TRANSPORTATION IMPACT ANALYSIS

project | **Forrest Glen Subdivision**
location | Forrest Road & Forsell Road
Grandview, Washington
client | Woodhill Homes
date | April, 2025

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FERGUSON & ASSOCIATES, INC.
Transportation Planning/Traffic Engineering

FORREST GLEN RESIDENTIAL

Traffic Impact Study
&
GMA Concurrency Assessment

Prepared for:

WOODHILL HOMES

by:

Ferguson & Associates, Inc

April 21, 2025

Expires: April 24, 2026

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EXECUTIVE SUMMARY

Project Overview

The proposed development consists of 279 single-family homes on an agricultural parcel northwest of the Forrest Road and Forsell Road intersection in Grandview, Washington. The project would be phased, with complete buildout assumed by 2040. Multiple site access points would connect to Forsell Road, Forrest Road, and Ogle Road, with stubs extending westward to accommodate future development.

Existing Conditions

- **Current Land Use:** The site is vacant agricultural land within city limits and the Urban Growth Area
- **Zoning:** Currently zoned AG (Agriculture) with future land use designation as Industrial
- **Required Change:** Land use redesignation would change to residential to support the proposed development
- **Surrounding Area:** Low-density residential to the south, light industrial to the east, and agricultural to the west

Traffic Generation Analysis

- **Methodology:** Trip generation based on ITE Land Use Code 210 (Single Family Homes)
- **Forecast Results:**
    - 262 PM peak hour trips (165 inbound, 91 outbound)
    - 2,631 daily trips
- **Distribution:** Traffic primarily oriented toward town and highway

Concurrency Analysis

- **Standard:** Grandview Comprehensive Plan requires minimum LOS C (V/C ratio of 0.71-0.80)
- **Analysis Period:** PM peak hour evaluated for existing (2025) and future (2040) conditions
- **Growth Assumption:** 2% annual traffic growth rate through 2040

- Results:

Road Segment	2040 V/C Ratio	2040 LOS
Euclid St (W 2nd to Forsell)	0.53	A
Euclid St (Forsell to Wine Country)	0.47	A
Forsell Rd (Puterbaugh to Forrest)	0.20	A
Forsell Rd (Forrest to Wallace)	0.31	A
Forsell Rd (Wallace to Euclid)	0.27	A
All other segments	<0.20	A

- Conclusion: All segments will operate well below capacity, meeting concurrency requirements

Detailed Intersection Assessments

Puterbaugh Rd/Forsell Rd Intersection

- Configuration: Two intersections offset by approximately 140 feet (center-to-center)
- Issues Identified:
    - Insufficient spacing between intersections (approximately 100 feet)
    - Noticeable dip between intersections
    - Poorly defined turn radii causing vehicles to leave pavement
    - Suboptimal placement of farm access roads near intersection
- Assessment: Configuration functions adequately at current and projected volumes despite issues
- Recommendation: Long-term realignment of Forsell Road to eliminate the offset

Stover Rd/Puterbaugh Rd Intersection

- Assessment: Sufficient capacity with low traffic flows
- Issues: Insufficient turn radii for trucks unless entire street width is utilized
- Recommendations:
    - Relocate 35 mph speed limit to west of intersection
    - Clarify southbound speed on Puterbaugh Road approaching Forsell Rd

Conclusions

1. The proposed residential development meets all City of Grandview transportation concurrency requirements
2. All studied roadway segments will operate at LOS A through 2040, well under the city's LOS C standard
3. Existing intersection configuration at Puterbaugh Rd/Forsell Road, while not ideal, function adequately at current and projected volumes

4. Long-term realignment of this intersection should be incorporated into the Comprehensive Plan or other implementing documents to guide future development.
5. Incorporate recommended speed limit adjustments and speed-signage improvements

This traffic impact study fulfills the requirements of Grandview Municipal Code Chapter 14.10 and demonstrates compliance with the city's adopted level of service standards.

INTRODUCTION

This study addresses the impacts of a proposed residential development in Grandview, Washington. This study focuses on p.m. peak hour traffic at selected locations. This study focuses on an assessment of the GMA concurrency requirements and City of Grandview requirements. While the focus of this study is to demonstrate that the State's concurrency requirements can be met, there was also a more detailed review of two of the intersections in the study area.

Purpose and Objectives

This study has been performed for submission to the City of Grandview, Washington and is based on the requirements of Chapter 14.10 Transportation Concurrency Management combined with input on the scope of work from City of Grandview staff.

Proposed Development

The proposed development is located on a large agricultural parcel. The proposed project includes plating and infrastructure for a 279 single-family home subdivision. The project would be built in multiple phases with buildout assumed to be built by year 2040 or earlier. For the purposes of this report, a 2040 horizon was assumed.

Site Location and Study Area

The site for the proposed development is located to the northwest of the intersection of Forrest Road and Forsell Road, as shown in Figure 1. Based on the conversations with City of Grandview staff, the following streets were selected for evaluation.

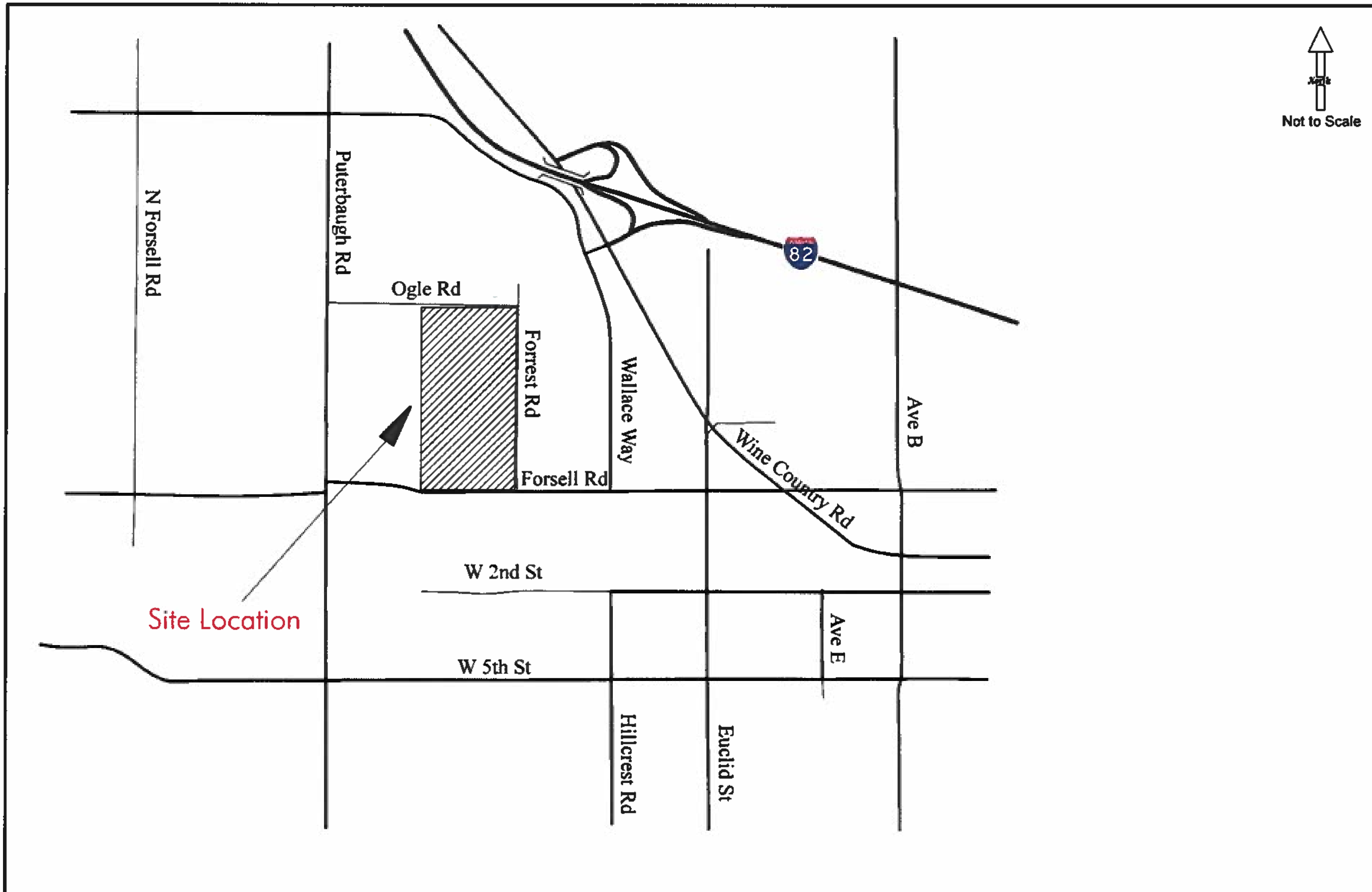
1. Forsell Road between Puterbaugh Road and Euclid Street;
2. Puterbaugh Road between 5th Street and Stover Road;
3. Ogle Road between Puterbaugh Road and Forrest Rd;
4. Forrest Road between Ogle Road and Forsell Road;
5. Wallace Way between Forsell Road and Stover Road;
6. Euclid Street between Wine Country Road and 2nd Street; and,
7. 5th Street between Puterbaugh Road and Euclid Street.

In addition, the City requested that the following intersections be evaluated in more detail:

1. Puterbaugh Rd/Forsell Rd.
2. Puterbaugh Rd/Stover Rd.

Site Access

The site would be accessed via a number of new street connections, as shown in Figure 2. This would include two new streets connecting to each of Forsell Road, Forrest Road, and Ogle Road, plus stubs extending to the west so that it could tie into future development.



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Site Location
Forrest Glen Subdivision - Grandview, Washington

Figure 1
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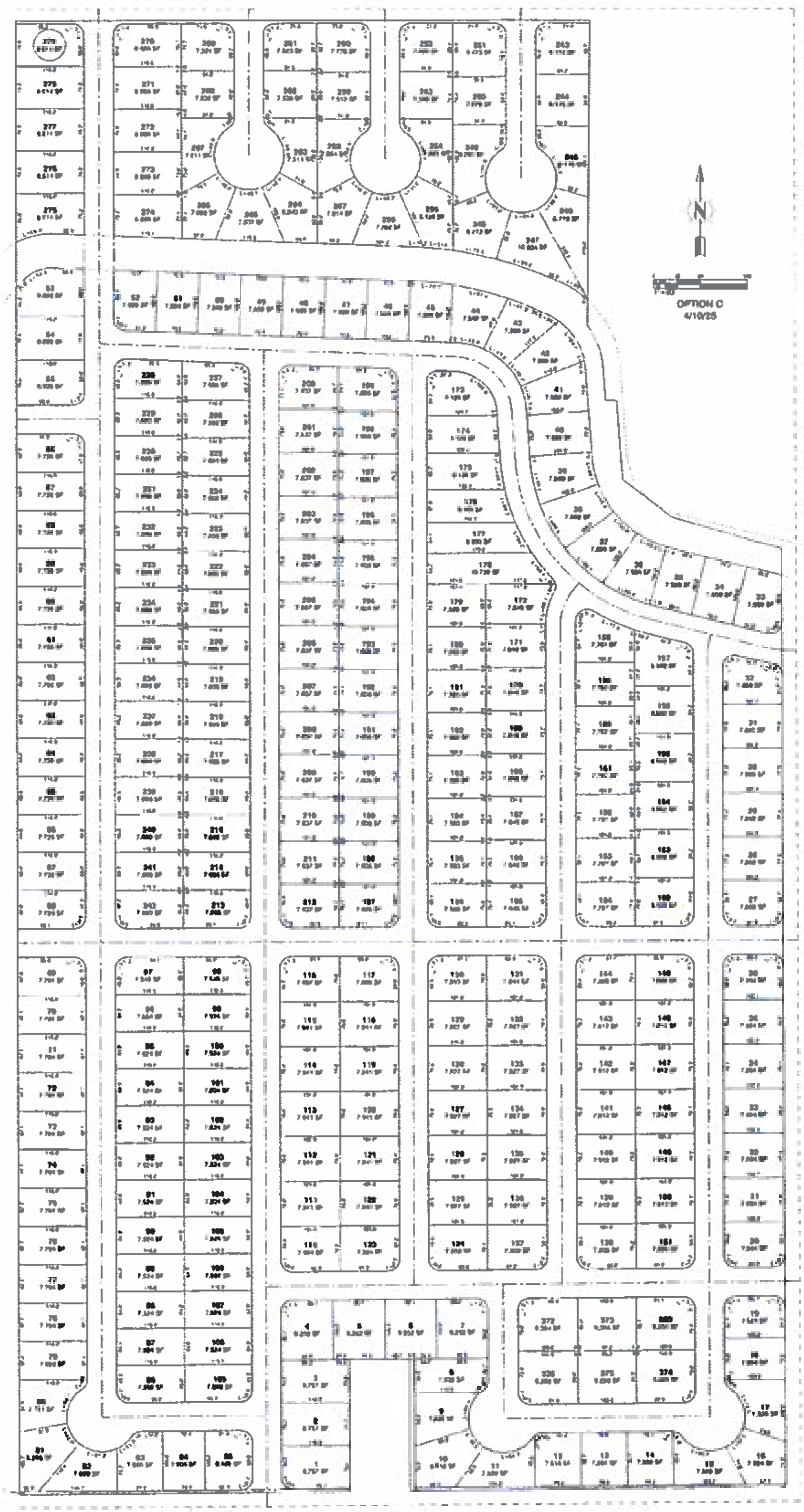

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Site Plan
Forrest Glen Subdivision - Grandview, Washington

Figure 2
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EXISTING CONDITIONS

A discussion of the existing site, adjacent land uses, surrounding street network and area is presented below. Other developments that are currently planned have been considered in this analysis and are presented herein. City plans for improvements to the nearby transportation system are also discussed in this section.

