

# **Traffic Impact Analysis**

# **TEANAWAY COURT**

Prepared for: Shelter Resources, Inc.

October 2025

Prepared by:



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### Introduction

This traffic impact analysis (TIA) identifies potential transportation-related impacts associated with the proposed Teanaway Court Daycare Center development in Cle Elum, WA.

## **Project Description**

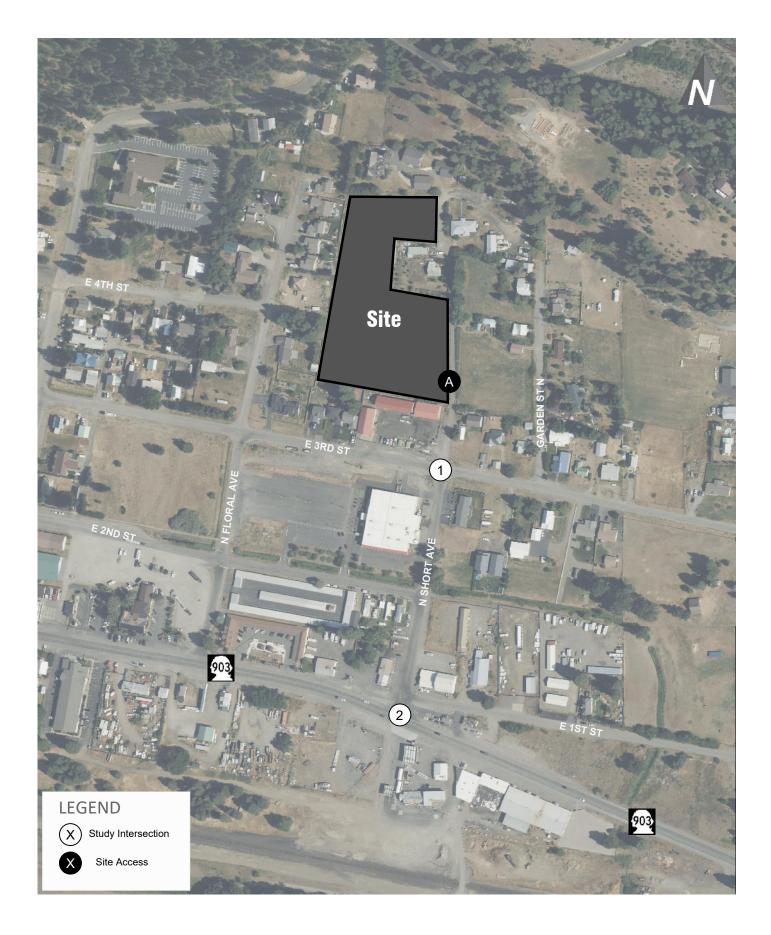
The proposed project will construct 41 affordable housing units within seven buildings on site in addition to a 5,000 square foot day care center serving up to 66 students on a currently vacant 4.3-acre lot (Parcel # 113034, 123034, 283034) located north of E 3rd Street and west of N Short Avenue in Cle Elum, WA. The site vicinity is shown on Figure 1. Access to and from the site is proposed via a single access driveway in the southeast corner of the project site along N Short Avenue, as shown in the site plan in Figure 2. The proposed project is anticipated to be fully constructed and occupied by 2027.

# Study Scope and Study Area

The stop-controlled intersections of N Short Avenue/E 3rd Street and N Short Avenue/SR 903 were studied for operational impacts during the weekday PM peak hour. Additionally, the site access intersection along N Short Avenue was also evaluated under future with-project conditions.

