	1	1	0	0	0	2	1	1	0	0	0	0	1	0	0	0	6	0	0	0	0
5:20 PM	0	3	0	0	0	8	0	1	0	0	0	0	0	0	0	0	11	0	0	0	0
5:25 PM	1	4	0	0	0	2	0	0	0	0	0	0	0	1	0	0	8	0	0	0	0
5:30 PM	1	3	1	0	0	6	2	0	0	0	0	0	0	0	0	0	13	0	0	0	0
5:35 PM	0	4	0	0	0	6	0	0	1	0	2	0	0	0	0	0	13	0	0	0	0
5:40 PM	2	4	0	0	0	7	0	1	0	0	1	0	0	0	0	0	14	0	0	0	0
5:45 PM	0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0
5:50 PM	1	7	0	0	0	3	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0
5:55 PM	2	5	0	0	0	7	0	0	0	1	2	0	0	0	0	0	17	0	0	0	0
Total Survey	24	76	3	0	1	122	4	7	7	3	18	3	2	4	3	0	267	0	0	0	4

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	0	7	0	0	0	10	0	1	0	0	2	1	1	1	2	0	23	0	0	0	0
4:15 PM	5	7	0	0	0	13	0	0	1	0	2	2	0	1	0	0	29	0	0	0	0
4:30 PM	7	7	2	0	0	23	1	1	2	2	7	0	0	0	0	0	51	0	0	0	4
4:45 PM	1	6	0	0	0	13	0	1	1	0	1	0	0	1	0	0	23	0	0	0	0
5:00 PM	3	14	0	0	1	15	0	1	2	0	1	0	0	0	1	0	37	0	0	0	0
5:15 PM	2	8	0	0	0	12	1	2	0	0	0	0	1	1	0	0	25	0	0	0	0
5:30 PM	3	11	1	0	0	19	2	1	1	0	3	0	0	0	0	0	40	0	0	0	0
5:45 PM	3	16	0	0	0	17	0	0	0	1	2	0	0	0	0	0	39	0	0	0	0
Total Survey	24	76	3	0	1	122	4	7	7	3	18	3	2	4	3	0	267	0	0	0	4

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	61	70	131	0	67	53	120	4	10	15	25	0	3	3	6	0	141	0	0	0	0
%HV	3.3%				3.0%				0.0%				33.3%				3.5%				
PHF	0.80				0.80				0.63				0.38				0.88				

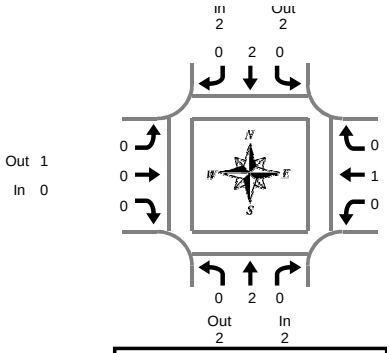
By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	11	49	1	61	1	63	3	67	3	1	6	10	1	1	1	3	141
%HV	0.0%	4.1%	0.0%	3.3%	0.0%	3.2%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	#####	0.0%	33.3%	3.5%
PHF	0.69	0.77	0.25	0.80	0.25	0.79	0.38	0.80	0.38	0.25	0.50	0.63	0.25	0.25	0.25	0.38	0.88

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	13	27	2	0	0	59	1	3	4	2	12	3	1	3	2	0	126	0	0	0	4
4:15 PM	16	34	2	0	1	64	1	3	6	2	11	2	0	2	1	0	140	0	0	0	4
4:30 PM	13	35	2	0	1	63	2	5	5	2	9	0	1	2	1	0	136	0	0	0	4
4:45 PM	9	39	1	0	1	59	3	5	4	0	5	0	1	2	1	0	125	0	0	0	0
5:00 PM	11	49	1	0	1	63	3	4	3	1	6	0	1	1	1	0	141	0	0	0	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



N Holly St & NE 22nd Ave

Thursday, August 09, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
5:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:40 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	2	0	2	0	3	0	3	1	0	0	1	0	1	2	3	9

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
5:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Survey	0	2	0	2	0	3	0	3	1	0	0	1	0	1	2	3	9

Heavy Vehicle Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound N Holly St			Southbound N Holly St			Eastbound NE 22nd Ave			Westbound NE 22nd Ave			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	2	2	4	2	2	4	0	1	1	1	0	1	5
PHF	0.50			0.50			0.00			0.25			0.42

By Movement	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	2	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
PHF	0.00	0.50	0.00	0.50	0.00	0.50	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.42

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound N Holly St				Southbound N Holly St				Eastbound NE 22nd Ave				Westbound NE 22nd Ave				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	2	2	4
4:15 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
4:30 PM	0	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1	4
4:45 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	1	0	1	4
5:00 PM	0	2	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5

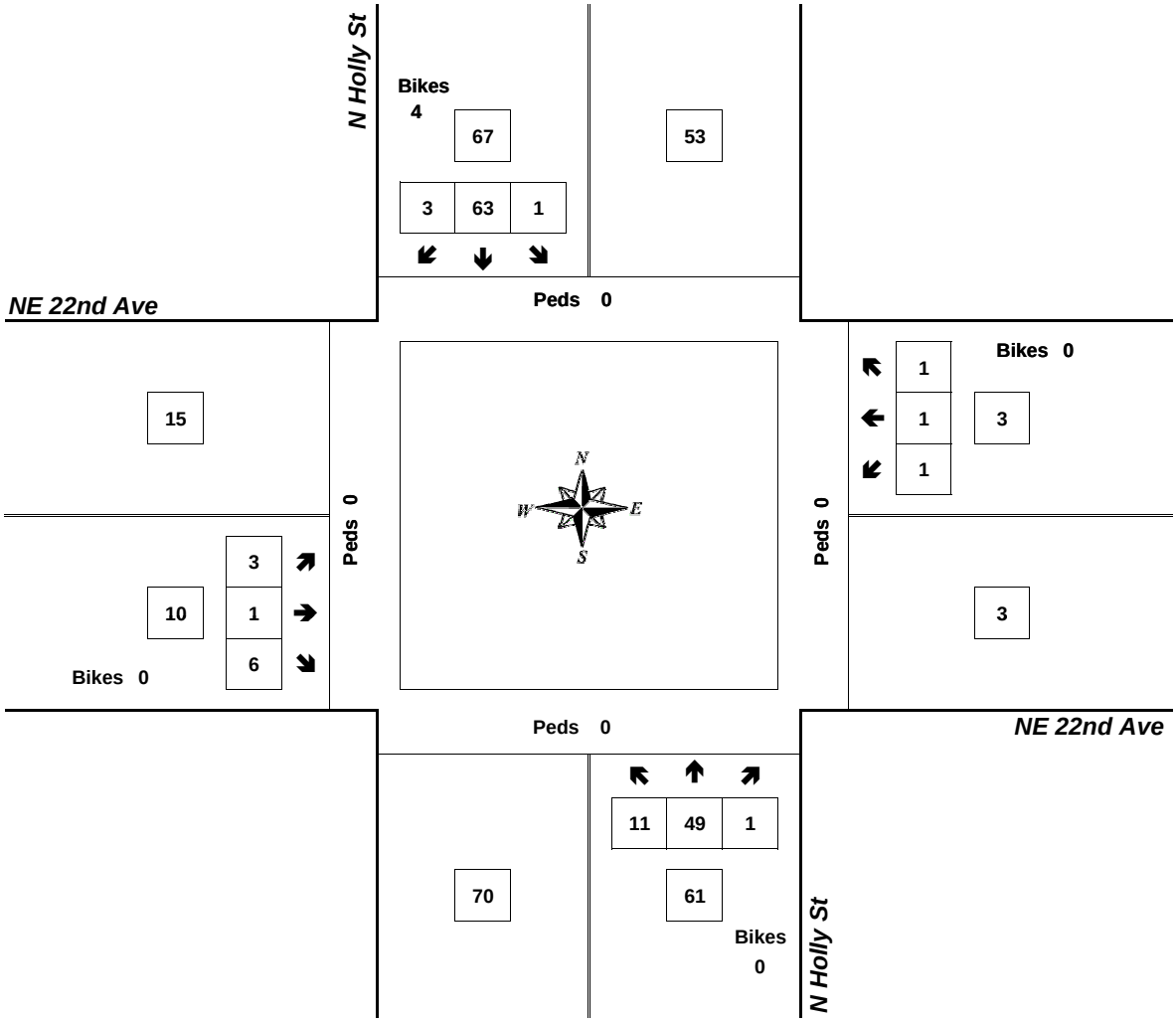
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

N Holly St & NE 22nd Ave

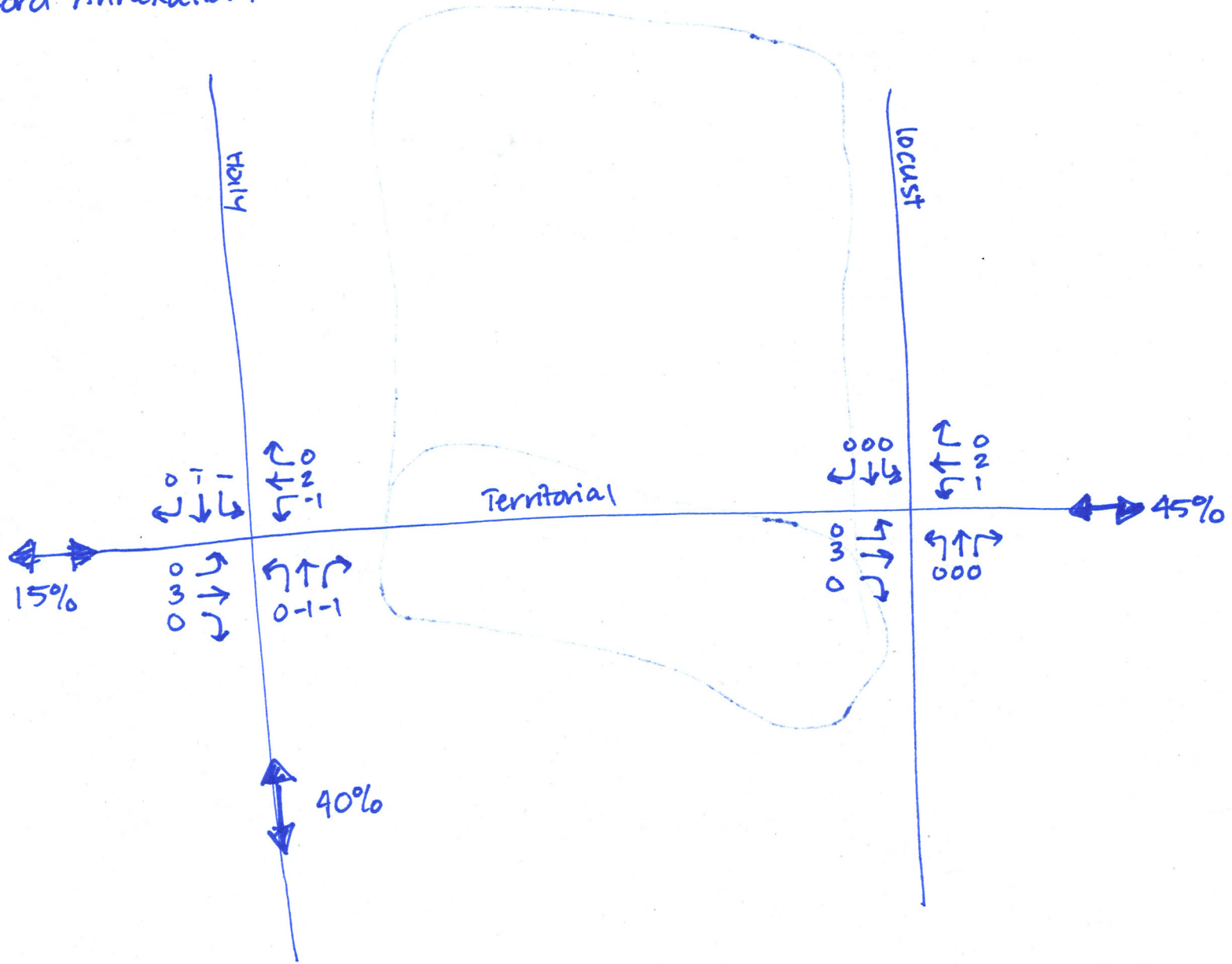
5:00 PM to 6:00 PM
Thursday, August 09, 2018



Approach	PHF	HV%	Volume
EB	0.63	0.0%	10
WB	0.38	33.3%	3
NB	0.80	3.3%	61
SB	0.80	3.0%	67
Intersection	0.88	3.5%	141

Count Period: 4:00 PM to 6:00 PM

School Trips and Trips Distribution from Canby Small Community Tool
Canby Stafford Annexation
DKS, 8/14/18



All Traffic Data
15105 SE 17th St.
Vancouver, WA. 98683
503-833-2740

Site Code: 1
Territorial Rd W-O Locust St

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
08/09/18	0	7	1	0	0	0	0	0	0	0	0	0	0	1	9
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	4	1	0	1	0	0	0	0	0	0	0	0	0	6
04:00	0	13	2	0	3	0	0	0	0	0	0	0	0	0	18
05:00	0	23	12	0	5	0	0	0	0	0	0	0	0	0	40
06:00	2	53	17	0	4	1	0	0	0	0	0	0	0	0	77
07:00	2	91	27	0	7	0	0	0	0	0	0	0	0	2	129
08:00	4	81	25	1	9	0	0	0	0	0	0	0	0	8	128
09:00	5	84	32	0	13	1	0	0	0	0	0	0	0	2	137
10:00	4	96	30	0	6	2	0	0	0	0	0	0	0	4	142
11:00	4	100	39	0	20	0	0	0	0	0	0	0	0	1	164
12 PM	2	144	22	2	5	0	0	0	0	0	0	0	0	8	183
13:00	8	139	33	1	12	1	0	1	1	0	0	0	0	8	204
14:00	5	166	32	0	13	2	0	0	0	0	0	0	0	3	221
15:00	3	176	36	0	15	0	0	1	0	0	0	0	0	2	233
16:00	9	202	48	0	15	1	0	0	0	0	0	0	0	6	281
17:00	4	188	36	0	17	1	0	0	0	0	0	0	0	8	254
18:00	4	161	32	0	7	0	0	0	0	0	0	0	0	1	205
19:00	3	105	17	0	5	0	0	0	0	0	0	0	0	1	131
20:00	1	101	11	0	5	0	0	0	0	0	0	0	0	2	120
21:00	2	70	11	0	2	0	0	0	1	0	0	0	0	0	86
22:00	0	38	7	0	3	0	0	0	0	0	0	0	0	0	48
23:00	0	18	0	0	1	0	0	0	0	0	0	0	0	0	19
Total	62	2068	472	4	168	9	0	2	2	0	0	0	0	57	2844
Percent	2.2%	72.7%	16.6%	0.1%	5.9%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	2.0%	
AM Peak	09:00	11:00	11:00	08:00	11:00	10:00								08:00	
Vol.	5	100	39	1	20	2								8	
PM Peak	16:00	16:00	16:00	12:00	17:00	14:00		13:00	13:00					12:00	
Vol.	9	202	48	2	17	2		1	1					8	
Grand Total	62	2068	472	4	168	9	0	2	2	0	0	0	0	57	2844
Percent	2.2%	72.7%	16.6%	0.1%	5.9%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	2.0%	