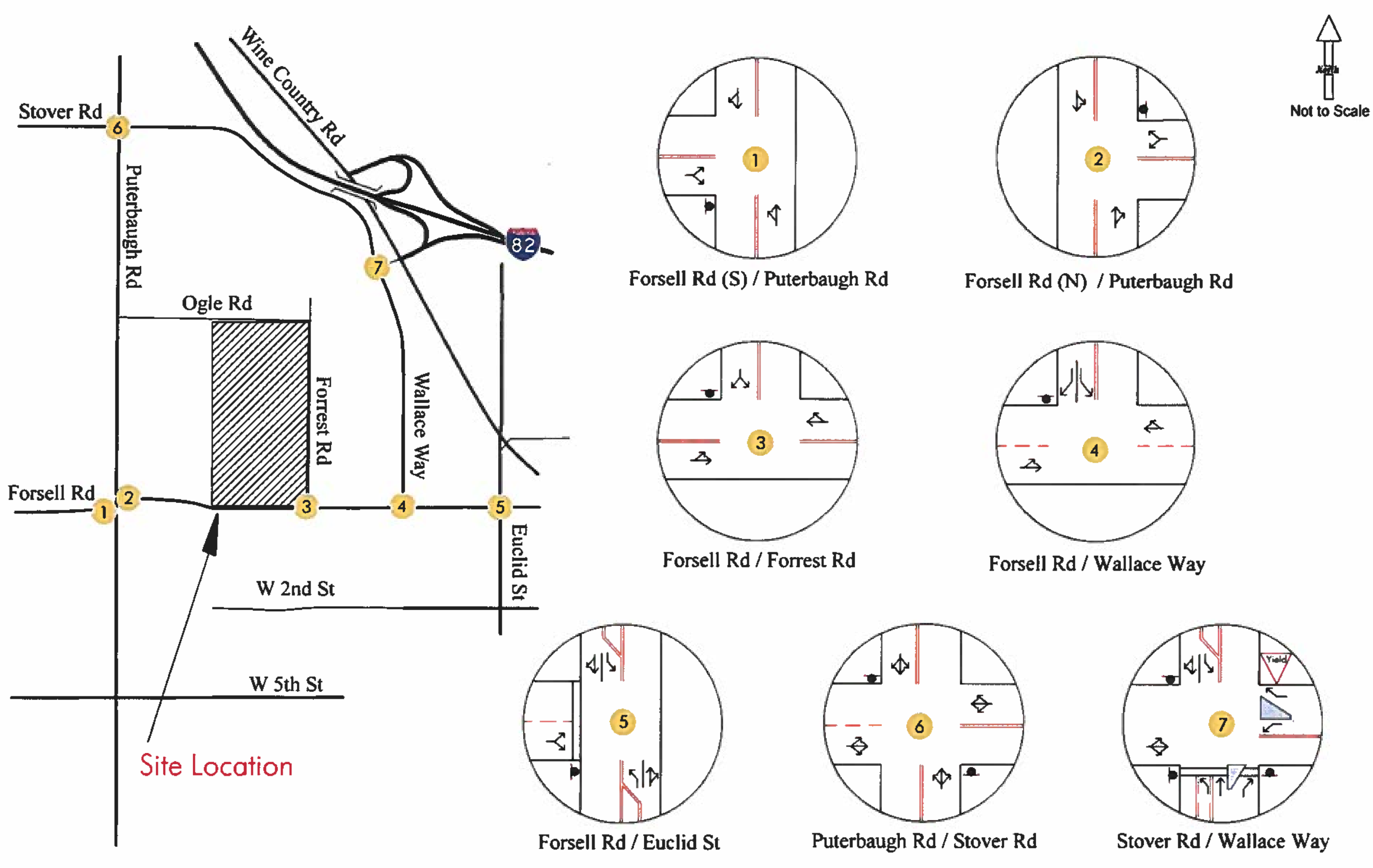
EXISTING LAND USES AND ZONING

The site is currently vacant. The site is designated as agriculture on the City of Grandview Plan Maps. The site is inside the City Boundary and inside the Urban Growth Area. The current zoning designation is AG, Agriculture and the future land use designation is Industrial. This should be changed to residential to support the proposed land use. The area to the south is designated as low-density residential and is shown to be standard residential in the future. The lands to the east are primarily designated as M1 - Light-Industrial. Landes to the west are primarily designated as AG – Agricultural.

EXISTING STREET NETWORK

As shown in Figures 1 & 2, the site would be connected to the system via Ogle Road, Forrest Road, and Forsell Road. These streets connect to the rest of the street system.

Street characteristics of each of the related streets are shown in Table 1. The existing lane configuration and intersection controls are shown in Figure 3.



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Lane Configuration and Intersection Controls
Forrest Glen Subdivision - Grandview, Washington

Figure 3

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TABLE 1 – STREET CHARACTERISTICS*

STREET	LANES	POSTED SPEED (MPH)	CURBS	SIDE-WALKS	BIKE LANE	ON STREET PARKING
Forsell Road	2	25/35	No	Partial to east of Walker Way; none to west	No	No
Walker Way	3	25	Yes	Partial	No	No
Euclid Street	3	20/25	Yes	Partial	No	No
Puterbaugh Road	2	35	No	No	No	No
Forrest Road	2	25	No	No	No	No
Ogle Road	2	25	No	No	No	No
Stover Road	2	35/55	Partial	Partial	No	No

*In the vicinity of study intersections

EXISTING TRAFFIC FLOW AND CONDITIONS

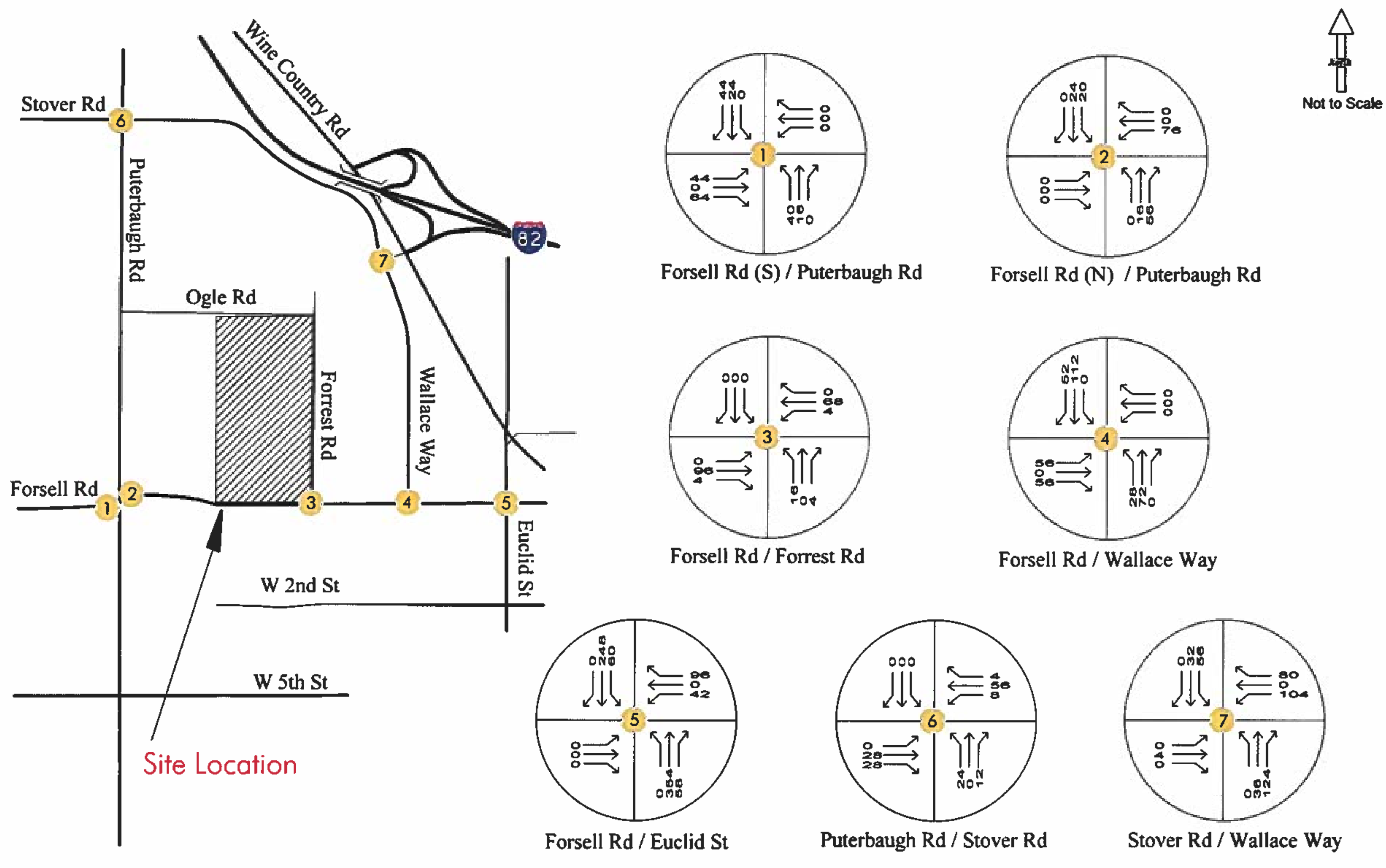
Short-interval counts were conducted at the study intersections for at least 15 minutes between 4:00 p.m. and 6:00 p.m.. Intersection count data summaries can be found in Appendix A. Existing traffic flows, as counted, were factored to one-hour counts and are shown in Figures 4 for the p.m. peak hour.

OTHER DEVELOPMENT

The study considered other development projects located in Grandview. No projects of any significance were identified by staff.

COMMITTED OR PLANNED STREET IMPROVEMENTS

No street improvement projects of significance were identified.



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Existing PM Peak Hour Traffic As Counted
Forrest Glen Subdivision - Grandview, Washington

Figure 4

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Local and State Programs, Policies, and Regulations

The requirements for a traffic analysis is primarily regulated by Chapter 14.10 of the Grandview Municipal Code:

> *"The purpose of this chapter is to provide provisions for determining that development within the city of Grandview does not cause the level of service for a transportation facility to decline below adopted city level of service standards and to ensure that adequate public facilities meeting acceptable levels of service are provided to support development impacts."*

Section B(2) defines the concurrency test:

> *"The projected number of trips generated by a proposed development shall be subtracted from available capacity of the impacted transportation facility. If projected demand is less than available capacity, the project is not adverse to level of service standards and shall be issued a certificate of concurrency."*

The Level of Service standards for transportation facilities are found in the Comprehensive Plan. As per the section entitled Level of Service on page 4-11 of the Transportation Element of the Grandview Comprehensive Plan (2016 Update):

> *"The minimum acceptable LOS on Grandview streets is a LOS "C" (e.g., a volume-to-capacity ratio of between 0.71 and 0.80). This expectation results in a maximum traffic volume of 900 vehicles per hour per lane on City streets (minor arterial). In instances when the traffic volumes exceed this threshold, capacity-related improvements are necessary before additional land use development can occur."*

The Transportation Element of the plan (p. 4-10) also defines the capacity for various types of facilities, as shown below in Table 2

Table 2 – Capacity by Functional Class as per Comprehensive Plan

Functional Class	Capacity of Roadway (Vehicles/Hour)
Freeway	3,600
Freeway Ramps	1,200
State Highways	2,200
Principal Arterial (Urban/Rural)	2,200
Minor Arterial (Urban)	2,000
Collector Arterial (Urban)	1,800
Access/Local (Urban)	1,600
Major Collector (Rural)	2,400
Minor Collector (Rural)	2,000
Access/Local (Rural)	1,600
Other	1,600

TRAFFIC FORECAST

Traffic forecasts are presented in this section. Trips generated by the project as well as other growth through 2040 in the area are considered.