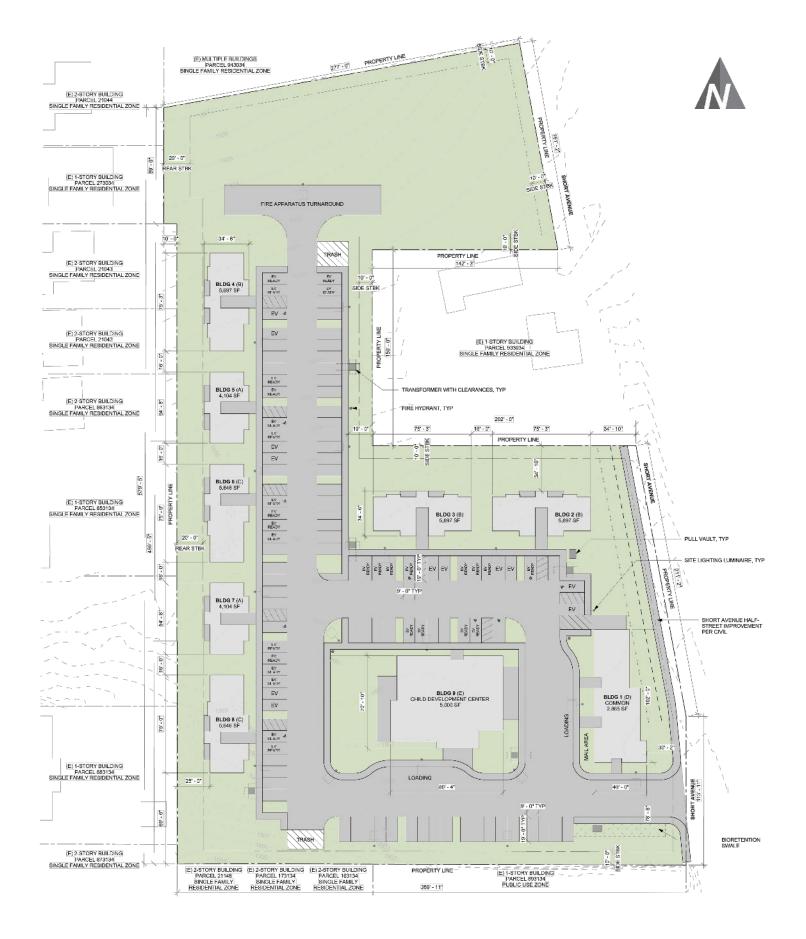
The scope of the analysis includes a review of the weekday PM peak hour conditions. The analysis includes a review of existing conditions in the vicinity of the project site, including the transportation network, planned improvements, existing and future without-project peak hour traffic volumes, traffic operations, and traffic safety. Future (2027) with-project conditions are evaluated by adding site-generated traffic to the future (2027) without-project volumes and were then compared to future (2027) without-project conditions to identify the relative impacts the proposed project has on the surrounding transportation system.

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# Site Vicinity and Study Intersections

**FIGURE** 



# Preliminary Site Plan

# **Existing & Future Without-Project Conditions**

This section describes both existing and future (2027) without-project conditions within the identified study area. Study area characteristics are provided for the transportation system, planned improvements, existing and future forecasted without-project traffic volumes, traffic operations, and traffic safety.

## Roadway Network

The following sections describe the existing street network within the vicinity of the proposed project and anticipated planned improvements.

#### Existing

The primary roadways within the study area and their characteristics near the study intersections are described below.

**N Short Avenue** is functionally classified by the City of Cle Elum as a local roadway with a speed limit of 30 mph in the vicinity of the project site. The roadway consists of an unmarked paved surface approximately 34 feet in width with no dedicated pedestrian or bicycle facilities present within the study area.

**E 3rd Street** is an unmarked two-lane roadway with a speed limit of 30 mph in the vicinity of the project site, classified as a local roadway. No pedestrian facilities, bicycle facilities, or shoulders are provided along E 3rd Street.

**SR 903 (I-90 Bypass)** is a two-lane roadway classified by WSDOT as a major collector with a speed limit of 30 mph within the study area. Wide painted shoulders are provided on both sides of the roadway although no dedicated pedestrian or bicycle facilities are present along SR 903 in the vicinity of the proposed project site.

### **Planned Improvements**

Based on a review of the City of Cle Elum's Six-Year Transportation Improvement Plan and Washington State Department of Transportation's (WSDOT) 2025-2028 Statewide Transportation Improvement Plan (STIP), no projects were identified in the immediate vicinity of the project site. There are multiple non-motorized, safety and resurfacing improvement project within the City although no projects identified within the study area.

#### **Transit Service**

Transit service in the vicinity of the proposed project site is provided by Hope Source's Kittitas County Connector providing service 7-days per week between Kittitas, Ellensburg, Cle Elum, Ronald and Roslyn. The Kittitas County Connector travels along SR 903 with the closest stop to the project site located approximately 0.3 miles southwest at the intersection of SR 903/N Floral Avenue. Service is provided between 5:30 a.m. and 7:30 p.m. on weekdays and 8:30 a.m. to 7:30 p.m. on weekends with 5 round-trips per day on weekends.