All Traffic Data
15105 SE 17th St.
Vancouver, WA. 98683
503-833-2740

Site Code: 1
Territorial Rd W-O Locust St

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classed	Total
08/09/18	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
01:00	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
02:00	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
03:00	0	8	0	0	1	0	0	0	0	0	0	0	0	0	9
04:00	0	13	4	0	2	0	0	0	0	0	0	0	0	0	19
05:00	4	47	15	0	7	1	0	0	0	0	0	0	0	0	74
06:00	1	83	31	0	14	0	0	0	0	0	0	0	0	0	129
07:00	3	90	25	0	12	1	0	1	0	0	0	0	0	4	136
08:00	0	99	31	1	11	0	0	0	1	0	0	0	0	3	146
09:00	1	128	34	0	22	1	0	0	0	0	0	0	0	4	190
10:00	2	75	43	1	13	2	0	1	0	0	0	0	0	5	142
11:00	5	118	38	0	20	1	0	1	2	0	0	0	0	1	186
12 PM	5	127	30	2	12	0	0	0	0	0	0	0	0	8	184
13:00	3	118	35	2	10	1	0	0	0	0	0	0	0	8	177
14:00	2	164	46	0	14	1	0	1	1	0	0	0	0	9	238
15:00	1	140	39	1	15	0	0	1	0	0	0	0	0	5	202
16:00	6	132	34	0	33	0	0	0	0	0	0	0	0	14	219
17:00	2	141	38	0	10	0	0	0	0	0	0	0	0	11	202
18:00	0	119	34	0	9	0	0	0	0	0	0	0	0	3	165
19:00	1	76	29	0	4	0	0	0	1	0	0	0	0	1	112
20:00	2	70	24	0	5	0	0	0	0	0	0	0	0	2	103
21:00	1	54	9	0	3	0	0	0	0	0	0	0	0	0	67
22:00	0	25	8	0	0	0	0	0	0	0	0	0	0	0	33
23:00	0	24	4	0	2	0	0	0	0	0	0	0	0	0	30
Total	39	1863	555	7	221	8	0	5	5	0	0	0	0	78	2781
Percent	1.4%	67.0%	20.0%	0.3%	7.9%	0.3%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	2.8%	
AM Peak	11:00	09:00	10:00	08:00	09:00	10:00		07:00	11:00					10:00	
Vol.	5	128	43	1	22	2		1	2					5	
PM Peak	16:00	14:00	14:00	12:00	16:00	13:00		14:00	14:00					16:00	
Vol.	6	164	46	2	33	1		1	1					14	
Grand Total	39	1863	555	7	221	8	0	5	5	0	0	0	0	78	2781
Percent	1.4%	67.0%	20.0%	0.3%	7.9%	0.3%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	2.8%	

All Traffic Data
15105 SE 17th St.
Vancouver, WA. 98683
503-833-2740

Site Code: 1
Territorial Rd W-O Locust St

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
08/09/18	1	0	2	5	1	0	0	0	0	0	0	0	0	0	9	29	32
01:00	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7	29	29
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	34	34
03:00	0	0	2	3	1	0	0	0	0	0	0	0	0	0	6	30	33
04:00	0	0	0	10	7	1	0	0	0	0	0	0	0	0	18	33	35
05:00	0	0	4	17	17	2	0	0	0	0	0	0	0	0	40	33	35
06:00	0	1	4	28	35	9	0	0	0	0	0	0	0	0	77	34	37
07:00	2	1	12	**76**	34	3	1	0	0	0	0	0	0	0	129	32	34
08:00	**8**	**3**	15	60	30	11	1	0	0	0	0	0	0	0	128	33	37
09:00	2	3	**25**	55	42	8	**2**	0	0	0	0	0	0	0	137	33	36
10:00	5	0	17	71	36	12	1	0	0	0	0	0	0	0	142	33	37
11:00	2	0	17	48	**80**	**16**	1	0	0	0	0	0	0	0	**164**	34	37
12 PM	**9**	2	31	91	44	6	0	0	0	0	0	0	0	0	183	32	34
13:00	8	**4**	**37**	91	56	8	0	0	0	0	0	0	0	0	204	32	34
14:00	3	0	23	**118**	68	9	0	0	0	0	0	0	0	0	221	33	34
15:00	3	0	18	90	95	24	**3**	0	0	0	0	0	0	0	233	34	38
16:00	8	1	15	112	**124**	18	3	0	0	0	0	0	0	0	**281**	34	36
17:00	8	1	14	109	92	**27**	3	0	0	0	0	0	0	0	254	34	38
18:00	2	0	15	84	91	12	1	0	0	0	0	0	0	0	205	34	36
19:00	2	0	24	56	41	4	3	**1**	0	0	0	0	0	0	131	33	36
20:00	3	1	18	68	28	2	0	0	0	0	0	0	0	0	120	32	34
21:00	0	0	10	51	25	0	0	0	0	0	0	0	0	0	86	32	34
22:00	0	0	7	25	12	2	2	0	0	0	0	0	0	0	48	33	39
23:00	0	0	1	13	5	0	0	0	0	0	0	0	0	0	19	32	34
Total	66	17	311	1288	966	174	21	1	0	0	0	0	0	0	2844		
Percent	2.3%	0.6%	10.9%	45.3%	34.0%	6.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	09:00	07:00	11:00	11:00	09:00								11:00		
Vol.	8	3	25	76	80	16	2								164		
PM Peak	12:00	13:00	13:00	14:00	16:00	17:00	15:00	19:00							16:00		
Vol.	9	4	37	118	124	27	3	1							281		
Grand Total	66	17	311	1288	966	174	21	1	0	0	0	0	0	0	2844		
Percent	2.3%	0.6%	10.9%	45.3%	34.0%	6.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	25 MPH
50th Percentile :	28 MPH
85th Percentile :	33 MPH
95th Percentile :	36 MPH

Statistics

10 MPH Pace Speed :	26-35 MPH
Number in Pace :	2254
Percent in Pace :	79.3%
Number of Vehicles > 55 MPH :	0
Percent of Vehicles > 55 MPH :	0.0%
Mean Speed(Average) :	29 MPH

All Traffic Data
15105 SE 17th St.
Vancouver, WA. 98683
503-833-2740

Site Code: 1
Territorial Rd W-O Locust St

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
08/09/18	0	0	0	5	3	0	0	0	0	0	0	0	0	0	8	33	34
01:00	0	0	0	3	2	0	1	0	0	0	0	0	0	0	6	40	43
02:00	0	0	0	1	2	1	0	0	0	0	0	0	0	0	4	37	39
03:00	0	0	0	2	6	1	0	0	0	0	0	0	0	0	9	34	37
04:00	0	**1**	2	4	9	2	0	**1**	0	0	0	0	0	0	19	35	45
05:00	0	1	3	20	28	18	3	1	0	0	0	0	0	0	74	38	40
06:00	0	0	4	24	72	27	1	1	0	0	0	0	0	0	129	36	39
07:00	4	1	7	33	67	21	3	0	0	0	0	0	0	0	136	35	39
08:00	3	1	**14**	**55**	61	11	1	0	0	0	0	0	0	0	146	34	37
09:00	4	1	9	55	95	25	1	0	0	0	0	0	0	0	**190**	34	38
10:00	**5**	0	13	39	60	23	1	1	0	0	0	0	0	0	142	35	38
11:00	1	0	11	39	**99**	**30**	**6**	0	0	0	0	0	0	0	186	36	39
12 PM	8	**2**	7	**79**	62	22	4	0	0	0	0	0	0	0	184	34	38
13:00	8	0	**11**	55	77	26	0	0	0	0	0	0	0	0	177	34	38
14:00	9	1	10	68	**128**	19	3	0	0	0	0	0	0	0	**238**	34	37
15:00	5	1	4	51	98	**37**	**5**	0	0	0	**1**	0	0	0	202	36	39
16:00	**16**	1	11	58	109	19	4	1	0	0	0	0	0	0	219	34	38
17:00	11	0	6	56	101	25	1	**2**	0	0	0	0	0	0	202	34	38
18:00	3	0	7	39	87	26	3	0	0	0	0	0	0	0	165	35	38
19:00	1	1	6	38	54	10	2	0	0	0	0	0	0	0	112	34	38
20:00	3	0	7	35	46	9	3	0	0	0	0	0	0	0	103	34	38
21:00	0	1	5	23	21	15	2	0	0	0	0	0	0	0	67	37	39
22:00	0	0	3	14	11	4	1	0	0	0	0	0	0	0	33	35	39
23:00	0	0	1	12	15	0	1	1	0	0	0	0	0	0	30	34	42
Total	81	12	141	808	1313	371	46	8	0	0	1	0	0	0	2781		
Percent	2.9%	0.4%	5.1%	29.1%	47.2%	13.3%	1.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	04:00	08:00	08:00	11:00	11:00	11:00	04:00							09:00		
Vol.	5	1	14	55	99	30	6	1							190		
PM Peak	16:00	12:00	13:00	12:00	14:00	15:00	15:00	17:00			15:00				14:00		
Vol.	16	2	11	79	128	37	5	2			1				238		
Grand Total	81	12	141	808	1313	371	46	8	0	0	1	0	0	0	2781		
Percent	2.9%	0.4%	5.1%	29.1%	47.2%	13.3%	1.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	26 MPH
	50th Percentile :	31 MPH
	85th Percentile :	35 MPH
	95th Percentile :	38 MPH
Statistics	10 MPH Pace Speed :	26-35 MPH
	Number in Pace :	2121
	Percent in Pace :	76.3%
	Number of Vehicles > 55 MPH :	1
	Percent of Vehicles > 55 MPH :	0.0%
	Mean Speed(Average) :	31 MPH

TRIP GENERATION CALCULATIONS
Proposed Conditions

Land Use: Single-Family Detached Housing
Land Use Code: 210
Setting/Location General Urban/Suburban
Variable: Dwelling Units
Variable Value: 240

AM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	**45**	**133**	**178**

PM PEAK HOUR

Trip Rate: 0.99

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	**150**	**88**	**238**

WEEKDAY

Trip Rate: 9.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**1,133**	**1,133**	**2,266**

SATURDAY

Trip Rate: 9.54

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**1,145**	**1,145**	**2,290**

Source: Trip Generation Manual, Tenth Edition

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

TERRITORIAL RD at HOLLY ST, City of Canby, Clackamas County, 01/01/2012 to 12/31/2016

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2016														
ANGLE	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR 2016 TOTAL	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**
YEAR: 2014														
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	0	1	1	0	0
YEAR 2014 TOTAL	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
YEAR: 2013														
ANGLE	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR 2013 TOTAL	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**
YEAR: 2012														
REAR-END	0	1	0	1	0	1	0	0	1	0	1	1	0	0
YEAR 2012 TOTAL	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**0**
FINAL TOTAL	**0**	**2**	**2**	**4**	**0**	**2**	**0**	**3**	**1**	**2**	**2**	**4**	**0**	**0**

CITY OF CANBY, CLACKAMAS COUNTY **TERRITORIAL RD at HOLLY ST, City of Canby, Clackamas County, 01/01/2012 to 12/31/2016**

1 - 4 of 4 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	R U G S	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
02235	N	Y	N	N	N	06/22/2012	16	NW HOLLY ST	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											07
CITY						FR	0	NE TERRITORIAL RD	UN		STOP SIGN	N	WET	REAR		PRVTE	UN-UN									000		00
N						9P			06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	37	F	SUSP		026,043	000		07
N						45 16 30.9428157	-122 41 49.1990836																OR<25					
															02	NONE 0	STOP											
																PRVTE	UN-UN									011		00
																PSNGR CAR		01	DRVR	INJC	40	M	OR-Y		000	000		00
																							OR<25					
00788	N	N	N			03/07/2013	16	NW HOLLY ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
NONE						TH	0	NE TERRITORIAL RD	CN		STOP SIGN	N	DRY	ANGL		PRVTE	SW-NE									015		00
N						7A			01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	62	F	OR-Y		028	026		02
N						45 16 30.9973439	-122 41 49.291656																OR<25					
															02	NONE 0	STRGHT											
																PRVTE	N -S									015		00
																PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																							OR<25					
00788	N	N	N			03/07/2014	16	NW HOLLY ST	INTER	CROSS	N	N	CLR	BIKE													110	03
CITY						FR	0	NE TERRITORIAL RD	CN		STOP SIGN	N	DRY	TURN			-											
N						5P			02	0		N	DUSK	INJ			STRGHT	01	BIKE	INJB	54	M		I INRD	021	034		03
N						45 16 30.9973439	-122 41 49.291656										S N											
															01	NONE 0	STRGHT											
																PRVTE	NE-SW									015		00
																PSNGR CAR		01	DRVR	NONE	49	F	OR-Y		000	000		00
																							OR<25					
00637	N	N	N			02/08/2016	16	NW HOLLY ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT											02
NO RPT						MO	0	NE TERRITORIAL RD	CN		STOP SIGN	N	DRY	ANGL		N/A	NE-SW									015		00
N						7A			01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N						45 16 31	-122 41 49.29																UNK					
															02	NONE 9	STRGHT											
																N/A	S -N									015		00
																PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																							UNK					

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

TERRITORIAL RD at LOCUST ST, City of Canby, Clackamas County, 01/01/2012 to 12/31/2016

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2015														
ANGLE	0	1	1	2	0	1	0	1	1	1	1	2	0	0
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR 2015 TOTAL	**0**	**1**	**2**	**3**	**0**	**1**	**0**	**2**	**1**	**2**	**1**	**3**	**0**	**0**
YEAR: 2013														
ANGLE	0	1	0	1	0	1	0	0	0	1	0	1	0	0
YEAR 2013 TOTAL	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**
YEAR: 2012														
REAR-END	0	1	0	1	0	2	0	1	0	1	0	1	0	0
YEAR 2012 TOTAL	**0**	**1**	**0**	**1**	**0**	**2**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**
FINAL TOTAL	**0**	**3**	**2**	**5**	**0**	**4**	**0**	**3**	**1**	**4**	**1**	**5**	**0**	**0**

CITY OF CANBY, CLACKAMAS COUNTY **TERRITORIAL RD at LOCUST ST, City of Canby, Clackamas County, 01/01/2012 to 12/31/2016**