Site Generated Traffic

Daily and p.m. peak hour trips generated by the proposed project were forecast. The forecast considered pass-by trips and modal split. The peak hour trips were then distributed and assigned to the study area network. Details are presented below.

Trip Generation

For the future trips generated trip generation rates were selected from the 11th Edition of Trip Generation (ITE, 2021). ITE Land Use Code 210, Single Family Homes, was used in the trip forecast. The ITE trip generation rates used in this study are summarized in Table 3.

Table 3 – Trip Generation Rates

ITE Land Use & Code	Ind. variable	Trip Ends Rate (trips per t.s.f) PM Peak Hour	Daily	In/Out Split (percent) PM Peak Hour	Daily
Single Family Homes 210	DU	0.94	9.43	63/37	50/50

Table 4 shows a forecast using ITE trip generation rates for the 297-unit residential subdivision. In was forecast that the development would generate 262 p.m. peak hour trips and 2,631 daily trips.

Table 4 – Trip Generation Forecast

ITE Land Use	Size (units)	PM Peak Hour Trip Ends In	Out	Total	Daily
Single Family Homes 210	279 DU	165	97	262	2,631

Pass-by Trips

No reduction in trip generation was made to account for pass-by trips.

Modal Split

No reduction in vehicle trips was made to account for a potential shift away from the automobile. ITE trip rates are based on observed vehicle trip patterns at each land use and thereby account for a basic amount of non-auto travel.

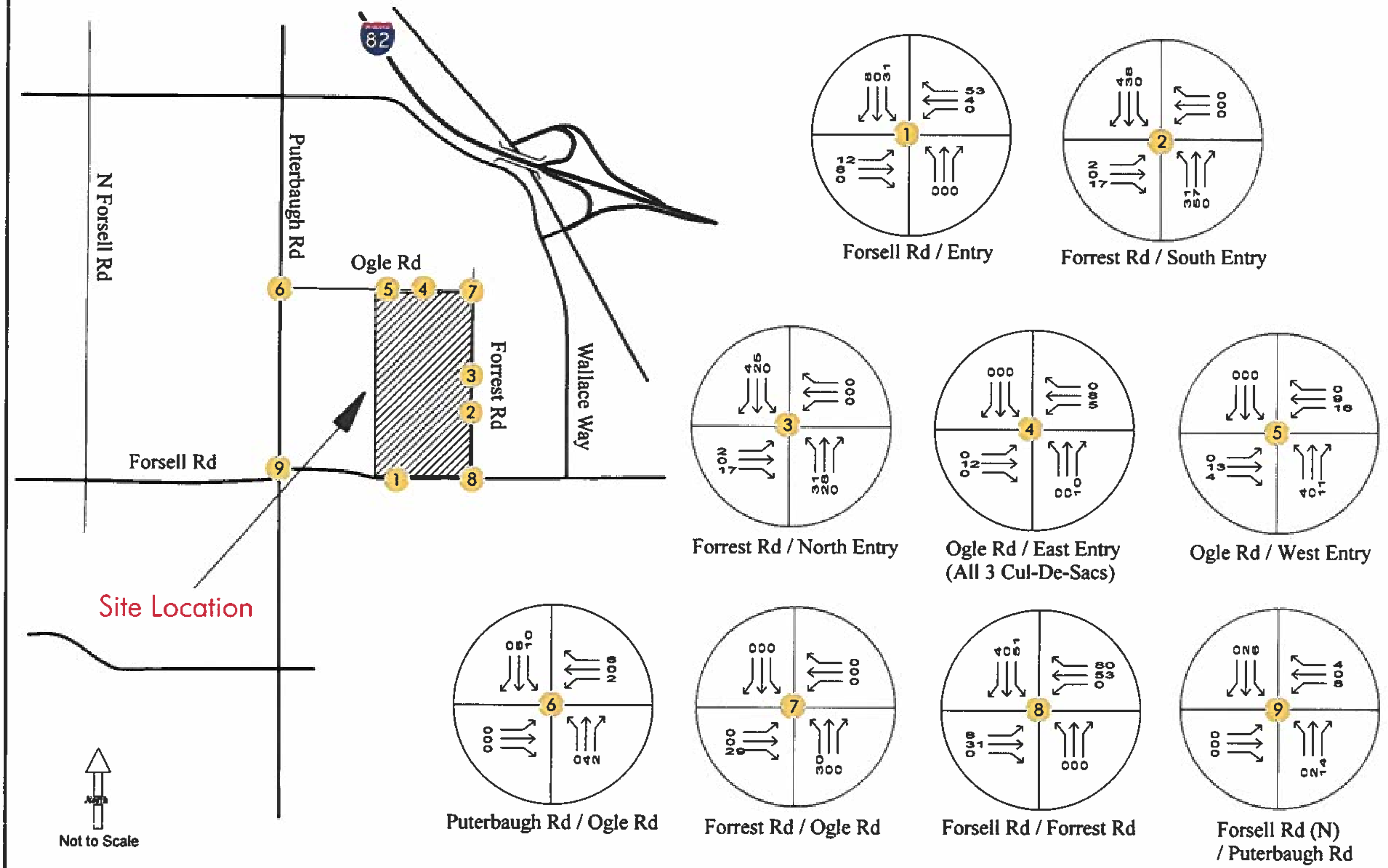
Trip Distribution and Assignment

The peak hour trips generated by the proposed project were distributed and assigned to the roadway system. The trip distribution percentages were determined based on turning movements at key study intersection, the dispersion of employment, shopping, schools and recreational areas in the city, as well as previous studies and general experience.

The peak hour trip distribution and resulting trip assignments are shown in Figures 5-A and 5-B for the intersection turn movements.

YEAR 2040 TRAFFIC FORECAST

Buildout was assumed to be by year 2040 or earlier. A growth factor of 2 percent per year was selected. It is reasonably conservative and consistent with assumptions in the comprehensive plan. The resulting link volumes for year 2040 without the proposed project as shown in Figure 6. In the next section on concurrency, this forecast was used at the link-volume level to add to the project forecast to create a 2040 with-project forecast.



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PM Peak Hour Distribution & Assignment (Part 1)
Forrest Glen Subdivision - Grandview, Washington

Figure 5-A
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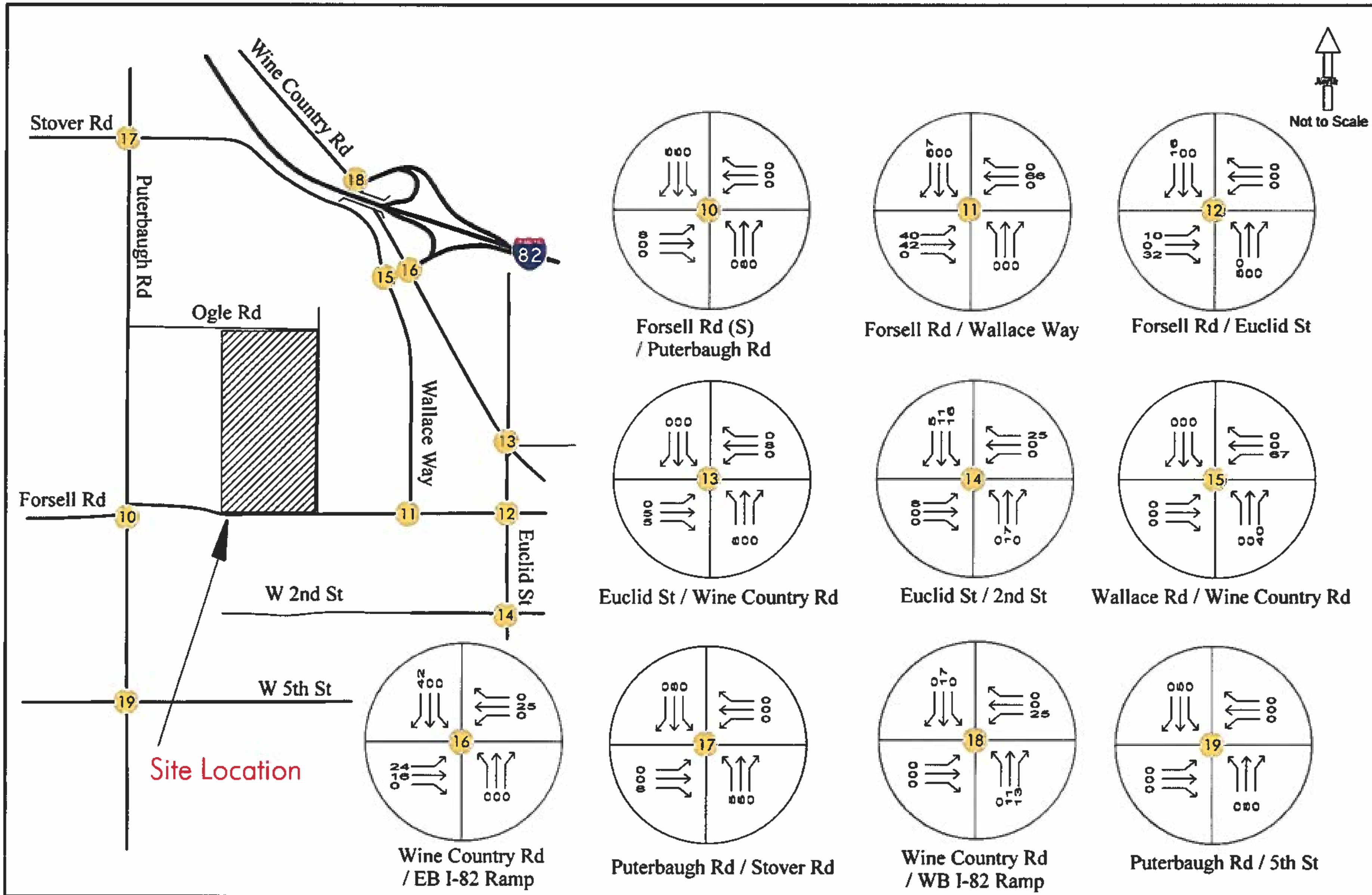

PM Peak Hour Distribution & Assignment (Part 2)
Forrest Glen Subdivision - Grandview, Washington