#### **Traffic Volumes**

#### Existing

Existing weekday PM (4 to 6 p.m.) peak period traffic counts were collected at the off-site study intersections in August 2025. Volumes are rounded to the nearest 5 vehicles to account

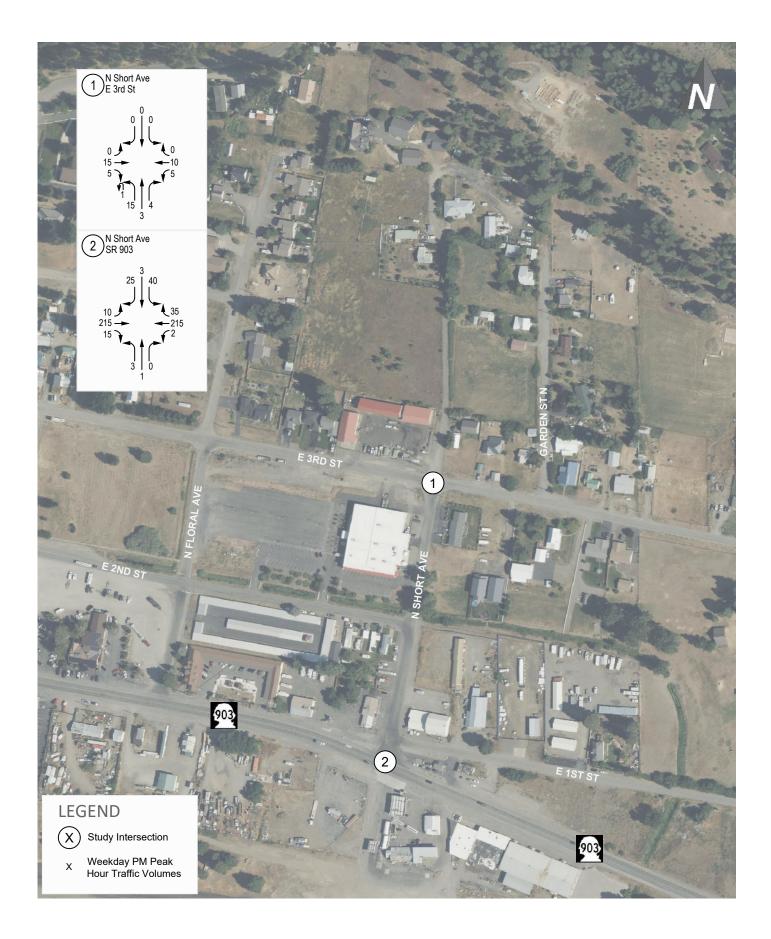


for the daily fluctuations in traffic volumes. Figure 3 illustrates the existing weekday PM peak hour traffic volumes at the off-site study intersection.

### Future Without-Project Traffic Volumes

Future (2027) without-project traffic volumes are comprised of background traffic growth anticipated in the area as well as traffic from a planned but not yet constructed "pipeline" development identified in the vicinity of the proposed project site. An annual growth rate of 2.5 percent was used to estimate future traffic volumes on the roadways surrounding the project site, consistent with the growth used in the City's Comprehensive Plan (November 2021) and other traffic studies prepared in the area of this project. The one pipeline development project identified was the Wildwood Ranch residential development proposed to construct 48 detached and 40 attached single-family homes on a site located east of S Cottage Avenue between E 1st Street and E 3rd Street. The forecast future (2027) without-project weekday PM peak hour traffic volumes are shown on Figure 4.