1 - 4 of 5 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D / A L C / R S H / S L / W O R / K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04931	N N N	11/20/2015	16	NE LOCUST ST	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE		FR	0	NE TERRITORIAL RD	NE		UNKNOWN	N	DRY	REAR		PRVTE	NE-SW									000		00
N		3P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	57	F	OR-Y		026	000		29
N		45 16 33.69	-122 41 30.78																OR<25					
											02	NONE 0	STOP											
												PRVTE	NE-SW									011		00
												PSNGR CAR		01	DRVR	NONE	50	F	OR-Y		000	000		00
																			OR<25					
01665	N N N N N	05/07/2012	16	NE LOCUST ST	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	07
COUNTY		MO	0	NE TERRITORIAL RD	E		UNKNOWN	N	DRY	REAR		PRVTE	E -W									000		00
N		12P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	65	M	OR-Y		043,026	000		07
N		45 16 33.6262505	-122 41 30.7583797																OR<25					
											02	NONE 0	STOP											
												PRVTE	E -W									011	013	00
												PSNGR CAR		01	DRVR	INJC	19	M	OR-Y		000	000		00
																			OR<25					
											03	NONE 0	STOP											
												PRVTE	E -W									022		00
												PSNGR CAR		01	DRVR	NONE	50	F	OR-Y		000	000		00
																			OR<25					
00885	N N N	03/16/2013	16	NE LOCUST ST	INTER	CROSS	N	N	UNK	ANGL-OTH	01	NONE 0	STRGHT											02
NONE		SA	0	NE TERRITORIAL RD	CN		STOP SIGN	N	UNK	ANGL		PRVTE	SW-NE									000		00
N		6P			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	40	F	OR-Y		000	000		00
N		45 16 33.6930959	-122 41 30.781572																OR<25					
											02	NONE 0	STRGHT											
												PRVTE	S -N									015		00
												PSNGR CAR		01	DRVR	INJC	17	M	OR-Y		028	000		02
																			OR<25					
01814	N N N N N	05/13/2015	16	NE LOCUST ST	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 0	STRGHT											02
CITY		WE	0	NE TERRITORIAL RD	CN		STOP SIGN	N	WET	ANGL		PRVTE	S -N									015		00
N		8P			02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	17	M	OR-Y		028	000		02
N		45 16 33.69	-122 41 30.78																OR<25					
											02	NONE 0	STRGHT											
												PRVTE	NE-SW									000		00
												PSNGR CAR		01	DRVR	INJB	48	M	OR-Y		000	000		00
																			OR<25					
05086	N N N N N	12/01/2015	16	NE LOCUST ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										082	02
CITY		TU	0	NE TERRITORIAL RD	CN		STOP SIGN	N	DRY	ANGL		PRVTE	N -S									015		00
N		11A			03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	84	F	OR-Y		028	000	082	02
N		45 16 33.69	-122 41 30.78																OR<25					

CITY OF CANBY, CLACKAMAS COUNTY **TERRITORIAL RD at LOCUST ST, City of Canby, Clackamas County, 01/01/2012 to 12/31/2016**

5 - 5 of 5 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	R U G S	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
															02	NONE 0	STRGHT									000		00
																PRVTE	W -E											
																PSNGR CAR		01	DRVR	NONE	38	F	OR-Y OR<25		000	000		00

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 2. NE Territorial Road at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (EB)

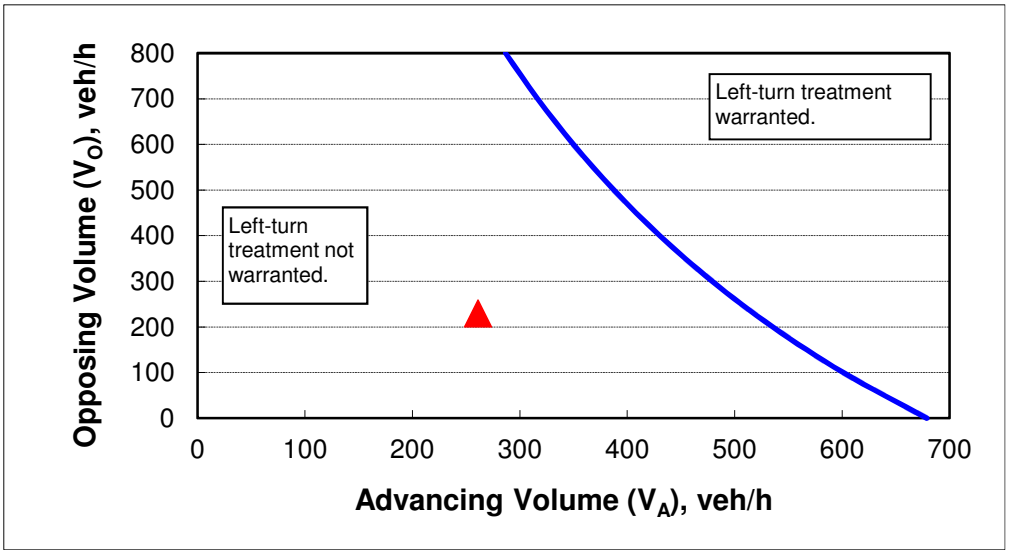
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	8%
Advancing volume (V_A), veh/h:	261
Opposing volume (V_O), veh/h:	229

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	518
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 2. NE Territorial Road at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (WB)

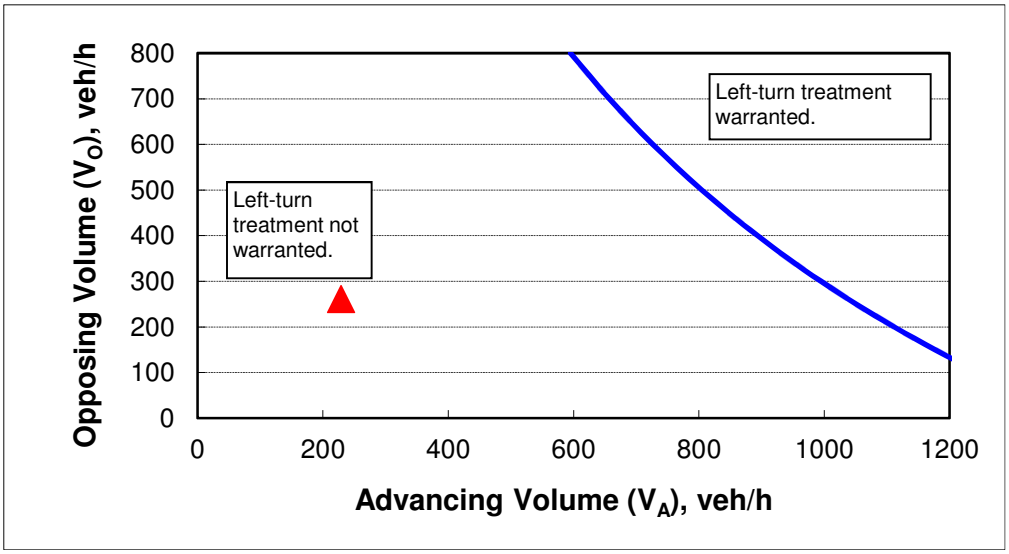
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	2%
Advancing volume (V_A), veh/h:	229
Opposing volume (V_O), veh/h:	261

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1038
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 2. NE Territorial Road at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon w/o Annexation - PM Peak Hour (EB)

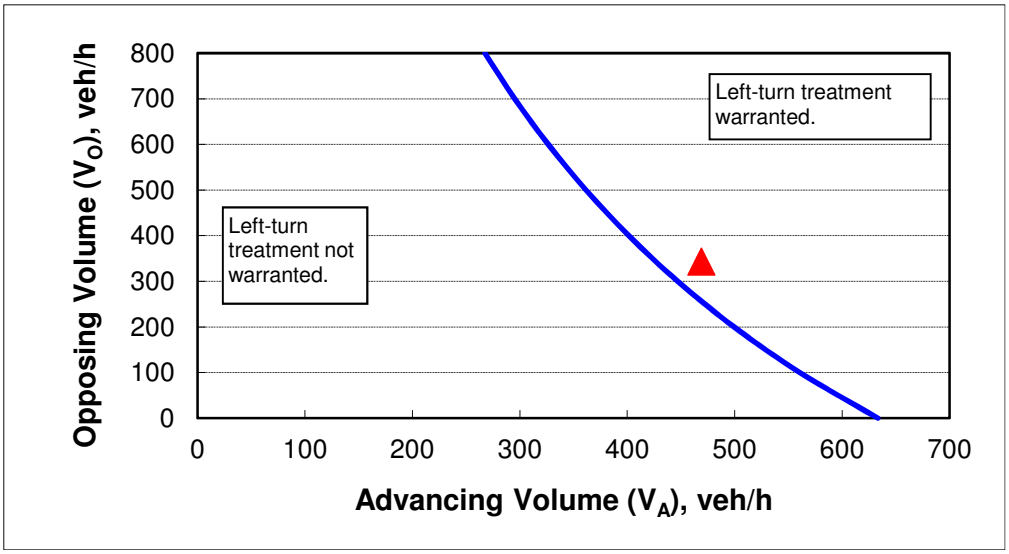
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	9%
Advancing volume (V_A), veh/h:	469
Opposing volume (V_O), veh/h:	343

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	427
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 2. NE Territorial Road at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (WB)

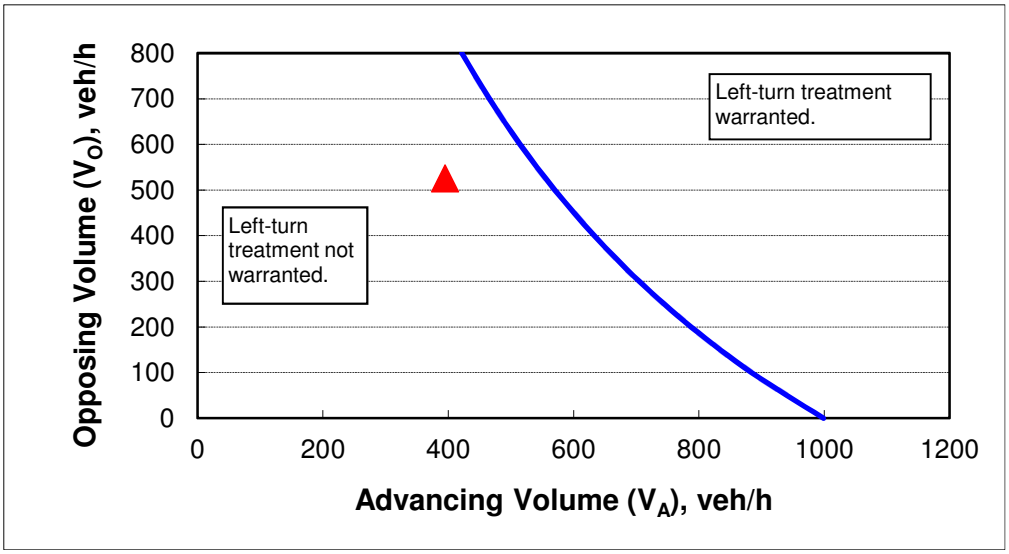
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	4%
Advancing volume (V_A), veh/h:	395
Opposing volume (V_O), veh/h:	525

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	556
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 3. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour

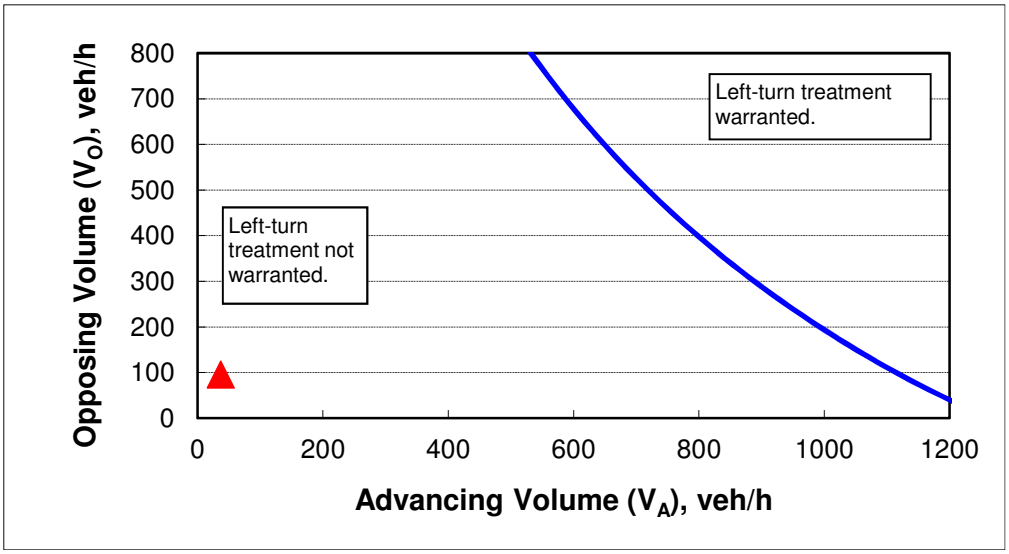
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	37
Opposing volume (V_O), veh/h:	95

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1121
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 3. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour

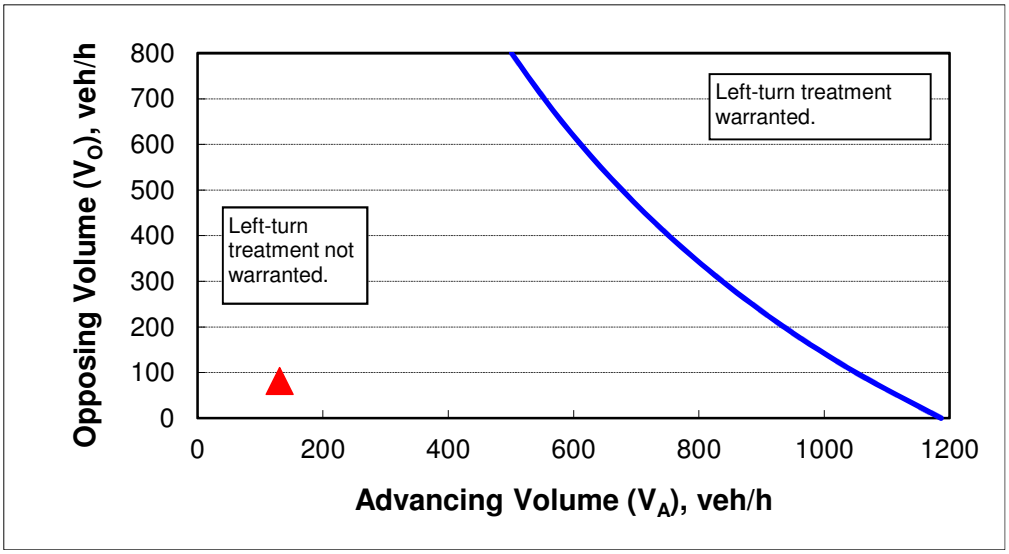
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	131
Opposing volume (V_O), veh/h:	81

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1075
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 4. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour

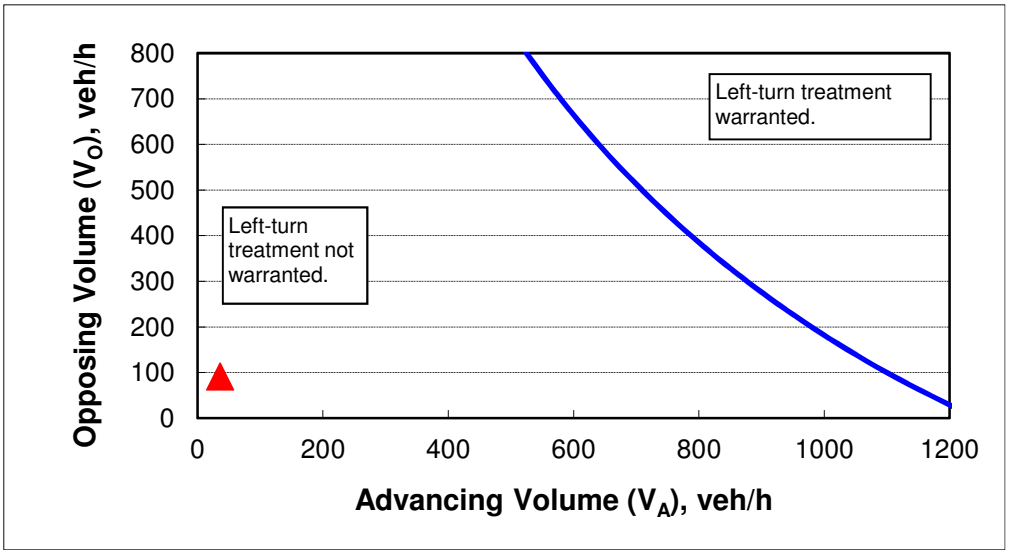
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	36
Opposing volume (V_O), veh/h:	91