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Figure 5-B

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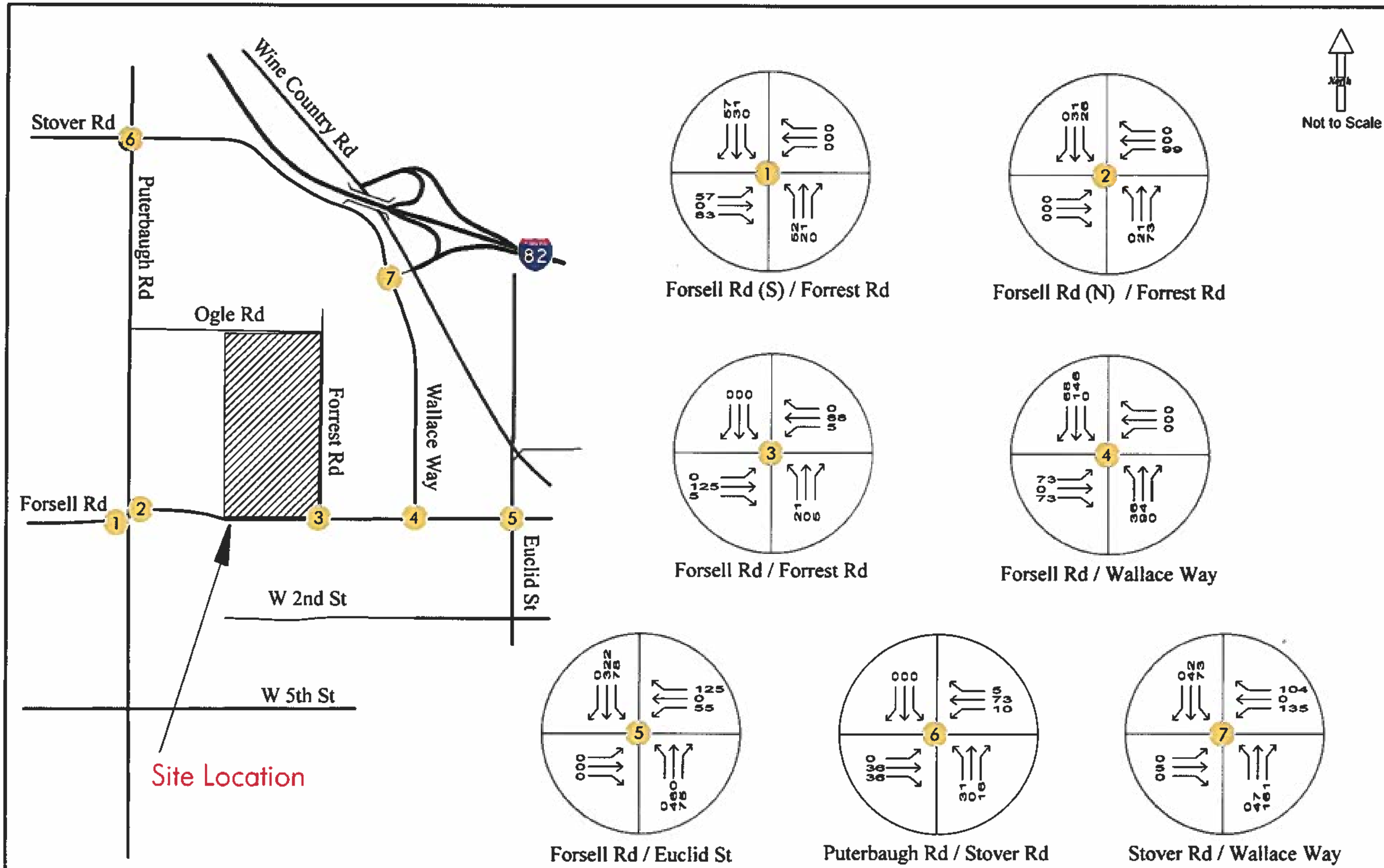

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PM Peak Hour Traffic - Year 2040 without Project
Forrest Glen Subdivision - Grandview, Washington

Figure 6

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CONCURANCY ANALYSIS

This section of the report presents the concurrency analysis which is used to determine if City of Grandview Level of Service standards and concurrency requirements would be met in the future. Table 5 shows the idealized capacity, which is based on the Comprehensive Plan (see also Table 2) as well as the existing and forecast link volumes on each street segment.

TABLE 5 –PM PEAK HOUR LINK CAPACITY AND FORECAST LINK-VOLUMES

			Pm Peak Hour Traffic (vehicles per hour)				
Functional Classification	**Roadway Name**	**Segment**	**Idealized Capacity**	**Existing 2025**	**2040 No Project**	**Project Traffic**	**2040 with Project**
Minor Arterial	Euclid St	W 2nd Street to Forsell Rd	2,000	758	985	85	1,071
		Forsell Rd to Wine Country Rd	2,000	702	913	32	945
Collector	Forsell Rd	Puterbaugh Rd to Forrest Rd	1,800	184	239	133	372
		Forrest Rd to Wallace Way	1,800	268	348	224	572
		Wallace Way to Euclid Street	1,800	292	380	117	497
	Wallace Wy	North of Forsell Rd	1,800	192	250	106	356
	Puterbaugh Rd	W 5th Street to Forsell Rd	2,000	144	187	16	203
		Forsell Rd to Stover Rd	2,000	72	94	32	126
Local Road	Forrest Rd	Forsell Rd to Ogle Rd	1,600	28	36	149	185
	Ogle Rd	Puterbaugh Rd to Forrest Rd	1,600	28	36	26	62

From the data in Table 5, it was possible to calculate the volume-capacity ratio on each segment and determine the Level of Service. As shown in Table 6, all segments were forecast to operate at Level of Service A. As such, concurrency requirements would be met.

Table 6 –PM Peak Hour Link V-C Ratios and Levels of Service

Functional Classification	Roadway Name	Segment	V-C Ratio		Level of Service	
			Existing 2025	2040 No Project	Existing 2025	2040 with Project
Minor Arterial	Euclid St	W 2nd Street to Forsell Rd	0.49	0.54	A	A
		Forsell Rd to Wine Country Rd	0.46	0.47	A	A
Collector	Forsell Rd	Puterbaugh Rd to Forrest Rd	0.13	0.21	A	A
		Forrest Rd to Wallace Way	0.19	0.32	A	A
		Wallace Way to Euclid Street	0.21	0.28	A	A
	Wallace Wy	North of Forsell Rd	0.14	0.20	A	A
	Puterbaugh Rd	W 5th Street to Forsell Rd	0.09	0.10	A	A
		Forsell Rd to Stover Rd	0.05	0.06	A	A
Local Road	Forrest Rd	Forsell Rd to Ogle Rd	0.02	0.12	A	A
	Ogle Rd	Puterbaugh Rd to Forrest Rd	0.02	0.04	A	A

INTERSECTION ASSESSMENTS

As per guidance of the City of Grandview, there was added interest in the intersection of Forsell Road and Puterbaugh Road, which functions as two-intersections as well as the intersection of Stover Road and Puterbaugh Road.

The operational capacity of these two intersections was determined to be sufficient by observation. Traffic from the proposed project would be primarily oriented towards town and the highway. As such, the impact of the project would be relatively minor.

Notable observations follow.

The key issues with the intersection of Puterbaugh Road and Forsell Road are:

1. The two intersections formed by these streets are offset by about 140 feet, center-to-center, leaving about 100 feet between the two intersections. This short-spacing is generally not desirable, especially considering that there is a fair amount of though traffic on Forsell Road on either side of Puterbaugh Road.
2. The dip between the two intersections is somewhat noticeable. Intersection sight-distance might not be met at higher speeds; however, it was found that sight distance is sufficient at the posted 35 mile per hour speed. The next section shows a table with AASHTO intersection sight-distance guidelines.
3. The turn-radii used by vehicles is not well defined by the pavement. As shown below in Exhibit 1, vehicles will tend to leave the pavement while making turns.
4. There are several farm access roads at this intersection. They may work adequately with the low volume of traffic on these streets. Even so, they are not ideally located. If the area is further developed, they should be realigned farther from the intersection.
5. While not ideal, this configuration functions adequately at the observed volumes of traffic. In the long term, it would be advisable to rationalize the intersection and realign Forsell Road to eliminate the offset. It is suggested that such an improvement be added to the Comprehensive Plan or other implementing document so that as such time that development occurs on the surrounding parcels there is a plan in place. Since the owner of this project does not control the adjacent private lands, it would not be possible at this time to realign the intersection.

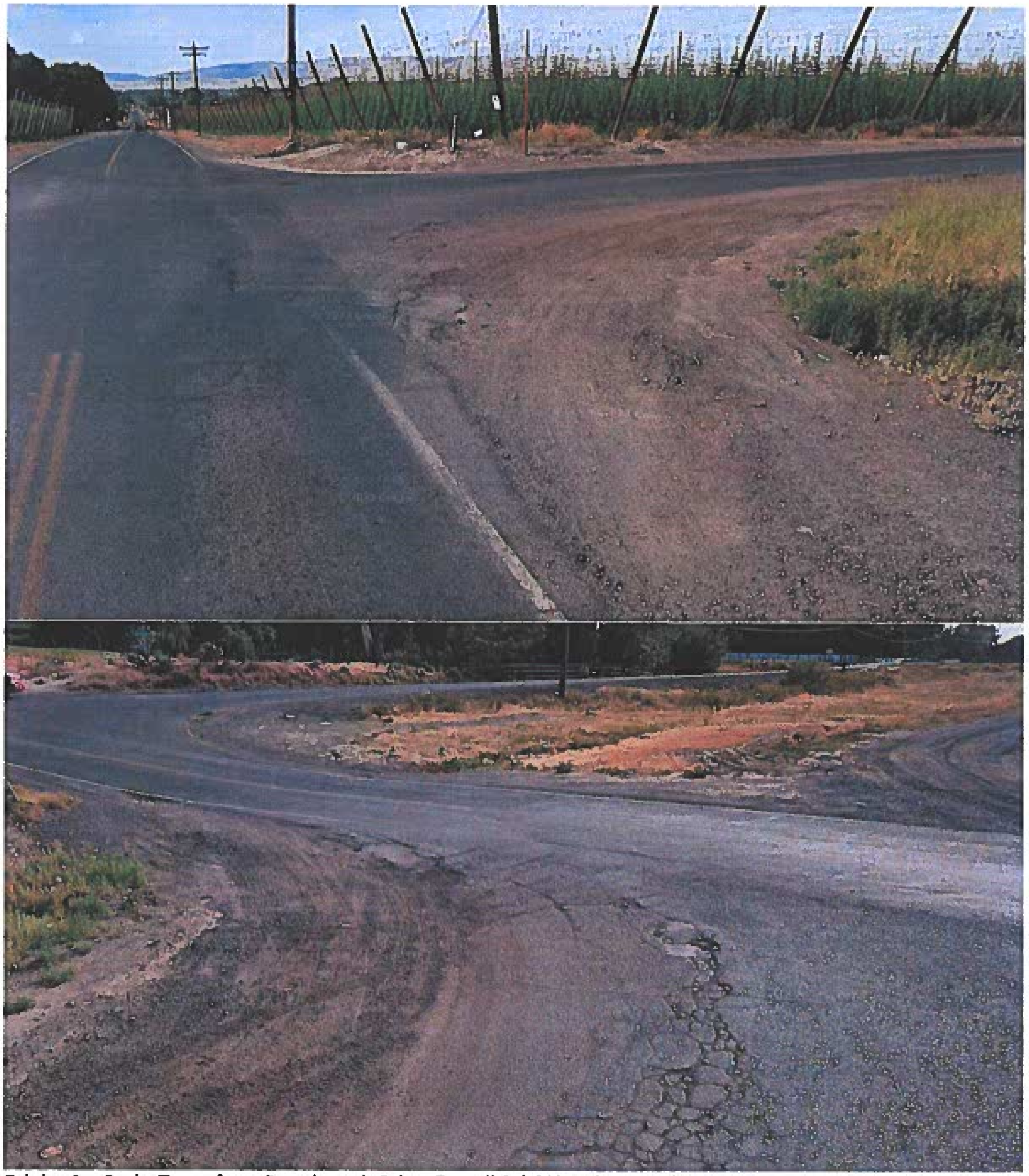


Exhibit 1 - Right Turns from Puterbaugh Rd to Forsell Rd (West Segment)

At the intersection of Stover Road and Puterbaugh Road it was observed that traffic is light and there is sufficient capacity. Some turn radii are insufficient for trucks unless they utilize the entire width of the street. This is a common way that trucks maneuver on constrained streets. This is reasonable when both volume and speed are low; however, in this case, the higher speeds on Stover Road make these maneuvers less desirable. Suggestions for consideration include:

1. Moving the 35 mile per hour speed limit to the west of the Stover Road/Puterbaugh Road intersection, reflecting the increased urbanization of the area to the east of Puterbaugh Road.
2. Clarifying the speed on southbound Puterbaugh Road. Currently, in the northbound direction the last posted speed is 35 miles per hour. But in the southbound direction, this is not clear. Heading south on Puterbaugh Road into the Forsell Road intersection, it would be desirable to be clear that the speed is the same in both directions (35 miles per hour).

SIGHT DISTANCE

Sight distance is a measure of how far a driver can see the road and/or other vehicles from various points in the roadway. Sight distance is measured in different ways and acceptable sight distance varies, depending on the type of sight distance that is important for a particular segment of road or intersection.

Stopping Sight Distance Guidelines

Stopping sight distance is the minimum required distance for a vehicle to stop before reaching a stationary object in its path. The standard assumptions used to determine minimum stopping sight distance are: Wet pavement, a driver's vision height of 3.5 feet, and a stationary object 2.0 feet high (A Policy on Geometric Design of Highways and Streets, AASHTO). Table 7 shows the AASHTO guidelines for stopping sight distance at a given speed.