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1112
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 4. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour

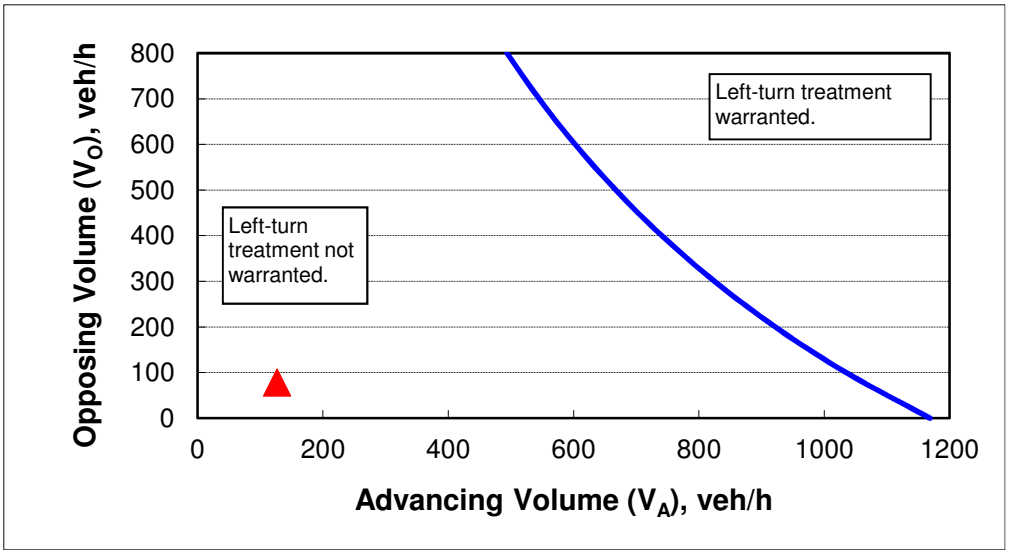
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	127
Opposing volume (V_O), veh/h:	78

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1062
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 5. NE 19th Avenue at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (NB)

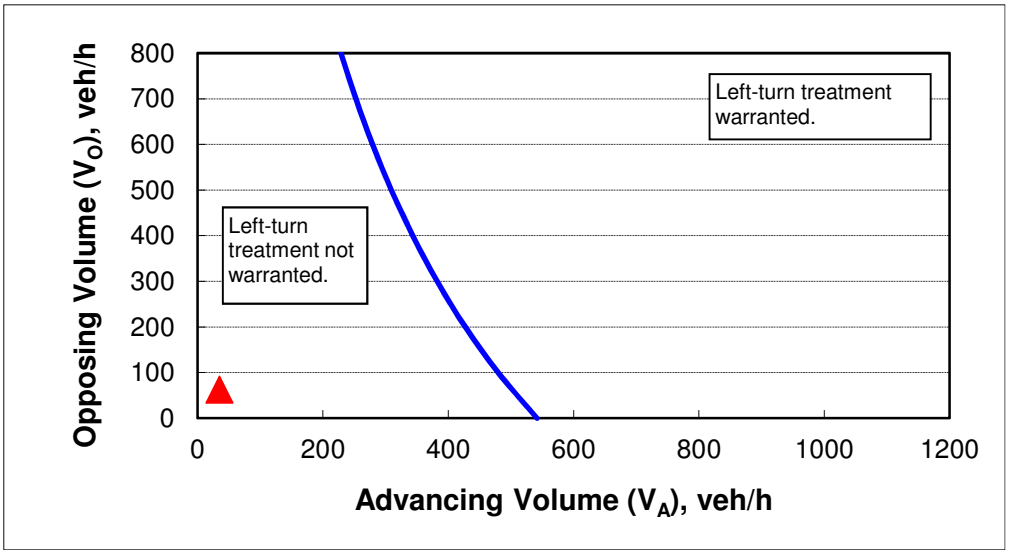
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	17%
Advancing volume (V_A), veh/h:	35
Opposing volume (V_O), veh/h:	62

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	502
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 5. NE 19th Avenue at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (SB)

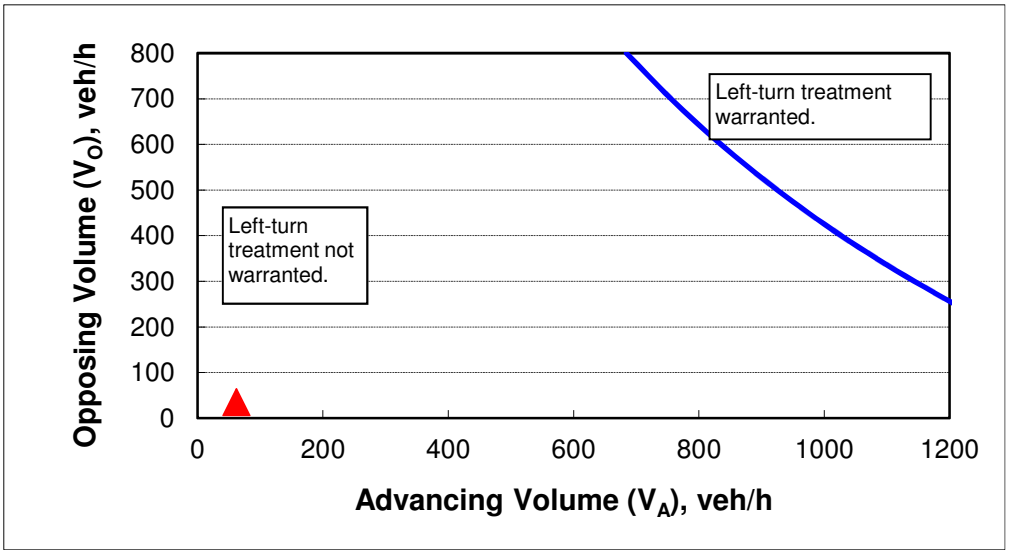
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	2%
Advancing volume (V_A), veh/h:	62
Opposing volume (V_O), veh/h:	35

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1552
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 5. NE 19th Avenue at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (NB)

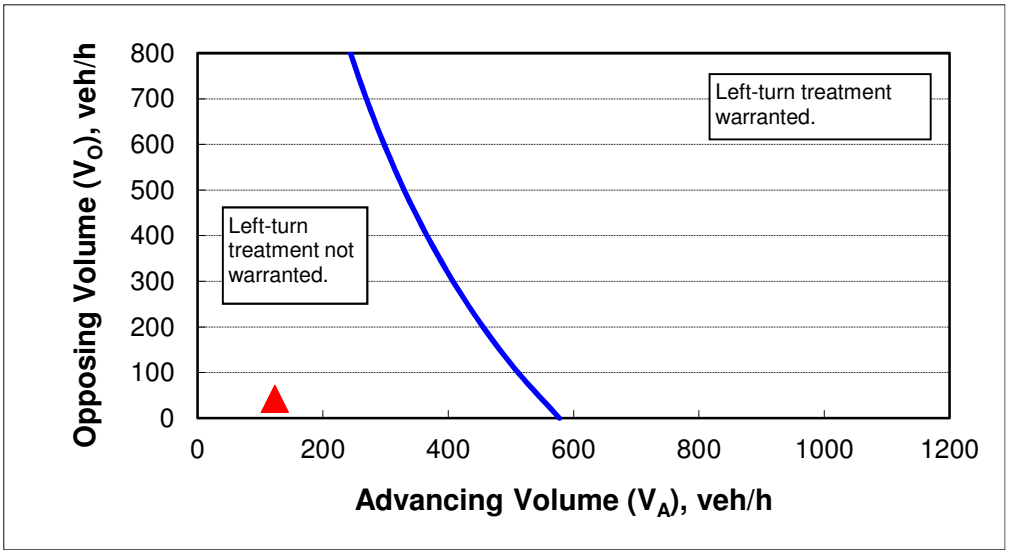
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	15%
Advancing volume (V_A), veh/h:	123
Opposing volume (V_O), veh/h:	42

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	548
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 5. NE 19th Avenue at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (SB)

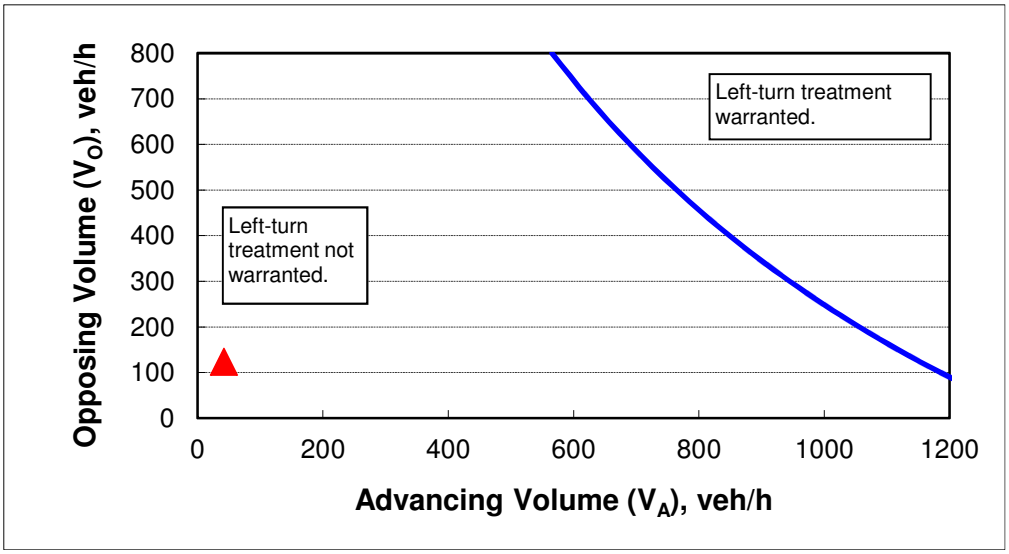
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	2%
Advancing volume (V_A), veh/h:	42
Opposing volume (V_O), veh/h:	123

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1154
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 6. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour

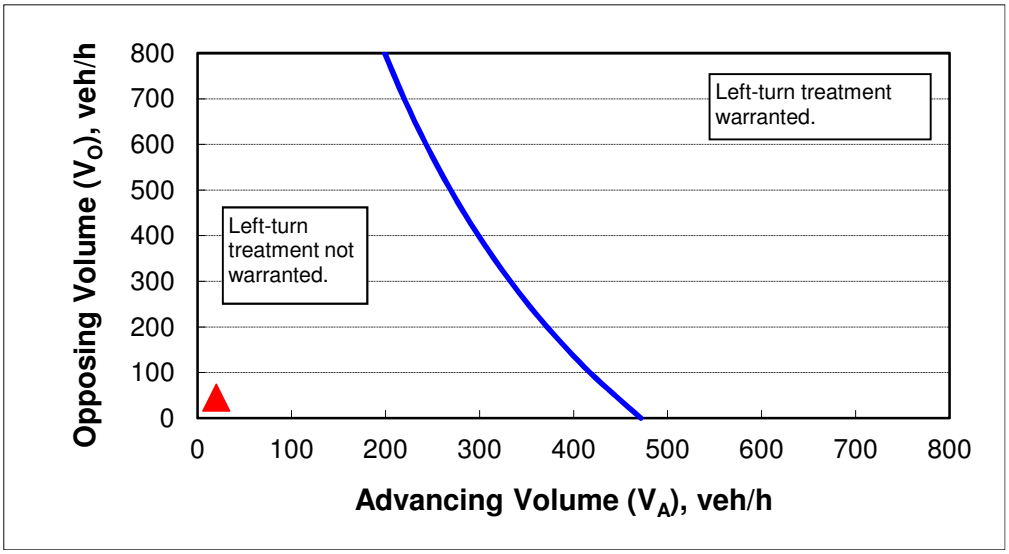
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	25%
Advancing volume (V_A), veh/h:	20
Opposing volume (V_O), veh/h:	45

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	446
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 6. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour

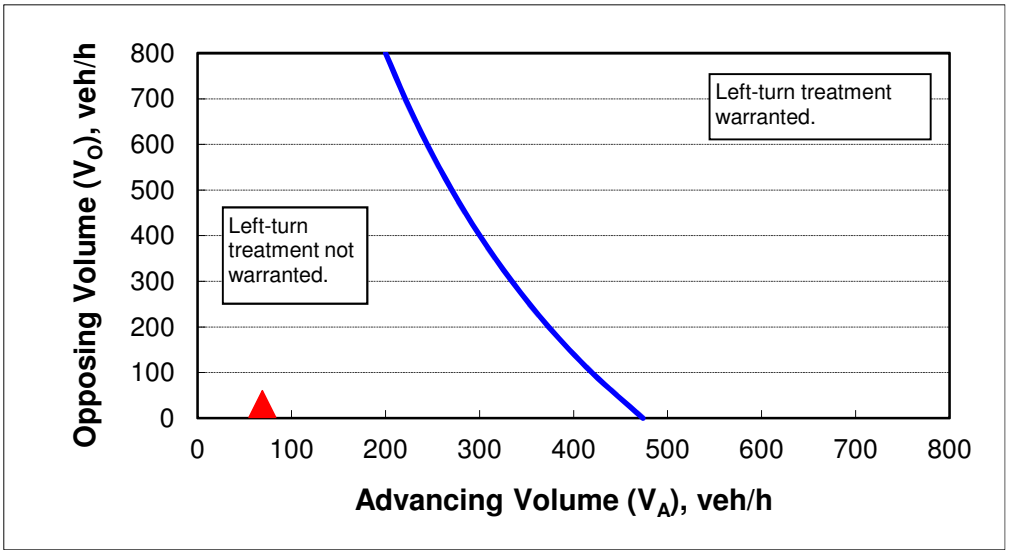
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	25%
Advancing volume (V_A), veh/h:	69
Opposing volume (V_O), veh/h:	31

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	456
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 12. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (NB)

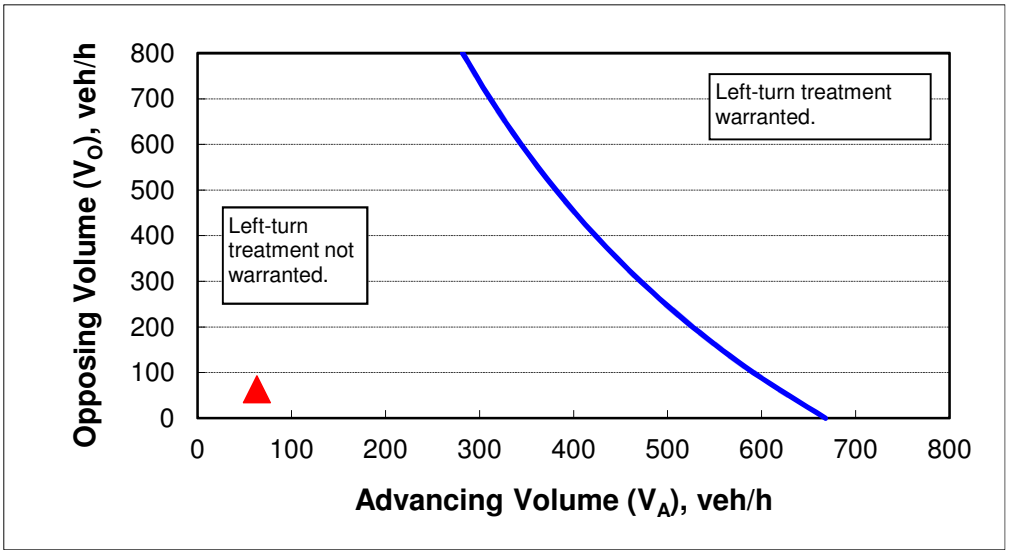
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	6%
Advancing volume (V_A), veh/h:	63
Opposing volume (V_O), veh/h:	63

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	618
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 12. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (SB)

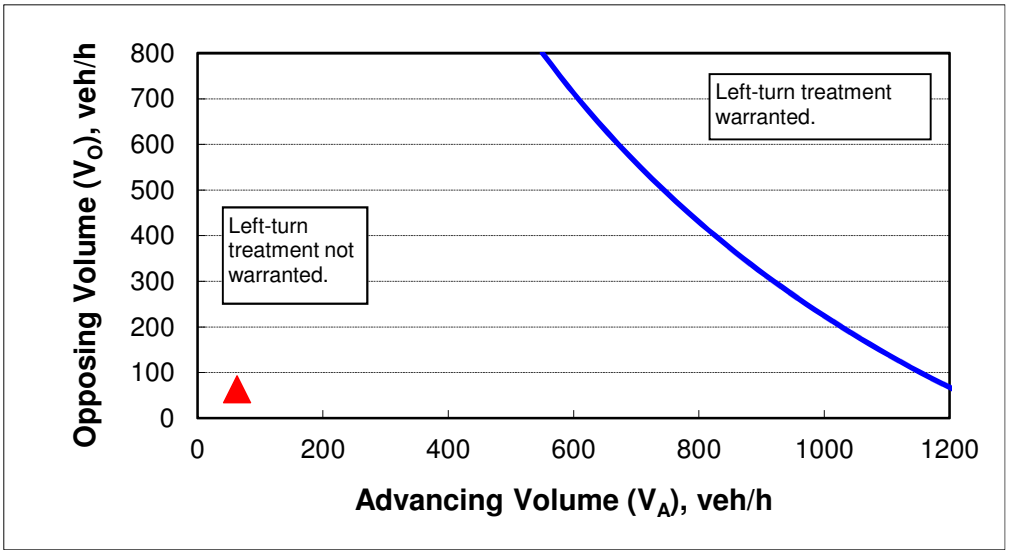
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	2%
Advancing volume (V_A), veh/h:	63
Opposing volume (V_O), veh/h:	63

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1206
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 12. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (NB)

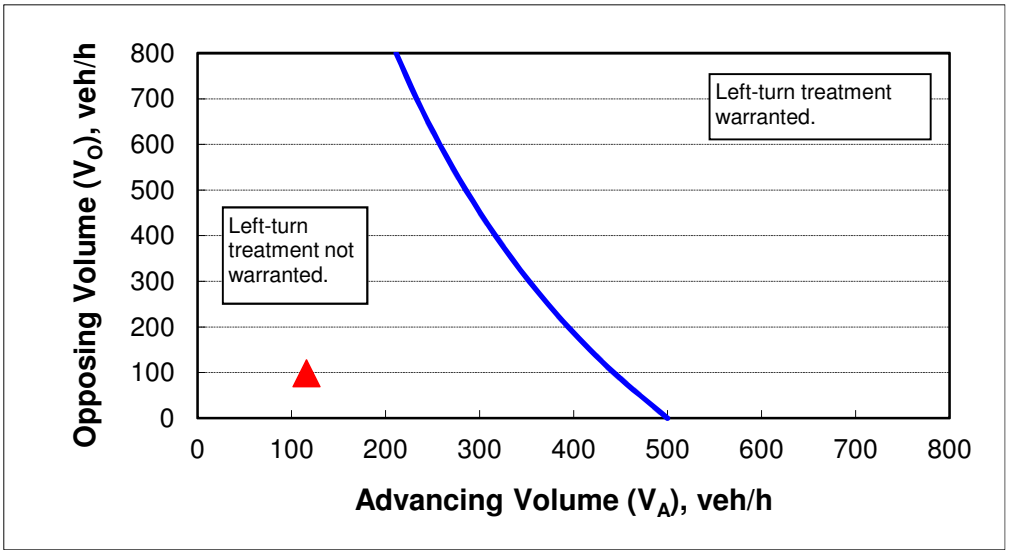
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	12%
Advancing volume (V_A), veh/h:	116
Opposing volume (V_O), veh/h:	98

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	444
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 12. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (SB)

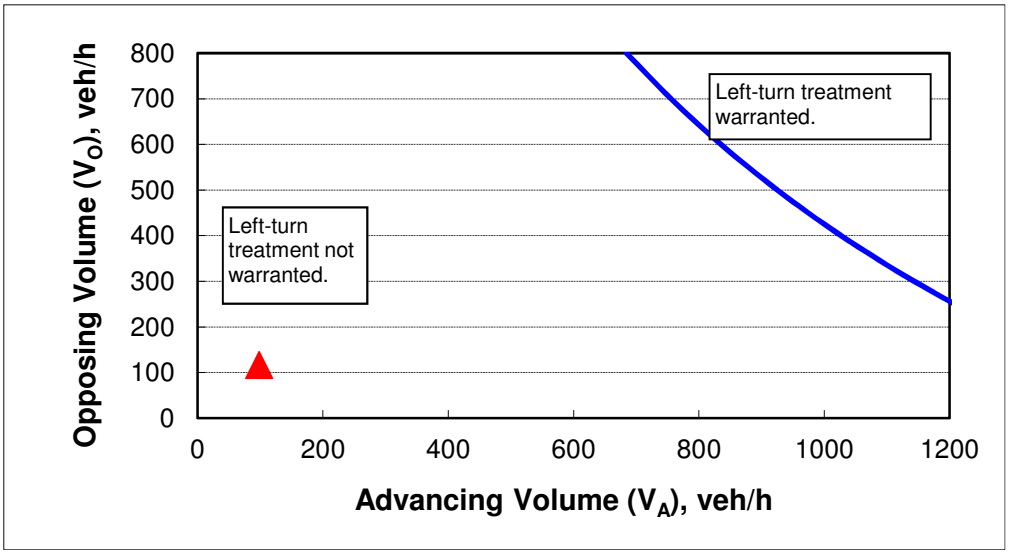
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	98
Opposing volume (V_O), veh/h:	116

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1408
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 13. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (NB)

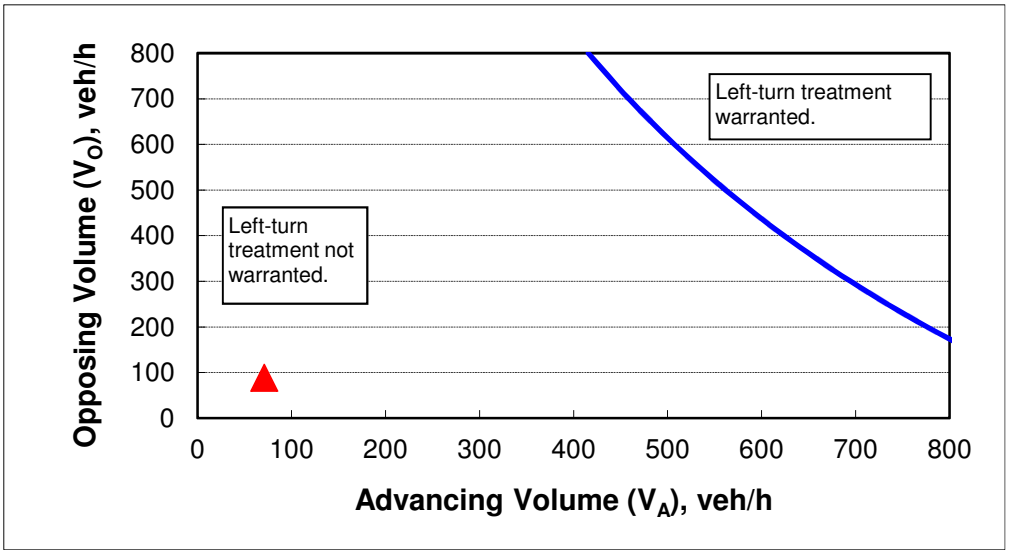
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	71
Opposing volume (V_O), veh/h:	88

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	884
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 13. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (SB)

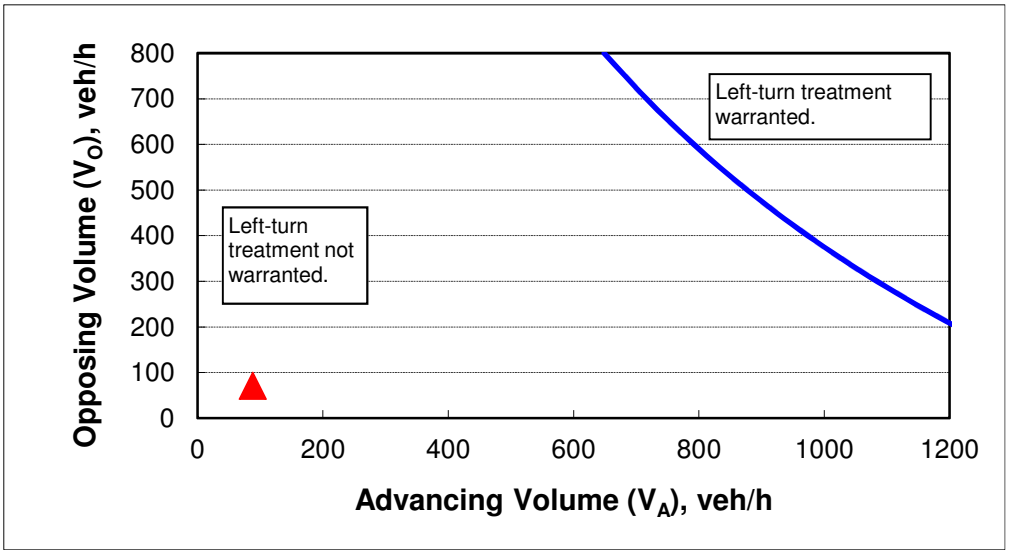
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	88
Opposing volume (V_O), veh/h:	71

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1408
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 13. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (NB)

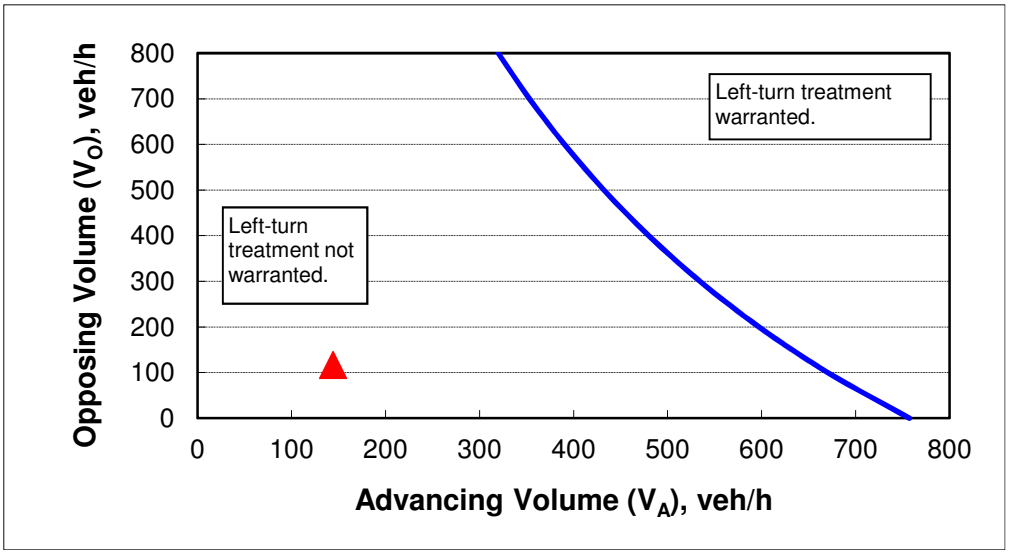
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	5%
Advancing volume (V_A), veh/h:	144
Opposing volume (V_O), veh/h:	116

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	658
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 13. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (SB)

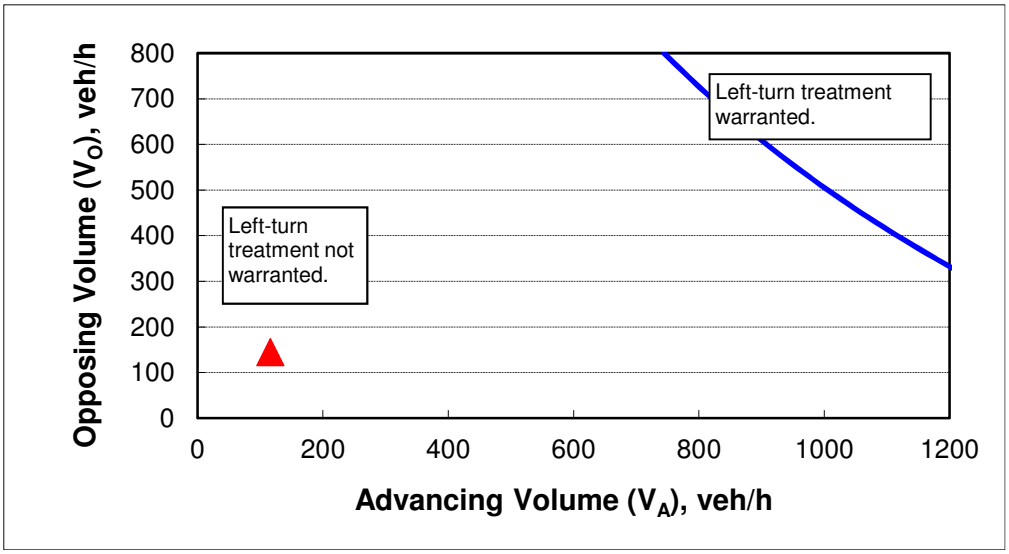
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	116
Opposing volume (V_O), veh/h:	144

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1481
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 14. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour (SB)