TABLE 7– AASHTO GUIDELINES FOR STOPPING AND INTERSECTION SIGHT DISTANCE

DESIGN SPEED	STOPPING SIGHT DISTANCE (FT.)	INTERSECTION SIGHT DISTANCE FOR LEFT-TURNS FROM STOP (FT.) (1)	INTERSECTION SIGHT DISTANCE FOR RIGHT-TURNS FROM STOP AND CROSSING MANEUVER (FT.) (2)
15	80	170	145
20	115	225	195
25	155	280	240
30	200	335	290
35	250	390	335
40	305	445	385
45	360	500	430
50	425	555	480
55	495	610	530
60	570	665	575
65	645	720	625
70	730	775	670
75	820	830	720
80	910	885	765

Source: A Policy on Geometric Design of Highways and Streets, AASHTO 2004
(1) Minimum distance to the right from the stopped approach
(2) Minimum distance to the left for the right turn movements and in both directions for the stopped movement.

Intersection Sight Distance Guidelines
Intersection sight distance is the distance a driver can see from a stop-controlled approach to an intersection. The measurement is typically taken 14.4 feet back from the edge of the travel-way at a height of 3.5 feet, measured to a height of 3.5 feet in the travel lane. The AASHTO intersection sight distance guidelines, as shown in Table 7, reflect the minimum distance that a driver needs to be able to see while stopped at an intersection so that the driver may proceed without slowing vehicles on the main street by more than 15 percent. The distance required for a left turn is slightly longer than the distance for a right-turn.

Sight Distance at Study Intersections
Stopping sight distance and intersection sight distance were measured at the study intersections via aerial photographs. This analysis indicated that both intersection and stopping sight distances appear to be met at all study intersections. All new intersections should be built to conform to standard intersection sight distance and stopping sight distance guidelines. In the field, these were reviewed. It was found that intersection sight-distance at the two intersections where further investigation was adequate at posted speeds.

SUMMARY, FINDINGS AND CONCLUSIONS

This traffic impact study evaluated the effects of a proposed 279 single-family home residential development in Grandview, Washington. The development would be located northwest of the Forrest Road and Forsell Road intersection.

Key Points:

1. **Development Details:**
   - 279 single-family homes to be built in phases
   - Assumed buildout by 2040
   - Multiple access points connecting to Forsell Road, Forrest Road, and Ogle Road
2. **Traffic Generation:**
   - 262 PM peak hour trips
   - 2,631 daily trips
3. **Concurrency Analysis:**
   - All studied road segments would operate at Level of Service A in 2040
   - Volume-to-capacity ratios would be well below the city's LOS C standard (0.71-0.80)
   - Project meets City of Grandview concurrency requirements
4. **Intersection Assessments:**
   - Puterbaugh Road/Forsell Road intersection has offset configuration (140 feet center-to-center)
   - Current configurations function adequately but have some issues with turn radii
   - Long-term recommendation to realign Forsell Road to eliminate the offset
5. **Sight Distance:**
   - Analysis indicates adequate stopping and intersection sight distances at study intersections
   - All new intersections should meet standard sight distance guidelines
6. **Recommendations:**
   - Move 35 mph speed limit west of Stover Road/Puterbaugh Road intersection
   - Clarify southbound speed on Puterbaugh Road
   - Add intersection realignment to Comprehensive Plan for future development

The study concludes that the proposed development meets Grandview's transportation concurrency requirements with all roadway segments operating well within capacity.

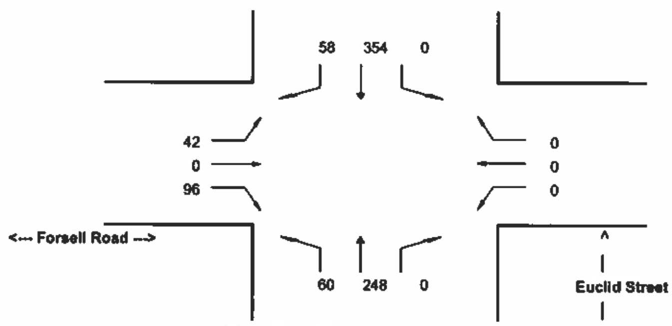
Appendix A – Traffic Counts

PEAK HOUR TRAFFIC COUNT SUMMARY

Count Location: Grandview, Washington
Count Date(s): Tuesday, March 18, 2025

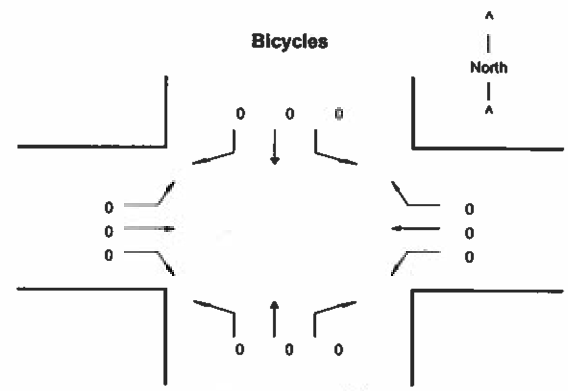
East-West Street Name: Forsell Road
North-South Street Name: Euclid Street
Peak Hour: 4:00 to 5:00 p.m.

Vehicles per Hour (all vehicles)



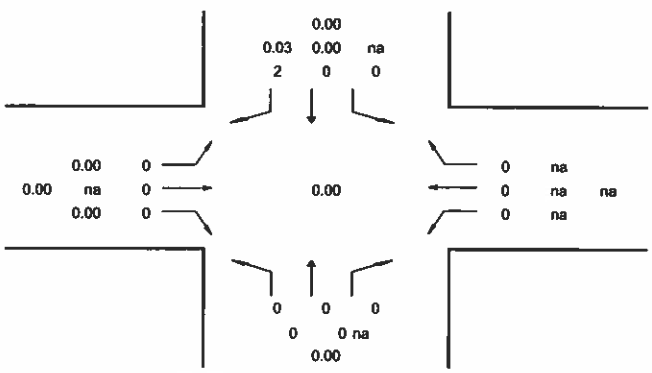
Total Entering Vehicles: 858

Bicycles



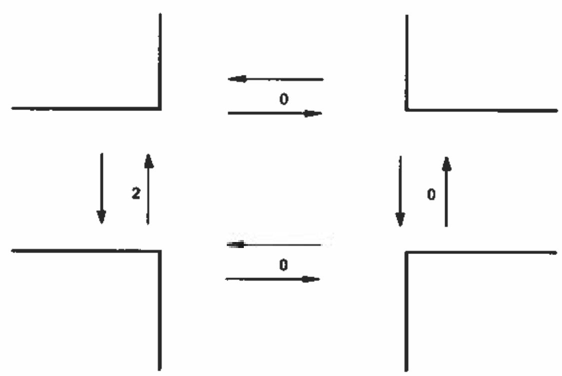
Total Entering Bicycles: 0

Heavy Vehicles (trucks per hour)

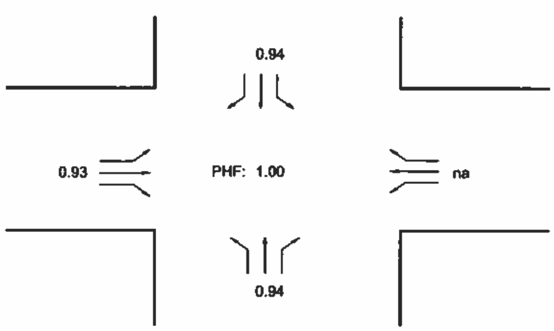


Total Entering Heavy Vehicles: 2

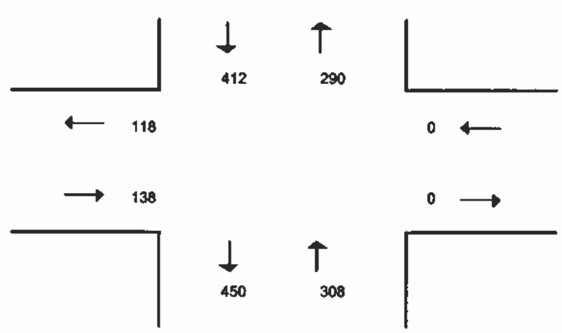
Pedestrians (crossings per hour)



Peak Hour Factor by Approach



Approach & Departure Volumes (vehicles per hour)



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Project #: 1811

PEAK PERIOD TRAFFIC COUNT -- DETAILED COUNT DATA

Count Location:	Grandview, Washington	*East-West Street Name:*	Forsell Road
		North-South Street Name:	Euclid Street
Count Date(s):	Tuesday, March 18, 2025	*Peak Hour:*	4:00 to 5:00 p.m.

ALL VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	69	13	24	0	13	17	79	0	0	0	0	215
4:15	4:30	0	69	13	24	0	13	17	79	0	0	0	0	215
4:30	4:45	0	55	17	24	0	8	12	98	0	0	0	0	214
4:45	5:00	0	55	17	24	0	8	12	98	0	0	0	0	214
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	248	60	96	0	42	58	354	0	0	0	0	858
Peak Hour		0	248	60	96	0	42	58	354	0	0	0	0	858

HEAVY VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15	4:30	0	0	0	0	0	0	1	0	0	0	0	0	1
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	2	0	0	0	0	0	2
Peak Hour		0	0	0	0	0	0	2	0	0	0	0	0	2

BICYCLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

PEDESTRIANS

TIME		CROSSINGS			
STARTING	ENDING	South Leg	West Leg	North Leg	East Leg
4:00	4:15	0	0	0	0
4:15	4:30	0	0	0	0
4:30	4:45	0	1	0	0
4:45	5:00	0	1	0	0
5:00	5:15	0	0	0	0
5:15	5:30	0	0	0	0
5:30	5:45	0	0	0	0
5:45	6:00	0	0	0	0
6:00	6:15	0	0	0	0
6:15	6:30	0	0	0	0
6:30	6:45	0	0	0	0
6:45	7:00	0	0	0	0
7:00	7:15	0	0	0	0
7:15	7:30	0	0	0	0
7:30	7:45	0	0	0	0
7:45	8:00	0	0	0	0
TOTAL		0	2	0	0
Peak Hour		0	2	0	0

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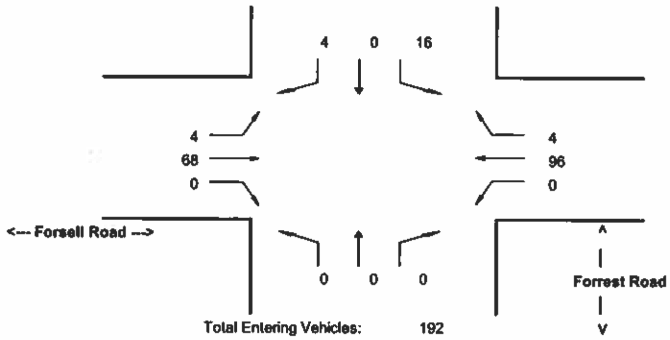
Project #: 1811

PEAK HOUR TRAFFIC COUNT SUMMARY

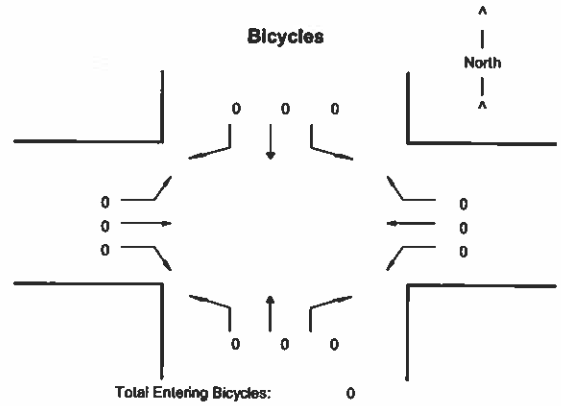
Count Location: Grandview, Washington
Count Date(s): Tuesday, March 18, 2025

East-West Street Name: Forsell Road
North-South Street Name: Forrest Road
Peak Hour: 4:00 to 5:00 p.m.