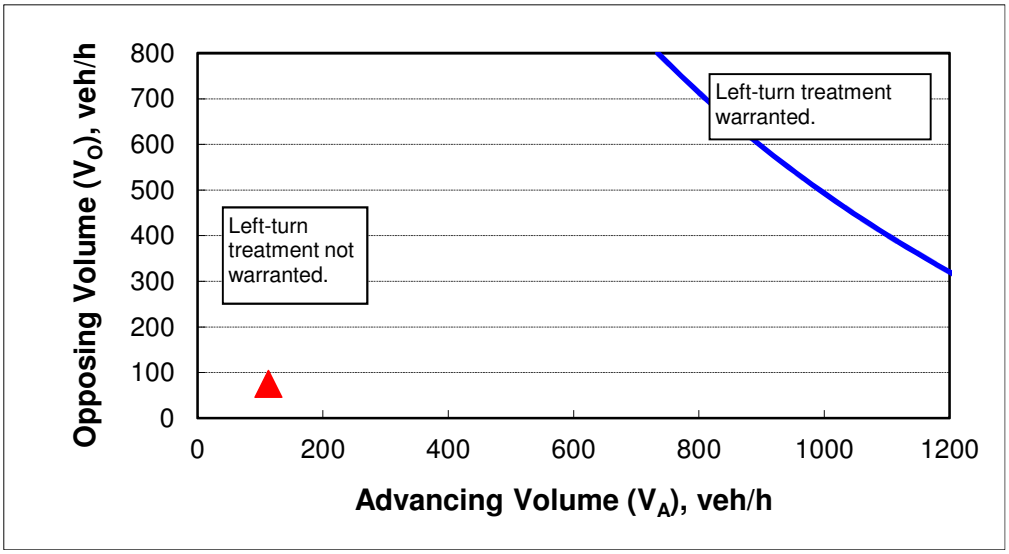
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	113
Opposing volume (V_O), veh/h:	75

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1586
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 14. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour (SB)

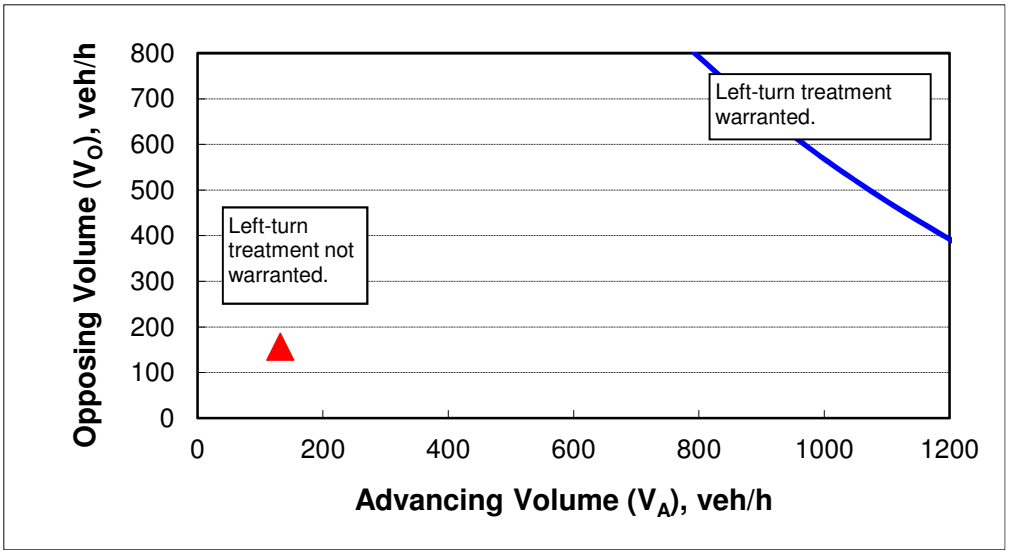
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	132
Opposing volume (V_O), veh/h:	156

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1558
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 15. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - AM Peak Hour

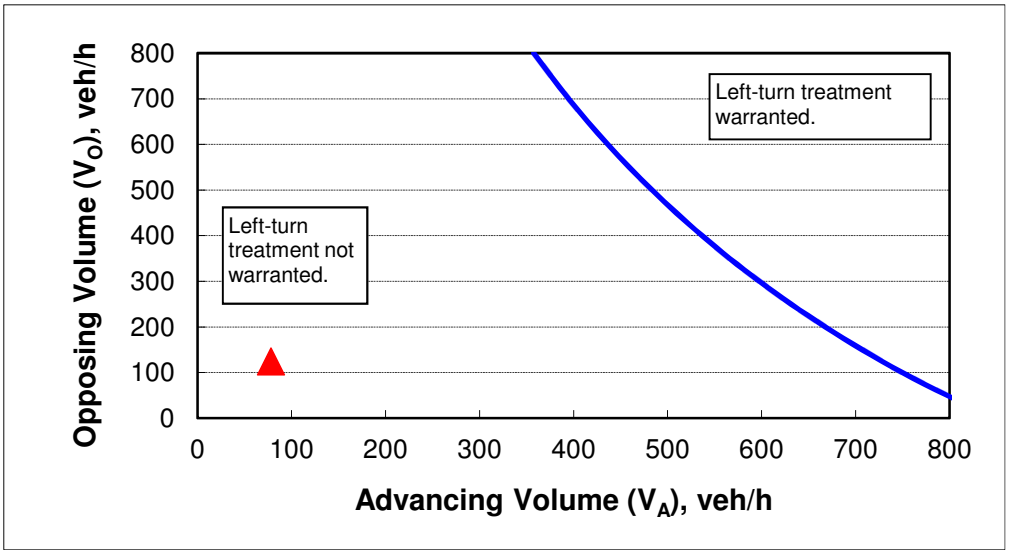
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	4%
Advancing volume (V_A), veh/h:	78
Opposing volume (V_O), veh/h:	124

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	729
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Holly DCP
Intersection: 15. Site Access at N Locust Street
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation - PM Peak Hour

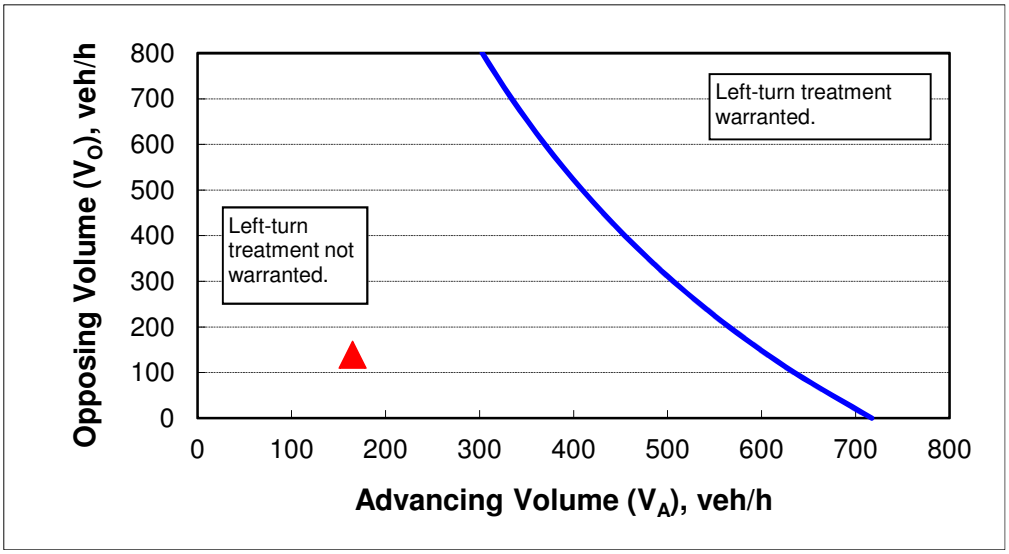
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	5%
Advancing volume (V_A), veh/h:	165
Opposing volume (V_O), veh/h:	139

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	607
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Traffic Signal Warrant Analysis

Project: Holly DCP
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation

Major Street:	NW Territorial Road	Minor Street:	N Holly Street
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	723	PM Peak Hour Volumes:	240

Warrant Used:

X 100 percent of standard warrants used

_____ 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	7,230	8,850	
Minor Street*	2,400	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	7,230	13,300	
Minor Street*	2,400	1,350	**No**
Combination Warrant			
Major Street	7,230	10,640	
Minor Street*	2,400	2,120	**No**

Note: Minor street right-turning traffic volumes reduced by 25%.

Traffic Signal Warrant Analysis

Project: Holly DCP
Date: 12/10/2018
Scenario: 2030 Planning Horizon with Annexation

Major Street:	NE Territorial Road	Minor Street:	N Locust Street
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	920	PM Peak Hour Volumes:	69

Warrant Used:

X 100 percent of standard warrants used

_____ 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	9,200	8,850	
Minor Street*	690	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	9,200	13,300	
Minor Street*	690	1,350	**No**
Combination Warrant			
Major Street	9,200	10,640	
Minor Street*	690	2,120	**No**

Note: Minor street right-turning traffic volumes reduced by 25%.

LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

LEVEL OF SERVICE CRITERIA
FOR SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

LEVEL OF SERVICE CRITERIA
FOR UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	74	2	68	54	16	1	16	50	14	19	10
Future Vol, veh/h	4	74	2	68	54	16	1	16	50	14	19	10
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	2	2	2	4	4	4	5	5	5
Mvmt Flow	5	84	2	77	61	18	1	18	57	16	22	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	8.4	7.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	5%	49%	33%
Vol Thru, %	24%	93%	39%	44%
Vol Right, %	75%	3%	12%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	80	138	43
LT Vol	1	4	68	14
Through Vol	16	74	54	19
RT Vol	50	2	16	10
Lane Flow Rate	76	91	157	49
Geometry Grp	1	1	1	1
Degree of Util (X)	0.088	0.11	0.19	0.062
Departure Headway (Hd)	4.138	4.34	4.353	4.552
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	867	827	830	788
Service Time	2.156	2.357	2.353	2.571
HCM Lane V/C Ratio	0.088	0.11	0.189	0.062
HCM Control Delay	7.6	7.9	8.4	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.7	0.2

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	156	1	3	148	5	3	2	5	5	1	24
Future Vol, veh/h	7	156	1	3	148	5	3	2	5	5	1	24
Conflicting Peds, #/hr	0	0	8	8	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	1	1	1	10	10	10	3	3	3
Mvmt Flow	8	171	1	3	163	5	3	2	5	5	1	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	168	0	0	180	0	0	381	370	181	364	368	166
Stage 1	-	-	-	-	-	-	196	196	-	172	172	-
Stage 2	-	-	-	-	-	-	185	174	-	192	196	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.2	6.6	6.3	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.13	5.53	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.59	4.09	3.39	3.527	4.027	3.327
Pot Cap-1 Maneuver	1410	-	-	1402	-	-	563	547	841	590	559	876
Stage 1	-	-	-	-	-	-	788	724	-	828	755	-
Stage 2	-	-	-	-	-	-	799	740	-	807	737	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1410	-	-	1391	-	-	538	538	834	580	550	876
Mov Cap-2 Maneuver	-	-	-	-	-	-	538	538	-	580	550	-
Stage 1	-	-	-	-	-	-	777	714	-	823	753	-
Stage 2	-	-	-	-	-	-	772	739	-	794	727	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	10.6	9.7
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	654	1410	-	-	1391	-	-	793
HCM Lane V/C Ratio	0.017	0.005	-	-	0.002	-	-	0.042
HCM Control Delay (s)	10.6	7.6	0	-	7.6	0	-	9.7
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	1	8	6	1	24
Future Vol, veh/h	10	1	8	6	1	24
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	1	10	8	1	30

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	47	15	0	0	19	0
Stage 1	15	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	968	1070	-	-	1611	-
Stage 1	1013	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	966	1069	-	-	1609	-
Mov Cap-2 Maneuver	966	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	996	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	975	1609	-
HCM Lane V/C Ratio	-	-	0.014	0.001	-
HCM Control Delay (s)	-	-	8.7	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	130	5	105	87	21	4	27	131	24	42	7
Future Vol, veh/h	4	130	5	105	87	21	4	27	131	24	42	7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	1	1	1
Mvmt Flow	4	144	6	117	97	23	4	30	146	27	47	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	10	8.8	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	3%	49%	33%
Vol Thru, %	17%	94%	41%	58%
Vol Right, %	81%	4%	10%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	162	139	213	73
LT Vol	4	4	105	24
Through Vol	27	130	87	42
RT Vol	131	5	21	7
Lane Flow Rate	180	154	237	81
Geometry Grp	1	1	1	1
Degree of Util (X)	0.224	0.205	0.312	0.114
Departure Headway (Hd)	4.475	4.782	4.751	5.079
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	797	746	753	701
Service Time	2.529	2.842	2.808	3.145
HCM Lane V/C Ratio	0.226	0.206	0.315	0.116
HCM Control Delay	8.8	9.1	10	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.8	1.3	0.4

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	309	3	10	230	11	5	3	2	10	4	20
Future Vol, veh/h	32	309	3	10	230	11	5	3	2	10	4	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	2	2	2	0	0	0	0	0	0
Mvmt Flow	34	329	3	11	245	12	5	3	2	11	4	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	257	0	0	332	0	0	685	678	331	674	673	251
Stage 1	-	-	-	-	-	-	399	399	-	273	273	-
Stage 2	-	-	-	-	-	-	286	279	-	401	400	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1320	-	-	1227	-	-	365	377	715	371	379	793
Stage 1	-	-	-	-	-	-	631	606	-	737	688	-
Stage 2	-	-	-	-	-	-	726	683	-	630	605	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1320	-	-	1227	-	-	341	361	715	356	363	793
Mov Cap-2 Maneuver	-	-	-	-	-	-	341	361	-	356	363	-
Stage 1	-	-	-	-	-	-	611	587	-	713	681	-
Stage 2	-	-	-	-	-	-	695	676	-	605	586	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.3	14.5	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	388	1320	-	-	1227	-	-	529
HCM Lane V/C Ratio	0.027	0.026	-	-	0.009	-	-	0.068
HCM Control Delay (s)	14.5	7.8	0	-	8	0	-	12.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	1	28	24	1	17
Future Vol, veh/h	19	1	28	24	1	17
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	1	35	30	1	21

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	75	52	0	0	67	0
Stage 1	52	-	-	-	-	-
Stage 2	23	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	933	1021	-	-	1547	-
Stage 1	976	-	-	-	-	-
Stage 2	1005	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	930	1019	-	-	1544	-
Mov Cap-2 Maneuver	930	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	1005	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	934	1544	-
HCM Lane V/C Ratio	-	-	0.026	0.001	-
HCM Control Delay (s)	-	-	9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	101	3	93	74	22	1	22	68	19	26	14
Future Vol, veh/h	5	101	3	93	74	22	1	22	68	19	26	14
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	2	2	2	4	4	4	5	5	5
Mvmt Flow	6	115	3	106	84	25	1	25	77	22	30	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	9.2	8.1	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	5%	49%	32%
Vol Thru, %	24%	93%	39%	44%
Vol Right, %	75%	3%	12%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	91	109	189	59
LT Vol	1	5	93	19
Through Vol	22	101	74	26
RT Vol	68	3	22	14
Lane Flow Rate	103	124	215	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.126	0.156	0.268	0.09
Departure Headway (Hd)	4.385	4.528	4.495	4.809
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	817	791	799	744
Service Time	2.416	2.559	2.525	2.843
HCM Lane V/C Ratio	0.126	0.157	0.269	0.09
HCM Control Delay	8.1	8.4	9.2	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.6	1.1	0.3

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	213	1	4	202	7	4	3	7	7	1	33
Future Vol, veh/h	10	213	1	4	202	7	4	3	7	7	1	33
Conflicting Peds, #/hr	0	0	8	8	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	1	1	1	10	10	10	3	3	3
Mvmt Flow	11	234	1	4	222	8	4	3	8	8	1	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	230	0	0	243	0	0	518	503	244	497	499	226
Stage 1	-	-	-	-	-	-	265	265	-	234	234	-
Stage 2	-	-	-	-	-	-	253	238	-	263	265	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.2	6.6	6.3	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.13	5.53	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.59	4.09	3.39	3.527	4.027	3.327
Pot Cap-1 Maneuver	1338	-	-	1329	-	-	456	460	776	482	472	811
Stage 1	-	-	-	-	-	-	723	675	-	767	709	-
Stage 2	-	-	-	-	-	-	734	694	-	740	688	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1338	-	-	1319	-	-	428	451	769	470	463	811
Mov Cap-2 Maneuver	-	-	-	-	-	-	428	451	-	470	463	-
Stage 1	-	-	-	-	-	-	711	664	-	760	707	-
Stage 2	-	-	-	-	-	-	698	692	-	722	676	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	11.6	10.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	558	1338	-	-	1319	-	-	710
HCM Lane V/C Ratio	0.028	0.008	-	-	0.003	-	-	0.063
HCM Control Delay (s)	11.6	7.7	0	-	7.7	0	-	10.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	1	11	8	1	33
Future Vol, veh/h	14	1	11	8	1	33
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	1	14	10	1	41

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	63	20	0	0	25	0
Stage 1	20	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	948	1064	-	-	1603	-
Stage 1	1008	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	946	1063	-	-	1601	-
Mov Cap-2 Maneuver	946	-	-	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	953	1601	-
HCM Lane V/C Ratio	-	-	0.02	0.001	-
HCM Control Delay (s)	-	-	8.9	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	177	7	143	119	29	5	37	179	33	57	10
Future Vol, veh/h	5	177	7	143	119	29	5	37	179	33	57	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	1	1	1
Mvmt Flow	6	197	8	159	132	32	6	41	199	37	63	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.8	12.9	10.8	10.1
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	3%	49%	33%
Vol Thru, %	17%	94%	41%	57%
Vol Right, %	81%	4%	10%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	221	189	291	100
LT Vol	5	5	143	33
Through Vol	37	177	119	57
RT Vol	179	7	29	10
Lane Flow Rate	246	210	323	111
Geometry Grp	1	1	1	1
Degree of Util (X)	0.345	0.312	0.472	0.178
Departure Headway (Hd)	5.054	5.351	5.251	5.761
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	710	670	685	621
Service Time	3.098	3.394	3.288	3.812
HCM Lane V/C Ratio	0.346	0.313	0.472	0.179
HCM Control Delay	10.8	10.8	12.9	10.1
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.5	1.3	2.5	0.6

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	44	421	4	14	314	15	7	4	3	14	5	27
Future Vol, veh/h	44	421	4	14	314	15	7	4	3	14	5	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	2	2	2	0	0	0	0	0	0
Mvmt Flow	47	448	4	15	334	16	7	4	3	15	5	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	350	0	0	452	0	0	933	924	450	920	918	342
Stage 1	-	-	-	-	-	-	544	544	-	372	372	-
Stage 2	-	-	-	-	-	-	389	380	-	548	546	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1220	-	-	1109	-	-	248	271	613	254	274	705
Stage 1	-	-	-	-	-	-	527	522	-	653	622	-
Stage 2	-	-	-	-	-	-	639	617	-	524	521	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1220	-	-	1109	-	-	222	253	613	237	256	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	222	253	-	237	256	-
Stage 1	-	-	-	-	-	-	500	495	-	620	611	-
Stage 2	-	-	-	-	-	-	597	607	-	490	494	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.3	19.2	15.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	268	1220	-	-	1109	-	-	393
HCM Lane V/C Ratio	0.056	0.038	-	-	0.013	-	-	0.125
HCM Control Delay (s)	19.2	8.1	0	-	8.3	0	-	15.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	1	38	33	1	23
Future Vol, veh/h	26	1	38	33	1	23
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	1	47	41	1	28

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	100	70	0	0	90	0
Stage 1	70	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	904	998	-	-	1518	-
Stage 1	958	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	901	996	-	-	1515	-
Mov Cap-2 Maneuver	901	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	904	1515	-
HCM Lane V/C Ratio	-	-	0.037	0.001	-
HCM Control Delay (s)	-	-	9.1	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	103	3	106	81	31	1	38	72	45	73	14
Future Vol, veh/h	5	103	3	106	81	31	1	38	72	45	73	14
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	2	2	2	4	4	4	5	5	5
Mvmt Flow	6	117	3	120	92	35	1	43	82	51	83	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	10.2	8.7	9.5
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	5%	49%	34%
Vol Thru, %	34%	93%	37%	55%
Vol Right, %	65%	3%	14%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	111	111	218	132
LT Vol	1	5	106	45
Through Vol	38	103	81	73
RT Vol	72	3	31	14
Lane Flow Rate	126	126	248	150
Geometry Grp	1	1	1	1
Degree of Util (X)	0.164	0.171	0.328	0.21
Departure Headway (Hd)	4.68	4.871	4.772	5.044
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	761	730	748	707
Service Time	2.748	2.939	2.831	3.111
HCM Lane V/C Ratio	0.166	0.173	0.332	0.212
HCM Control Delay	8.7	9	10.2	9.5
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.6	0.6	1.4	0.8

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	21	239	1	4	211	14	4	3	7	27	1	66
Future Vol, veh/h	21	239	1	4	211	14	4	3	7	27	1	66
Conflicting Peds, #/hr	0	0	8	8	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	1	1	1	10	10	10	3	3	3
Mvmt Flow	23	263	1	4	232	15	4	3	8	30	1	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	247	0	0	272	0	0	603	573	273	564	566	240
Stage 1	-	-	-	-	-	-	318	318	-	248	248	-
Stage 2	-	-	-	-	-	-	285	255	-	316	318	-
Critical Hdwy	4.12	-	-	4.11	-	-	7.2	6.6	6.3	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.13	5.53	-
Follow-up Hdwy	2.218	-	-	2.209	-	-	3.59	4.09	3.39	3.527	4.027	3.327
Pot Cap-1 Maneuver	1319	-	-	1297	-	-	399	419	747	435	432	796
Stage 1	-	-	-	-	-	-	677	639	-	754	699	-
Stage 2	-	-	-	-	-	-	705	682	-	693	652	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1319	-	-	1287	-	-	353	406	741	420	418	796
Mov Cap-2 Maneuver	-	-	-	-	-	-	353	406	-	420	418	-
Stage 1	-	-	-	-	-	-	659	621	-	739	696	-
Stage 2	-	-	-	-	-	-	637	679	-	668	634	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	12.5	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	497	1319	-	-	1287	-	-	628
HCM Lane V/C Ratio	0.031	0.017	-	-	0.003	-	-	0.164
HCM Control Delay (s)	12.5	7.8	0	-	7.8	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	4	1	36	95	1
Future Vol, veh/h	1	4	1	36	95	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	4	1	39	103	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	145	104	104	0	-	0
Stage 1	104	-	-	-	-	-
Stage 2	41	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	847	951	1488	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	846	951	1488	-	-	-
Mov Cap-2 Maneuver	846	-	-	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	981	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1488	-	928	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.4	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	4	1	35	91	1
Future Vol, veh/h	1	4	1	35	91	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	4	1	38	99	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	140	100	100	0	-	0
Stage 1	100	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	853	956	1493	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	852	956	1493	-	-	-
Mov Cap-2 Maneuver	852	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	982	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1493	-	933	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.4	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	16	14	1	1	6	21	8	1	62	1
Future Vol, veh/h	1	1	16	14	1	1	6	21	8	1	62	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	20	18	1	1	8	26	10	1	78	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	129	134	79	139	129	32	79	0	0	37	0	0
Stage 1	81	81	-	48	48	-	-	-	-	-	-	-
Stage 2	48	53	-	91	81	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	844	757	981	836	765	1048	1532	-	-	1587	-	-
Stage 1	927	828	-	971	859	-	-	-	-	-	-	-
Stage 2	965	851	-	921	832	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	838	752	981	813	760	1047	1532	-	-	1585	-	-
Mov Cap-2 Maneuver	838	752	-	813	760	-	-	-	-	-	-	-
Stage 1	922	827	-	965	854	-	-	-	-	-	-	-
Stage 2	958	846	-	900	831	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.5	1.3	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1532	-	-	956	821	1585	-	-
HCM Lane V/C Ratio	0.005	-	-	0.024	0.024	0.001	-	-
HCM Control Delay (s)	7.4	0	-	8.9	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	14	5	15	45	1
Future Vol, veh/h	1	14	5	15	45	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	15	5	16	49	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	76	50	50	0	-	0
Stage 1	50	-	-	-	-	-
Stage 2	26	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	927	1018	1557	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	924	1018	1557	-	-	-
Mov Cap-2 Maneuver	924	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	997	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1557	-	1011	-	-
HCM Lane V/C Ratio	0.003	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	1	1	6	1	4
Future Vol, veh/h	16	1	1	6	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	1	1	7	1	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	18	0	27	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	9	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1599	-	988	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1599	-	987	1061
Mov Cap-2 Maneuver	-	-	-	-	987	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1045	-	-	1599	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	12	1	1	5	1	4
Future Vol, veh/h	12	1	1	5	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	1	1	5	1	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	14	0	21	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	7	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1604	-	996	1066
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1016	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1604	-	995	1066
Mov Cap-2 Maneuver	-	-	-	-	995	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	1016	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1051	-	-	1604	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	1	1	4	1	4
Future Vol, veh/h	8	1	1	4	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1	1	4	1	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	10	0	16	10
Stage 1	-	-	-	-	10	-
Stage 2	-	-	-	-	6	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1610	-	1002	1071
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	1017	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1610	-	1001	1071
Mov Cap-2 Maneuver	-	-	-	-	1001	-
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1017	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1056	-	-	1610	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	5	1	1	3	1	3
Future Vol, veh/h	5	1	1	3	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	1	1	3	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	6	0	11	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1615	-	1009	1077
Stage 1	-	-	-	-	1017	-
Stage 2	-	-	-	-	1018	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1615	-	1008	1077
Mov Cap-2 Maneuver	-	-	-	-	1008	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1018	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1059	-	-	1615	-
HCM Lane V/C Ratio	0.004	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	19	1	1	23	1	1
Future Vol, veh/h	19	1	1	23	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	1	1	25	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	22	0	49	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1593	-	960	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1593	-	959	1055
Mov Cap-2 Maneuver	-	-	-	-	959	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	996	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1005	-	-	1593	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	12	12	1	1	4	55	4	1	63	1
Future Vol, veh/h	1	1	12	12	1	1	4	55	4	1	63	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	13	13	1	1	4	60	4	1	68	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	142	143	69	148	141	62	69	0	0	64	0	0
Stage 1	71	71	-	70	70	-	-	-	-	-	-	-
Stage 2	71	72	-	78	71	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	828	748	994	820	750	1003	1532	-	-	1538	-	-
Stage 1	939	836	-	940	837	-	-	-	-	-	-	-
Stage 2	939	835	-	931	836	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	824	745	994	806	747	1003	1532	-	-	1538	-	-
Mov Cap-2 Maneuver	824	745	-	806	747	-	-	-	-	-	-	-
Stage 1	936	835	-	937	834	-	-	-	-	-	-	-
Stage 2	934	832	-	917	835	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.5	0.5	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1532	-	-	957	813	1538	-	-
HCM Lane V/C Ratio	0.003	-	-	0.016	0.019	0.001	-	-
HCM Control Delay (s)	7.4	0	-	8.8	9.5	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	1	7	18	1	1	2	63	6	1	88	1
Future Vol, veh/h	1	1	7	18	1	1	2	63	6	1	88	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	8	20	1	1	2	68	7	1	96	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	176	178	97	179	175	72	97	0	0	75	0	0
Stage 1	99	99	-	76	76	-	-	-	-	-	-	-
Stage 2	77	79	-	103	99	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	786	716	959	783	718	990	1496	-	-	1524	-	-
Stage 1	907	813	-	933	832	-	-	-	-	-	-	-
Stage 2	932	829	-	903	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	783	715	959	774	717	990	1496	-	-	1524	-	-
Mov Cap-2 Maneuver	783	715	-	774	717	-	-	-	-	-	-	-
Stage 1	906	812	-	932	831	-	-	-	-	-	-	-
Stage 2	929	828	-	894	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	9.8	0.2	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1496	-	-	902	779	1524	-	-
HCM Lane V/C Ratio	0.001	-	-	0.011	0.028	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9	9.8	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	11	0	1	0	71	4	1	113	0
Future Vol, veh/h	0	0	0	11	0	1	0	71	4	1	113	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	0	1	0	77	4	1	123	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	205	206	123	204	204	79	123	0	0	81	0	0
Stage 1	125	125	-	79	79	-	-	-	-	-	-	-
Stage 2	80	81	-	125	125	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	753	691	928	754	692	981	1464	-	-	1517	-	-
Stage 1	879	792	-	930	829	-	-	-	-	-	-	-
Stage 2	929	828	-	879	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	751	690	928	753	691	981	1464	-	-	1517	-	-
Mov Cap-2 Maneuver	751	690	-	753	691	-	-	-	-	-	-	-
Stage 1	879	791	-	930	829	-	-	-	-	-	-	-
Stage 2	928	828	-	878	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.8	0	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1464	-	-	-	768	1517	-	-
HCM Lane V/C Ratio	-	-	-	-	0.017	0.001	-	-
HCM Control Delay (s)	0	-	-	0	9.8	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	8	3	75	124	1
Future Vol, veh/h	1	8	3	75	124	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	9	3	82	135	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	224	136	136	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	764	913	1448	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	762	913	1448	-	-	-
Mov Cap-2 Maneuver	762	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	935	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1448	-	893	-	-
HCM Lane V/C Ratio	0.002	-	0.011	-	-
HCM Control Delay (s)	7.5	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	23.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	300	10	190	123	80	5	89	194	51	88	10
Future Vol, veh/h	20	300	10	190	123	80	5	89	194	51	88	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	333	11	211	137	89	6	99	216	57	98	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	22.9	30.6	19	14.7
HCM LOS	C	D	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	6%	48%	34%
Vol Thru, %	31%	91%	31%	59%
Vol Right, %	67%	3%	20%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	288	330	393	149
LT Vol	5	20	190	51
Through Vol	89	300	123	88
RT Vol	194	10	80	10
Lane Flow Rate	320	367	437	166
Geometry Grp	1	1	1	1
Degree of Util (X)	0.592	0.681	0.797	0.348
Departure Headway (Hd)	6.659	6.683	6.572	7.574
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	541	539	555	473
Service Time	4.722	4.742	4.572	5.651
HCM Lane V/C Ratio	0.591	0.681	0.787	0.351
HCM Control Delay	19	22.9	30.6	14.7
HCM Lane LOS	C	C	D	B
HCM 95th-tile Q	3.8	5.2	7.6	1.5