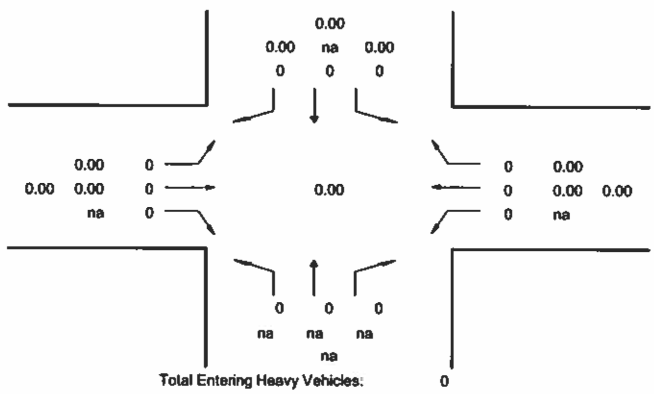
Vehicles per Hour (all vehicles)



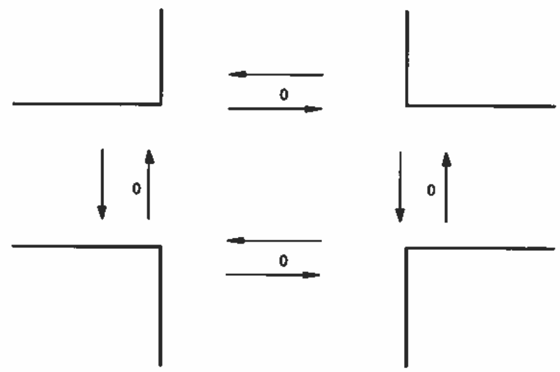
Bicycles



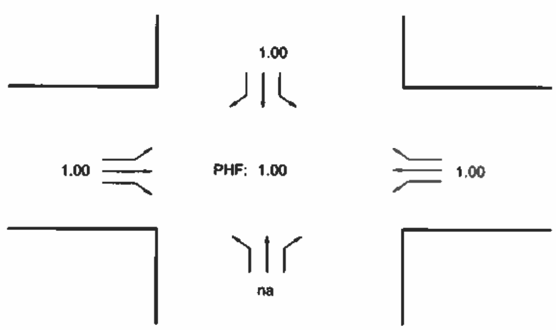
Heavy Vehicles (trucks per hour)



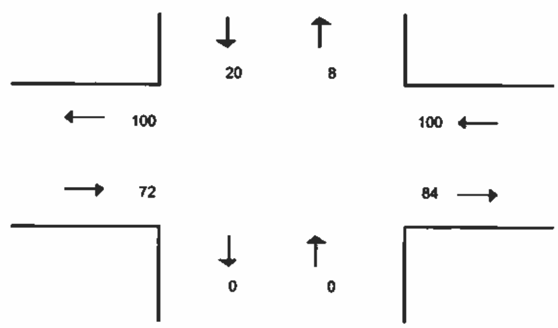
Pedestrians (crossings per hour)



Peak Hour Factor by Approach



Approach & Departure Volumes (vehicles per hour)



Ferguson & Associates, Inc PO Box 1336 Bend, OR 97709	Phone: 541-617-9352 gscott@traffic-team.us	Project #: 1811

PEAK PERIOD TRAFFIC COUNT -- DETAILED COUNT DATA

Count Location:	Grandview, Washington	*East-West Street Name:*	Forsell Road
		North-South Street Name:	Forrest Road
Count Date(s):	Tuesday, March 18, 2025	*Peak Hour:*	4:00 to 5:00 p.m.

ALL VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	17	1	1	0	4	1	24	0	48
4:15	4:30	0	0	0	0	17	1	1	0	4	1	24	0	48
4:30	4:45	0	0	0	0	17	1	1	0	4	1	24	0	48
4:45	5:00	0	0	0	0	17	1	1	0	4	1	24	0	48
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	68	4	4	0	16	4	96	0	192
Peak Hour		0	0	0	0	68	4	4	0	16	4	96	0	192

HEAVY VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

BICYCLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

PEDESTRIANS

TIME		CROSSINGS			
STARTING	ENDING	South Leg	West Leg	North Leg	East Leg
4:00	4:15	0	0	0	0
4:15	4:30	0	0	0	0
4:30	4:45	0	0	0	0
4:45	5:00	0	0	0	0
5:00	5:15	0	0	0	0
5:15	5:30	0	0	0	0
5:30	5:45	0	0	0	0
5:45	6:00	0	0	0	0
6:00	6:15	0	0	0	0
6:15	6:30	0	0	0	0
6:30	6:45	0	0	0	0
6:45	7:00	0	0	0	0
7:00	7:15	0	0	0	0
7:15	7:30	0	0	0	0
7:30	7:45	0	0	0	0
7:45	8:00	0	0	0	0
TOTAL		0	0	0	0
Peak Hour		0	0	0	0

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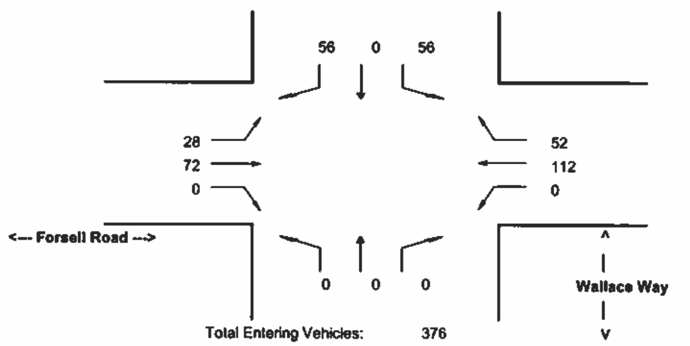
Project #: 1811

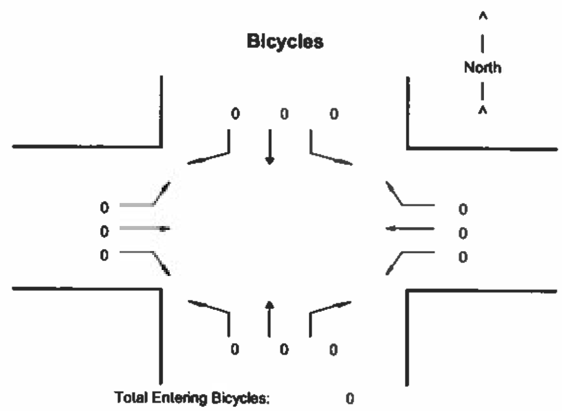
PEAK HOUR TRAFFIC COUNT SUMMARY

Count Location: Grandview, Washington
Count Date(s): Tuesday, March 18, 2025
East-West Street Name: Forsell Road
North-South Street Name: Wallace Way
Peak Hour: 4:00 to 5:00 p.m.

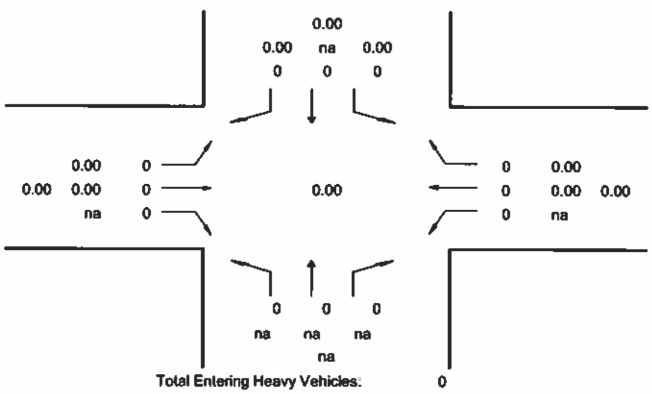
Vehicles per Hour (all vehicles)



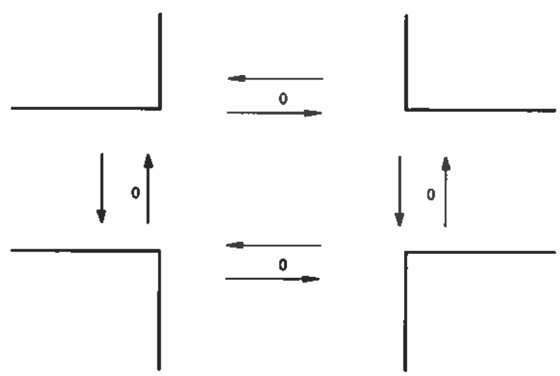
Bicycles



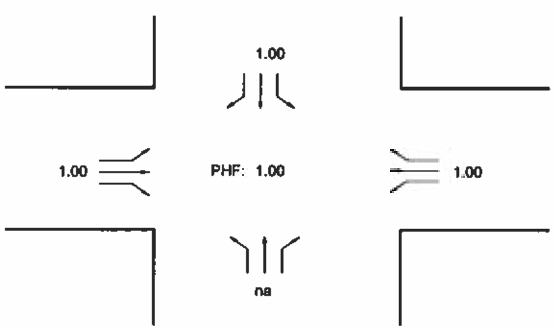
Heavy Vehicles (trucks per hour)



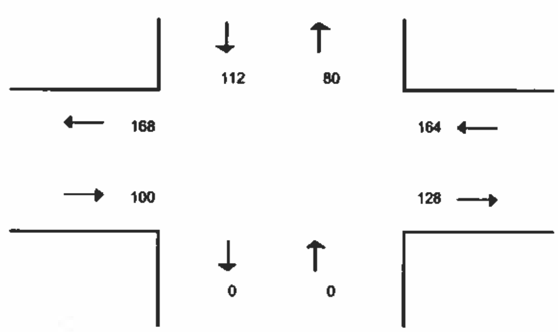
Pedestrians (crossings per hour)



Peak Hour Factor by Approach



Approach & Departure Volumes (vehicles per hour)



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Project #: 1811

PEAK PERIOD TRAFFIC COUNT -- DETAILED COUNT DATA

Count Location: Grandview, Washington

Count Date(s): Tuesday, March 18, 2025

East-West Street Name: Forsell Road

North-South Street Name: Wallace Way

Peak Hour: 4:00 to 5:00 p.m.

ALL VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	18	7	14	0	14	13	28	0	94
4:15	4:30	0	0	0	0	18	7	14	0	14	13	28	0	94
4:30	4:45	0	0	0	0	18	7	14	0	14	13	28	0	94
4:45	5:00	0	0	0	0	18	7	14	0	14	13	28	0	94
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	72	28	56	0	56	52	112	0	376
Peak Hour		0	0	0	0	72	28	56	0	56	52	112	0	376

HEAVY VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

BICYCLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

PEDESTRIANS

TIME		CROSSINGS			
STARTING	ENDING	South Leg	West Leg	North Leg	East Leg
4:00	4:15	0	0	0	0
4:15	4:30	0	0	0	0
4:30	4:45	0	0	0	0
4:45	5:00	0	0	0	0
5:00	5:15	0	0	0	0
5:15	5:30	0	0	0	0
5:30	5:45	0	0	0	0
5:45	6:00	0	0	0	0
6:00	6:15	0	0	0	0
6:15	6:30	0	0	0	0
6:30	6:45	0	0	0	0
6:45	7:00	0	0	0	0
7:00	7:15	0	0	0	0
7:15	7:30	0	0	0	0
7:30	7:45	0	0	0	0
7:45	8:00	0	0	0	0
TOTAL		0	0	0	0
Peak Hour		0	0	0	0

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Project #: 1811

PEAK HOUR TRAFFIC COUNT SUMMARY

Count Location: Grandview, Washington

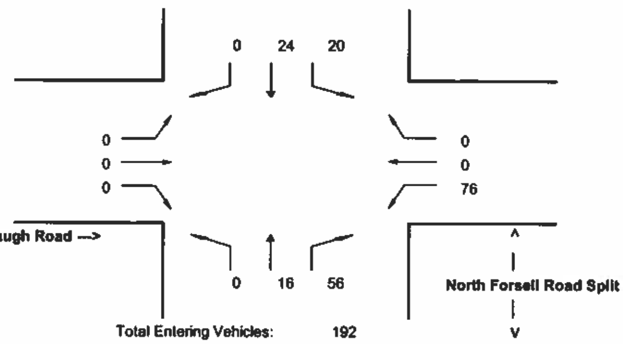
Count Date(s): Tuesday, March 18, 2025

East-West Street Name: Puterbaugh Road

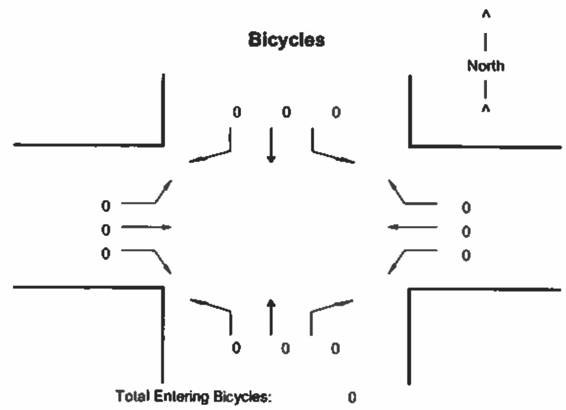
North-South Street Name: North Forsell Road Split

Peak Hour: 4:00 to 5:00 p.m.