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	82	439	4	14	344	37	7	4	3	27	5	49
Future Vol, veh/h	82	439	4	14	344	37	7	4	3	27	5	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	2	2	2	0	0	0	0	0	0
Mvmt Flow	87	467	4	15	366	39	7	4	3	29	5	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	405	0	0	471	0	0	1087	1078	469	1063	1061	386
Stage 1	-	-	-	-	-	-	643	643	-	416	416	-
Stage 2	-	-	-	-	-	-	444	435	-	647	645	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1165	-	-	1091	-	-	195	220	598	203	226	666
Stage 1	-	-	-	-	-	-	465	472	-	618	595	-
Stage 2	-	-	-	-	-	-	597	584	-	463	471	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1165	-	-	1091	-	-	160	194	598	181	200	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	194	-	181	200	-
Stage 1	-	-	-	-	-	-	418	424	-	556	584	-
Stage 2	-	-	-	-	-	-	535	573	-	410	423	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.3	24.2	19.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	202	1165	-	-	1091	-	-	327
HCM Lane V/C Ratio	0.074	0.075	-	-	0.014	-	-	0.264
HCM Control Delay (s)	24.2	8.3	0	-	8.3	0	-	19.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0	-	-	1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	127	81	1
Future Vol, veh/h	1	3	4	127	81	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	138	88	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	235	89	89	0	-	0
Stage 1	89	-	-	-	-	-
Stage 2	146	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	753	969	1506	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	751	969	1506	-	-	-
Mov Cap-2 Maneuver	751	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	881	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1506	-	903	-	-
HCM Lane V/C Ratio	0.003	-	0.005	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	3	4	123	78	1
Future Vol, veh/h	1	3	4	123	78	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	4	134	85	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	228	86	86	0	-	0
Stage 1	86	-	-	-	-	-
Stage 2	142	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	760	973	1510	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	885	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	758	973	1510	-	-	-
Mov Cap-2 Maneuver	758	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	885	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1510	-	909	-	-
HCM Lane V/C Ratio	0.003	-	0.005	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	10	26	1	1	18	72	33	1	42	1
Future Vol, veh/h	1	1	10	26	1	1	18	72	33	1	42	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	1	12	32	1	1	22	89	41	1	52	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	210	231	53	217	211	112	53	0	0	132	0	0
Stage 1	55	55	-	156	156	-	-	-	-	-	-	-
Stage 2	155	176	-	61	55	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	747	669	1014	744	690	947	1566	-	-	1466	-	-
Stage 1	957	849	-	851	772	-	-	-	-	-	-	-
Stage 2	847	753	-	955	853	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	736	657	1014	724	678	945	1566	-	-	1463	-	-
Mov Cap-2 Maneuver	736	657	-	724	678	-	-	-	-	-	-	-
Stage 1	943	848	-	837	759	-	-	-	-	-	-	-
Stage 2	832	740	-	941	852	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	10.2	1.1	0.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1566	-	-	942	728	1463	-	-
HCM Lane V/C Ratio	0.014	-	-	0.016	0.047	0.001	-	-
HCM Control Delay (s)	7.3	0	-	8.9	10.2	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	10	17	52	31	1
Future Vol, veh/h	1	10	17	52	31	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	11	18	57	34	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	128	35	35	0	-	0
Stage 1	35	-	-	-	-	-
Stage 2	93	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	866	1038	1576	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	931	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	856	1038	1576	-	-	-
Mov Cap-2 Maneuver	856	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1576	-	1018	-	-
HCM Lane V/C Ratio	0.012	-	0.012	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	12	1	5	20	1	3
Future Vol, veh/h	12	1	5	20	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	1	5	22	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	14	0	46	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1604	-	964	1066
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1604	-	961	1066
Mov Cap-2 Maneuver	-	-	-	-	961	-
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	991	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1038	-	-	1604	-
HCM Lane V/C Ratio	0.004	-	-	0.003	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	1	5	15	1	3
Future Vol, veh/h	9	1	5	15	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	1	5	16	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	11	0	37	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1608	-	975	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1608	-	972	1070
Mov Cap-2 Maneuver	-	-	-	-	972	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1044	-	-	1608	-
HCM Lane V/C Ratio	0.004	-	-	0.003	-
HCM Control Delay (s)	8.5	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	1	4	11	1	3
Future Vol, veh/h	6	1	4	11	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	1	4	12	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	28	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	987	1074
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	985	1074
Mov Cap-2 Maneuver	-	-	-	-	985	-
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1050	-	-	1612	-
HCM Lane V/C Ratio	0.004	-	-	0.003	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	1	3	8	1	2
Future Vol, veh/h	4	1	3	8	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	1	3	9	1	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	5	0	20	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1616	-	997	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	1008	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1616	-	995	1078
Mov Cap-2 Maneuver	-	-	-	-	995	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1049	-	-	1616	-
HCM Lane V/C Ratio	0.003	-	-	0.002	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	1	2	20	1	1
Future Vol, veh/h	14	1	2	20	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	1	2	22	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	42	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	969	1063
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	968	1063
Mov Cap-2 Maneuver	-	-	-	-	968	-
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1013	-	-	1602	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	8	8	1	1	14	88	14	1	98	1
Future Vol, veh/h	1	1	8	8	1	1	14	88	14	1	98	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	9	9	1	1	15	96	15	1	107	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	245	251	108	249	244	104	108	0	0	111	0	0
Stage 1	110	110	-	134	134	-	-	-	-	-	-	-
Stage 2	135	141	-	115	110	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	709	652	946	705	658	951	1483	-	-	1479	-	-
Stage 1	895	804	-	869	785	-	-	-	-	-	-	-
Stage 2	868	780	-	890	804	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	700	644	946	691	650	951	1483	-	-	1479	-	-
Mov Cap-2 Maneuver	700	644	-	691	650	-	-	-	-	-	-	-
Stage 1	885	803	-	859	776	-	-	-	-	-	-	-
Stage 2	856	771	-	880	803	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	10.2	0.9	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1483	-	-	874	706	1479	-	-
HCM Lane V/C Ratio	0.01	-	-	0.012	0.015	0.001	-	-
HCM Control Delay (s)	7.5	0	-	9.2	10.2	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	1	4	12	1	1	7	116	21	1	116	1
Future Vol, veh/h	1	1	4	12	1	1	7	116	21	1	116	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	4	13	1	1	8	126	23	1	126	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	284	294	127	285	283	138	127	0	0	149	0	0
Stage 1	129	129	-	154	154	-	-	-	-	-	-	-
Stage 2	155	165	-	131	129	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	668	617	923	667	626	910	1459	-	-	1432	-	-
Stage 1	875	789	-	848	770	-	-	-	-	-	-	-
Stage 2	847	762	-	873	789	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	663	613	923	660	622	910	1459	-	-	1432	-	-
Mov Cap-2 Maneuver	663	613	-	660	622	-	-	-	-	-	-	-
Stage 1	870	788	-	843	765	-	-	-	-	-	-	-
Stage 2	840	757	-	867	788	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	10.5	0.4	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1459	-	-	803	670	1432	-	-
HCM Lane V/C Ratio	0.005	-	-	0.008	0.023	0.001	-	-
HCM Control Delay (s)	7.5	0	-	9.5	10.5	7.5	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	7	0	1	0	144	12	1	132	0
Future Vol, veh/h	0	0	0	7	0	1	0	144	12	1	132	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	8	0	1	0	157	13	1	143	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	309	315	143	309	309	164	143	0	0	170	0	0
Stage 1	145	145	-	164	164	-	-	-	-	-	-	-
Stage 2	164	170	-	145	145	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	643	601	905	643	605	881	1440	-	-	1407	-	-
Stage 1	858	777	-	838	762	-	-	-	-	-	-	-
Stage 2	838	758	-	858	777	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	642	600	905	642	604	881	1440	-	-	1407	-	-
Mov Cap-2 Maneuver	642	600	-	642	604	-	-	-	-	-	-	-
Stage 1	858	776	-	838	762	-	-	-	-	-	-	-
Stage 2	837	758	-	857	776	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	10.5	0	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1440	-	-	-	665	1407	-	-
HCM Lane V/C Ratio	-	-	-	-	0.013	0.001	-	-
HCM Control Delay (s)	0	-	-	0	10.5	7.6	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	9	156	139	1
Future Vol, veh/h	1	5	9	156	139	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	5	10	170	151	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	342	152	152	0	-	0
Stage 1	152	-	-	-	-	-
Stage 2	190	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	654	894	1429	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	649	894	1429	-	-	-
Mov Cap-2 Maneuver	649	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	842	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1429	-	841	-	-
HCM Lane V/C Ratio	0.007	-	0.008	-	-
HCM Control Delay (s)	7.5	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection: 1: Holly Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	57	78	65	69
Average Queue (ft)	32	36	26	24
95th Queue (ft)	53	59	49	52
Link Distance (ft)	1117	1287	457	223
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Locust Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	17	31	52	50
Average Queue (ft)	1	1	9	17
95th Queue (ft)	11	14	35	39
Link Distance (ft)	1287	544	727	395
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Locust Street & 19th Avenue

Movement	WB
Directions Served	LR
Maximum Queue (ft)	36
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	434
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 1: Holly Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	78	75	65	46
Average Queue (ft)	39	42	36	25
95th Queue (ft)	63	63	59	42
Link Distance (ft)	1117	1287	457	223
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Locust Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	51	26	25	43
Average Queue (ft)	6	3	8	18
95th Queue (ft)	29	16	26	38
Link Distance (ft)	1287	544	727	395
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Locust Street & 19th Avenue

Movement	WB
Directions Served	LR
Maximum Queue (ft)	40
Average Queue (ft)	14
95th Queue (ft)	40
Link Distance (ft)	434
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 1: Holly Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	61	83	66	79
Average Queue (ft)	35	40	31	25
95th Queue (ft)	56	66	54	53
Link Distance (ft)	1117	1287	457	223
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Locust Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	28	21	54	60
Average Queue (ft)	3	1	11	22
95th Queue (ft)	16	10	36	43
Link Distance (ft)	1287	544	727	395
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Locust Street & 19th Avenue

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	14
95th Queue (ft)	40
Link Distance (ft)	434
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 1: Holly Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	90	104	80	57
Average Queue (ft)	44	53	42	28
95th Queue (ft)	71	82	68	45
Link Distance (ft)	1117	1287	457	223
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Locust Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	59	38	29	44
Average Queue (ft)	9	4	10	20
95th Queue (ft)	37	23	30	40
Link Distance (ft)	1287	544	727	395
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Locust Street & 19th Avenue

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	18
95th Queue (ft)	42
Link Distance (ft)	434
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 1: Holly Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	70	92	70	59
Average Queue (ft)	36	46	34	29
95th Queue (ft)	60	73	58	48
Link Distance (ft)	1117	1287	457	223
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Locust Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	42	33	51	57
Average Queue (ft)	5	2	11	28
95th Queue (ft)	25	16	34	46
Link Distance (ft)	1287	545	727	166
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Locust Street & Site Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	250
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Locust Street & Site Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	25
Average Queue (ft)	5
95th Queue (ft)	23
Link Distance (ft)	248
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Locust Street & 19th Avenue

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	31	36
Average Queue (ft)	14	9
95th Queue (ft)	39	33
Link Distance (ft)	265	434
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Locust Street & Site Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	31	6
Average Queue (ft)	11	0
95th Queue (ft)	36	4
Link Distance (ft)	293	528
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	259
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	22
Link Distance (ft)	276
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	5
95th Queue (ft)	24
Link Distance (ft)	281
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	22
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	3
95th Queue (ft)	16
Link Distance (ft)	232
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Holly Street & Site Access

Movement	EB	WB	NB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	36	40	11
Average Queue (ft)	13	12	1
95th Queue (ft)	38	38	7
Link Distance (ft)	245	307	510
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: Holly Street & Site Access

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	36	36
Average Queue (ft)	8	14
95th Queue (ft)	29	39
Link Distance (ft)	263	280
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Holly Street & Site Access

Movement	WB
Directions Served	LTR
Maximum Queue (ft)	31
Average Queue (ft)	9
95th Queue (ft)	33
Link Distance (ft)	261
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 15: Holly Street & Site Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	32	18
Average Queue (ft)	7	0
95th Queue (ft)	28	6
Link Distance (ft)	455	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 1: Holly Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	205	152	133	72
Average Queue (ft)	82	75	59	35
95th Queue (ft)	153	124	98	59
Link Distance (ft)	1117	1287	457	223
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Locust Street & Territorial Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	84	62	34	61
Average Queue (ft)	26	6	8	27
95th Queue (ft)	68	32	28	49
Link Distance (ft)	1287	544	727	198
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Locust Street & Site Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	36
Average Queue (ft)	4
95th Queue (ft)	23
Link Distance (ft)	250
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Locust Street & Site Access

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	3
95th Queue (ft)	17
Link Distance (ft)	242
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Locust Street & 19th Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	36	40	6	6
Average Queue (ft)	9	19	0	0
95th Queue (ft)	32	44	4	4
Link Distance (ft)	236	434	170	528
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Locust Street & Site Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	31	6
Average Queue (ft)	11	0
95th Queue (ft)	35	6
Link Distance (ft)	293	528
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	259
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	3
95th Queue (ft)	19
Link Distance (ft)	276
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	5
95th Queue (ft)	22
Link Distance (ft)	281
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	3
95th Queue (ft)	19
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Site Access & 22nd Avenue

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	2
95th Queue (ft)	16
Link Distance (ft)	232
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Holly Street & Site Access

Movement	EB	WB	NB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	32	31	22
Average Queue (ft)	9	9	1
95th Queue (ft)	32	31	10
Link Distance (ft)	245	307	510
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: Holly Street & Site Access

Movement	EB	WB	NB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	31	36	10
Average Queue (ft)	5	14	0
95th Queue (ft)	24	39	5
Link Distance (ft)	263	280	416
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 14: Holly Street & Site Access

Movement	WB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	32	5
Average Queue (ft)	6	0
95th Queue (ft)	26	4
Link Distance (ft)	261	416
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Holly Street & Site Access

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	31	29
Average Queue (ft)	5	2
95th Queue (ft)	24	15
Link Distance (ft)	455	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

January 7, 2019

Honorable Mayor Hodson and City Council,

Thank you for your interest in future park development for a growing Canby. This is just be a brief summary of our thought process for siting of the splash pad. We will be on your agenda at the second January meeting for a more in-depth discussion and a plan for future priorities both long- and short-term.

The splash pad was selected as a project that could be completed quickly and would receive favorable approval from the community. The goal is that the splash pad can be completed by early June so that it could be used this summer.

In selecting the location, we listed all possible sites that could accommodate a splash pad. The top three locations were Maple Street, Wait Park, and Legacy Park. Also considered, and dropped for various reasons were the Swim Center, Ackerman property, site of the old library, or near the new library. For the top three sites we listed all the pros and cons for siting of a splash pad. All were desirable for being established parks with other amenities.

Maple Street		Wait Park		Legacy Park	
Pros	Cons	Pros	Cons	Pros	Cons
Utilities	Sports events	Downtown	Trees/shade	Restrooms	Utilities
Grandfathered water	Limited shade	Utilities	Requires redo of park layout	Snack Bar	Parking
Parking		Grandfathered water	Lack of parking	Sunny	No Shade
Restroom		Restroom	Events		Deep Lot
Covered picnic area		Events			
Potential snack bar					
Multiple locations					
Sunny					
Added use w/Canby Community ed					
Sports events					

The Parks and Recreation Advisory Board's next step would be to solicit public input by the end of the month and bring results of the public input back to the city council as soon as the agenda will allow. We still would like to fast track this project to allow use of it this summer season if possible.

Thank you,

Parks and Recreation Advisory Board