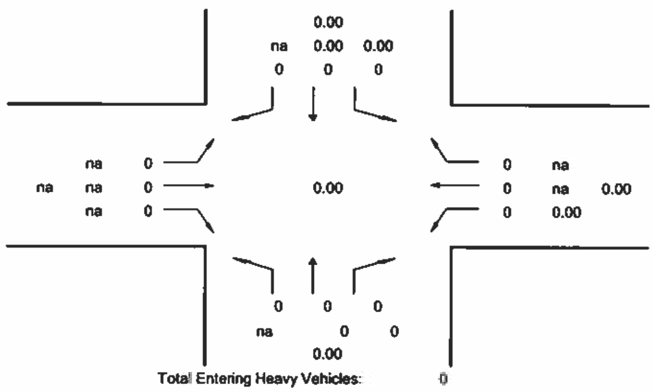
Vehicles per Hour (all vehicles)



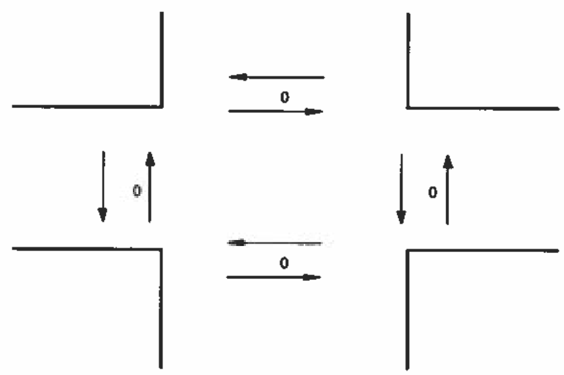
Bicycles



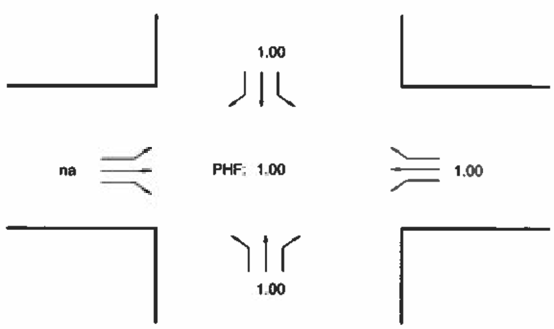
Heavy Vehicles (trucks per hour)



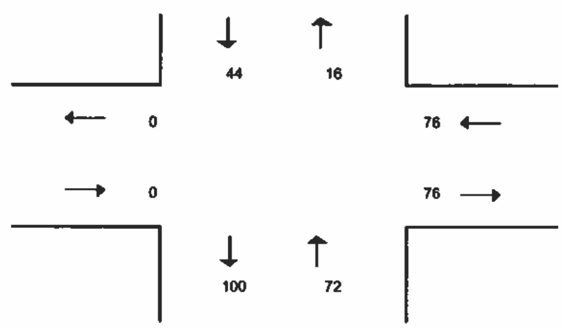
Pedestrians (crossings per hour)



Peak Hour Factor by Approach



Approach & Departure Volumes (vehicles per hour)



Ferguson & Associates, Inc PO Box 1336 Bend, OR 97709	Phone: 541-617-9352 gscott@traffic-team.us	Project #: 1811

PEAK PERIOD TRAFFIC COUNT -- DETAILED COUNT DATA

Count Location:	Grandview, Washington	*East-West Street Name:*	Puterbaugh Road
		North-South Street Name:	North Forsell Road Split
Count Date(s):	Tuesday, March 18, 2025	*Peak Hour:*	4:00 to 5:00 p.m.

ALL VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	14	4	0	0	0	0	0	6	5	0	0	19	48
4:15	4:30	14	4	0	0	0	0	0	6	5	0	0	19	48
4:30	4:45	14	4	0	0	0	0	0	6	5	0	0	19	48
4:45	5:00	14	4	0	0	0	0	0	6	5	0	0	19	48
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		56	16	0	0	0	0	0	24	20	0	0	76	192
Peak Hour		56	16	0	0	0	0	0	24	20	0	0	76	192

HEAVY VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

BICYCLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

PEDESTRIANS

TIME		CROSSINGS			
STARTING	ENDING	South Leg	West Leg	North Leg	East Leg
4:00	4:15	0	0	0	0
4:15	4:30	0	0	0	0
4:30	4:45	0	0	0	0
4:45	5:00	0	0	0	0
5:00	5:15	0	0	0	0
5:15	5:30	0	0	0	0
5:30	5:45	0	0	0	0
5:45	6:00	0	0	0	0
6:00	6:15	0	0	0	0
6:15	6:30	0	0	0	0
6:30	6:45	0	0	0	0
6:45	7:00	0	0	0	0
7:00	7:15	0	0	0	0
7:15	7:30	0	0	0	0
7:30	7:45	0	0	0	0
7:45	8:00	0	0	0	0
TOTAL		0	0	0	0
Peak Hour		0	0	0	0

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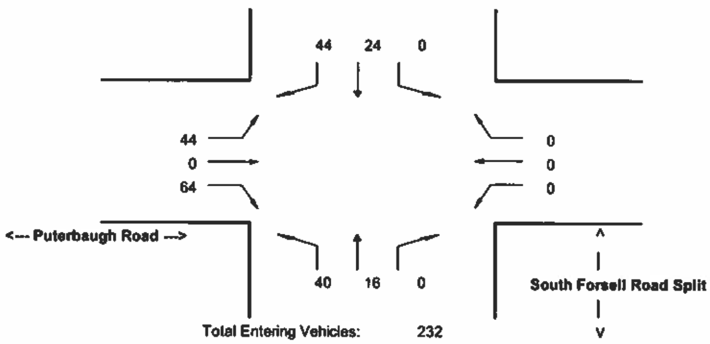
Project #: 1811

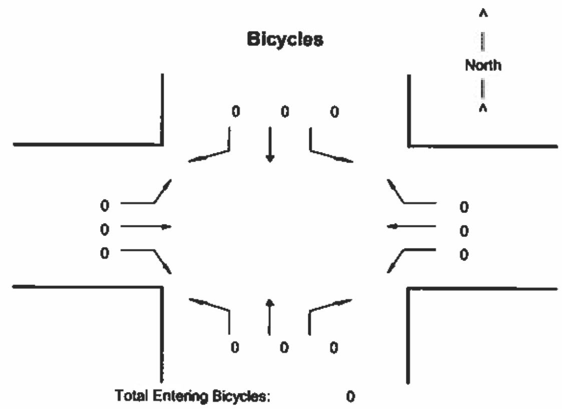
PEAK HOUR TRAFFIC COUNT SUMMARY

Count Location:	Grandview, Washington	*East-West Street Name:*	Puterbaugh Road
		North-South Street Name:	South Forsell Road Split
Count Date(s):	Tuesday, March 18, 2025	*Peak Hour:*	4:00 to 5:00 p.m.

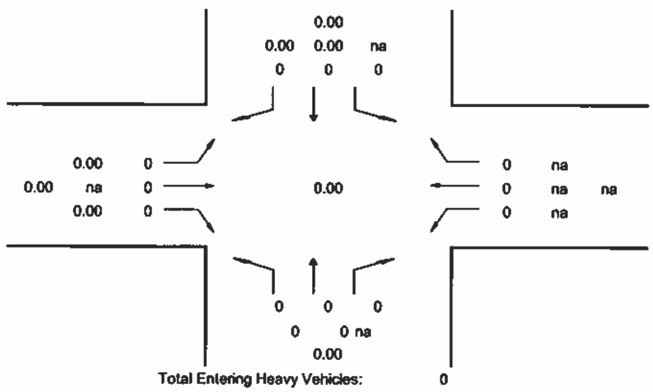
Vehicles per Hour (all vehicles)



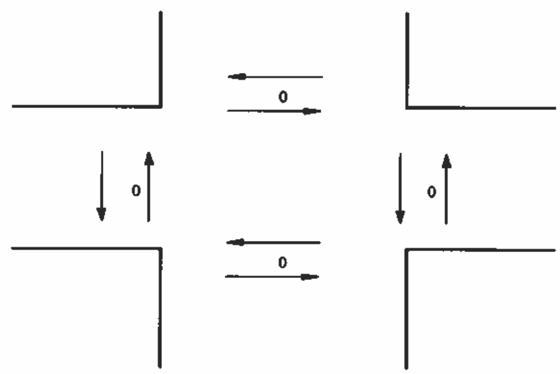
Bicycles



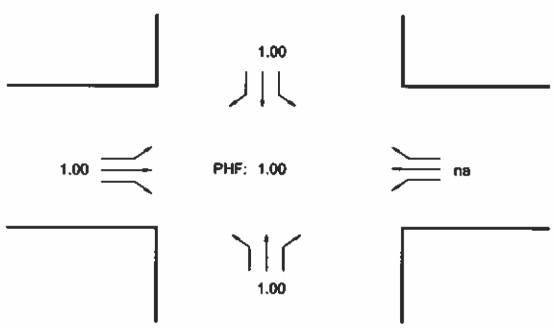
Heavy Vehicles (trucks per hour)



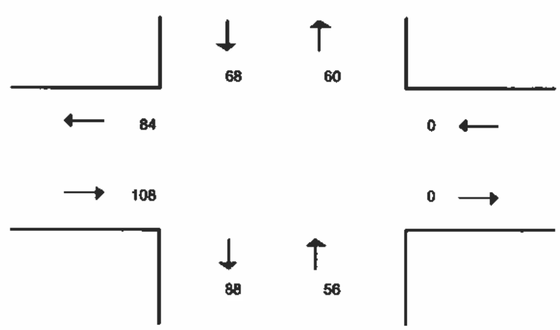
Pedestrians (crossings per hour)



Peak Hour Factor by Approach



Approach & Departure Volumes (vehicles per hour)



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PEAK PERIOD TRAFFIC COUNT -- DETAILED COUNT DATA

Count Location:	Grandview, Washington	*East-West Street Name:*	Puterbaugh Road
		North-South Street Name:	South Forsell Road Split
Count Date(s):	Tuesday, March 18, 2025	*Peak Hour:*	4:00 to 5:00 p.m.

ALL VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	4	10	16	0	11	11	6	0	0	0	0	58
4:15	4:30	0	4	10	16	0	11	11	6	0	0	0	0	58
4:30	4:45	0	4	10	16	0	11	11	6	0	0	0	0	58
4:45	5:00	0	4	10	16	0	11	11	6	0	0	0	0	58
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	16	40	64	0	44	44	24	0	0	0	0	232
Peak Hour		0	16	40	64	0	44	44	24	0	0	0	0	232

HEAVY VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

BICYCLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

PEDESTRIANS

TIME		CROSSINGS			
STARTING	ENDING	South Leg	West Leg	North Leg	East Leg
4:00	4:15	0	0	0	0
4:15	4:30	0	0	0	0
4:30	4:45	0	0	0	0
4:45	5:00	0	0	0	0
5:00	5:15	0	0	0	0
5:15	5:30	0	0	0	0
5:30	5:45	0	0	0	0
5:45	6:00	0	0	0	0
6:00	6:15	0	0	0	0
6:15	6:30	0	0	0	0
6:30	6:45	0	0	0	0
6:45	7:00	0	0	0	0
7:00	7:15	0	0	0	0
7:15	7:30	0	0	0	0
7:30	7:45	0	0	0	0
7:45	8:00	0	0	0	0
TOTAL		0	0	0	0
Peak Hour		0	0	0	0

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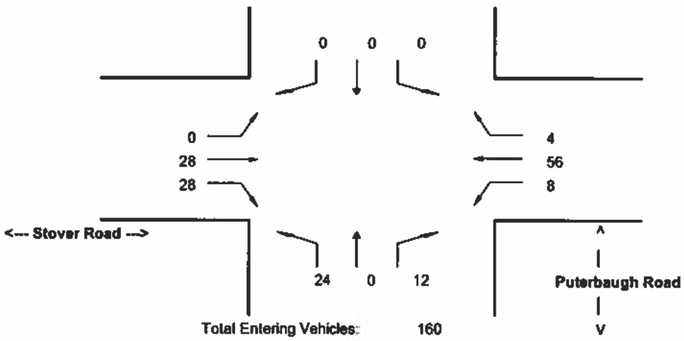
Project #: 1811

PEAK HOUR TRAFFIC COUNT SUMMARY

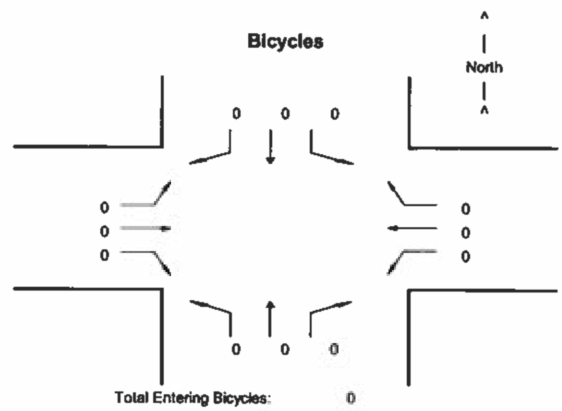
Count Location: Grandview, Washington
Count Date(s): Tuesday, March 18, 2025

East-West Street Name: Stover Road
North-South Street Name: Puterbaugh Road
Peak Hour: 4:00 to 5:00 p.m.

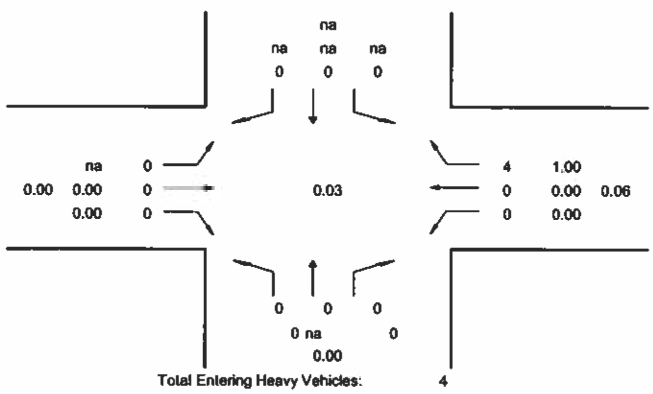
Vehicles per Hour (all vehicles)



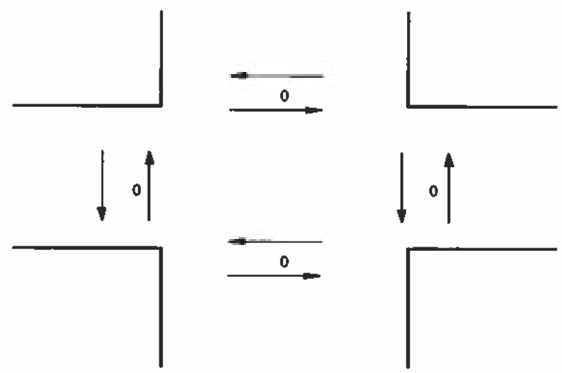
Bicycles



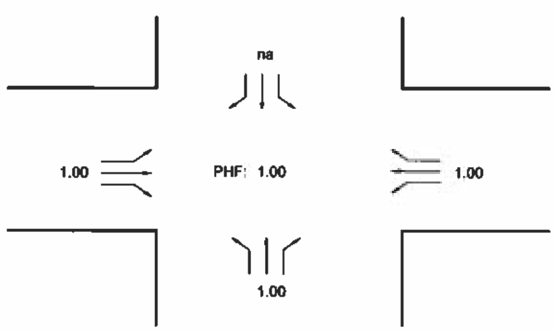
Heavy Vehicles (trucks per hour)



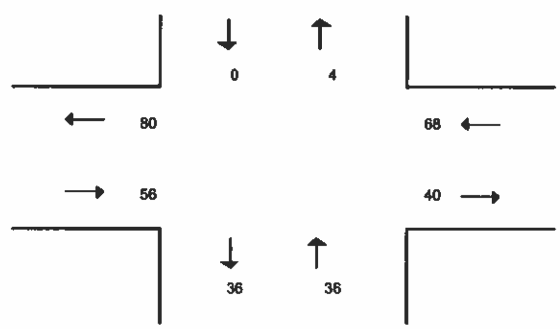
Pedestrians (crossings per hour)



Peak Hour Factor by Approach



Approach & Departure Volumes (vehicles per hour)



Ferguson & Associates, Inc PO Box 1336 Bend, OR 97709	Phone: 541-617-9352 gscott@traffic-team.us	Project #: 1811

PEAK PERIOD TRAFFIC COUNT -- DETAILED COUNT DATA

Count Location:	Grandview, Washington	*East-West Street Name:*	Stover Road
		North-South Street Name:	Puterbaugh Road
Count Date(s):	Tuesday, March 18, 2025	*Peak Hour:*	4:00 to 5:00 p.m.

ALL VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	3	0	6	7	7	0	0	0	0	1	14	2	40
4:15	4:30	3	0	6	7	7	0	0	0	0	1	14	2	40
4:30	4:45	3	0	6	7	7	0	0	0	0	1	14	2	40
4:45	5:00	3	0	6	7	7	0	0	0	0	1	14	2	40
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		12	0	24	28	28	0	0	0	0	4	56	8	160
Peak Hour		12	0	24	28	28	0	0	0	0	4	56	8	160

HEAVY VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15	4:30	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30	4:45	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45	5:00	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	4	0	0	4
Peak Hour		0	0	0	0	0	0	0	0	0	4	0	0	4

BICYCLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

PEDESTRIANS

TIME		CROSSINGS			
STARTING	ENDING	South Leg	West Leg	North Leg	East Leg
4:00	4:15	0	0	0	0
4:15	4:30	0	0	0	0
4:30	4:45	0	0	0	0
4:45	5:00	0	0	0	0
5:00	5:15	0	0	0	0
5:15	5:30	0	0	0	0
5:30	5:45	0	0	0	0
5:45	6:00	0	0	0	0
6:00	6:15	0	0	0	0
6:15	6:30	0	0	0	0
6:30	6:45	0	0	0	0
6:45	7:00	0	0	0	0
7:00	7:15	0	0	0	0
7:15	7:30	0	0	0	0
7:30	7:45	0	0	0	0
7:45	8:00	0	0	0	0
TOTAL		0	0	0	0
Peak Hour		0	0	0	0

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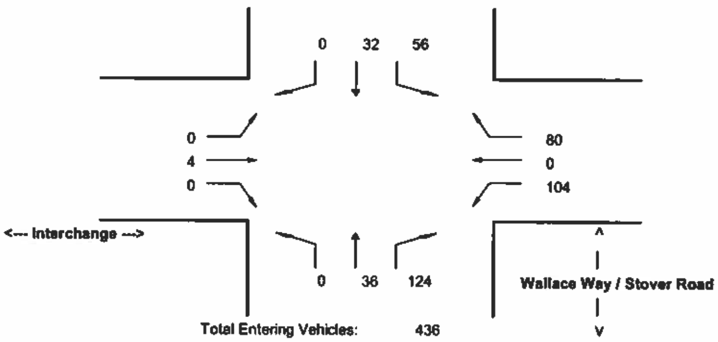
Project #: 1811

PEAK HOUR TRAFFIC COUNT SUMMARY

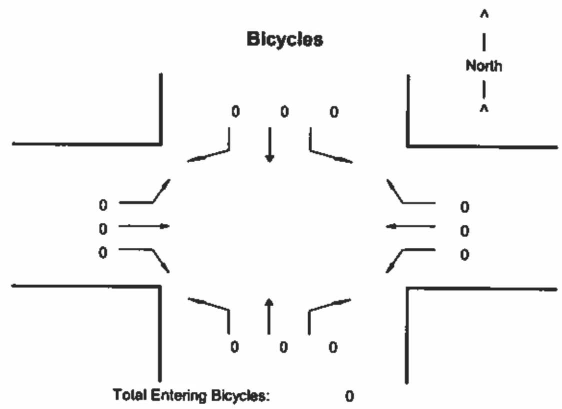
Count Location: Grandview, Washington
Count Date(s): Tuesday, March 18, 2025

East-West Street Name: Interchange
North-South Street Name: Wallace Way / Stover Road
Peak Hour: 4:00 to 5:00 p.m.

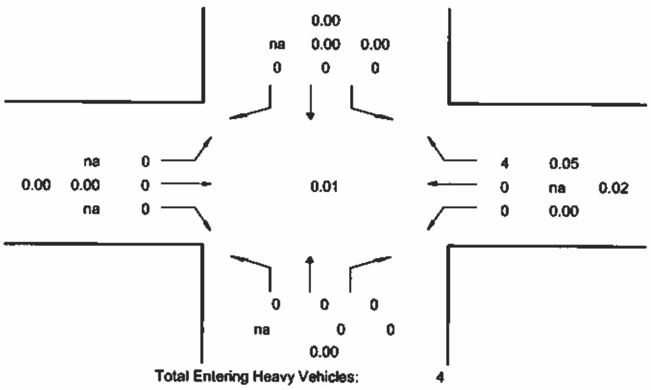
Vehicles per Hour (all vehicles)



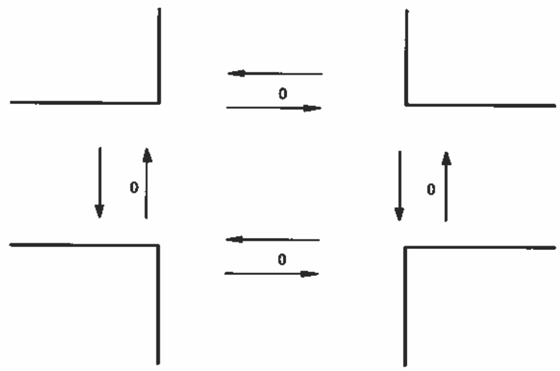
Bicycles



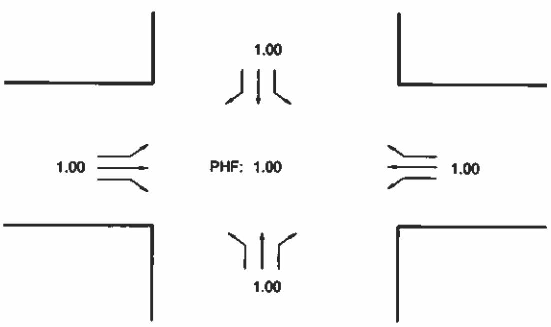
Heavy Vehicles (trucks per hour)



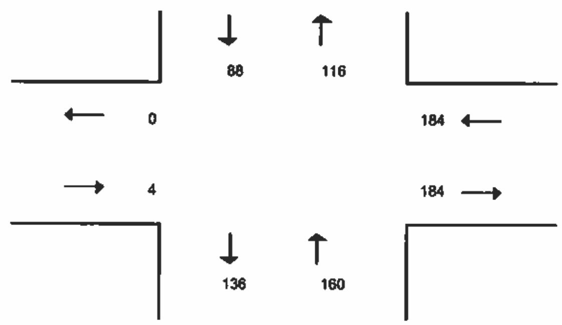
Pedestrians (crossings per hour)



Peak Hour Factor by Approach



Approach & Departure Volumes (vehicles per hour)



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Project #: 1811

PEAK PERIOD TRAFFIC COUNT -- DETAILED COUNT DATA

Count Location:	Grandview, Washington	*East-West Street Name:*	Interchange
		North-South Street Name:	Wallace Way / Stover Road
Count Date(s):	Tuesday, March 18, 2025	*Peak Hour:*	4:00 to 5:00 p.m.

ALL VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	31	9	0	0	1	0	0	8	14	20	0	26	109
4:15	4:30	31	9	0	0	1	0	0	8	14	20	0	26	109
4:30	4:45	31	9	0	0	1	0	0	8	14	20	0	26	109
4:45	5:00	31	9	0	0	1	0	0	8	14	20	0	26	109
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		124	36	0	0	4	0	0	32	56	80	0	104	436
Peak Hour		124	36	0	0	4	0	0	32	56	80	0	104	436

HEAVY VEHICLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15	4:30	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30	4:45	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45	5:00	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	4	0	0	4
Peak Hour		0	0	0	0	0	0	0	0	0	4	0	0	4

BICYCLES

TIME		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
STARTING	ENDING	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	TOTAL
4:00	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	4:30	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		0	0	0	0	0	0	0	0	0	0	0	0	0

PEDESTRIANS

TIME		CROSSINGS			
STARTING	ENDING	South Leg	West Leg	North Leg	East Leg
4:00	4:15	0	0	0	0
4:15	4:30	0	0	0	0
4:30	4:45	0	0	0	0
4:45	5:00	0	0	0	0
5:00	5:15	0	0	0	0
5:15	5:30	0	0	0	0
5:30	5:45	0	0	0	0
5:45	6:00	0	0	0	0
6:00	6:15	0	0	0	0
6:15	6:30	0	0	0	0
6:30	6:45	0	0	0	0
6:45	7:00	0	0	0	0
7:00	7:15	0	0	0	0
7:15	7:30	0	0	0	0
7:30	7:45	0	0	0	0
7:45	8:00	0	0	0	0
TOTAL		0	0	0	0
Peak Hour		0	0	0	0

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