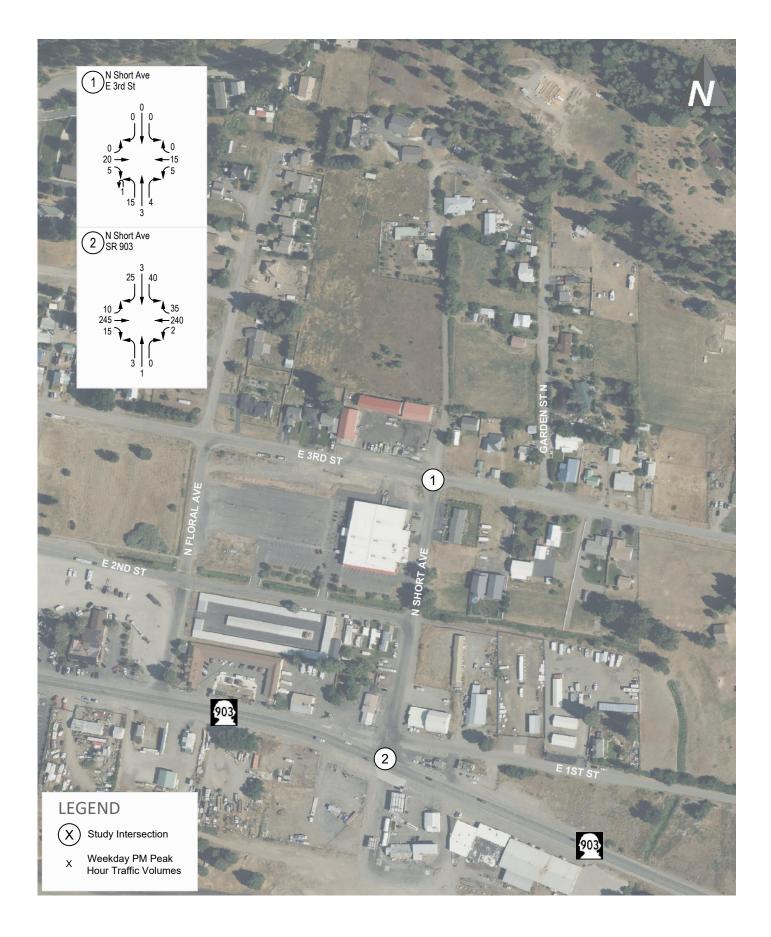
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# Existing Weekday PM Peak Hour Traffic Volumes

**FIGURE** 

3



Future (2027) Without-Project Weekday PM Peak Hour Traffic Volumes FIGURE

# **Traffic Operations**

The following section summarizes the traffic operations for existing and future (2027) without-project conditions for the study intersections.

The operational characteristics of an intersection are determined by calculating the intersection level of service (LOS). At unsignalized intersections, LOS is measured in average delay per vehicle and is typically reported as the worst vehicle movement delay at any given intersection. Traffic operations and average vehicle delay for an intersection can be described qualitatively with a range of levels of service (LOS A through LOS F), with LOS A indicating free-flowing traffic and LOS F indicating extreme congestion and long vehicle delays. Appendix B contains a detailed explanation of LOS criteria and definitions.

Based on the City of Cle Elum's Comprehensive Plan (November 2021), the City, in agreement with the Washington State Department of Transportation (WSDOT), has established a LOS C standard for all intersections along rural roadways and LOS D for intersections along urban roadways within the City. SR 903 is identified by the City as an urban roadway, therefore recognizes a LOS D standard.

Weekday peak hour traffic operations for existing and future without-project conditions were evaluated at the study intersections based on the procedures identified in the *Highway Capacity Manual* (HCM 7th ed.) and using *Synchro 12*. *Synchro 12* is a software program that uses *HCM* methodology to evaluate intersection LOS and average vehicle delays. Analysis parameters such as lane channelization and traffic control type were maintained for future (2027) without-project conditions consistent with existing conditions.

Results for the existing and future without-project operations analyses are summarized in Table 1. Detailed LOS worksheets for the existing and future without-project analysis are included in Appendix C.

Table 1.	Existing and Future Without-Pro	iect Weekdav PM Peak	Hour Intersection Operations

	LOS		Existing		2027	Without-Pre	oject
Intersection	Standard	LOS <sup>1</sup>	Delay <sup>2</sup>	WM <sup>3</sup>	LOS	Delay	WM
1. N Short Ave/E 3rd St	С	Α	9.0	NB	Α	9.1	NB
2. N Short Ave/SR 903	D	В	14.1	NB	С	15.1	NB

- 1. Level of Service (A F) as defined by the 7th Edition Highway Capacity Manual (HCM), Transportation Research Board.
- 2. Average delay per vehicle in seconds.
- 3. Worst movement reported for unsignalized intersections where NB = northbound.

Table 1 shows that under existing conditions, both of the study intersections operate at LOS B or better during the weekday PM peak hour, meeting the established City and WSDOT LOS standards. With the addition of background growth in the vicinity of the project site, under future (2027) without-project conditions, both study intersections are expected continue meeting the required LOS standards operating at LOS C or better with approximately 15 seconds or less of delay during the weekday PM peak hour.

# **Traffic Safety**

The five most recent years of collision records (January 1, 2019, to December 31, 2023) provided by the Washington State Department of Transportation (WSDOT) were reviewed within the study area to identify existing traffic safety issues at the study intersections. The review showed that no collisions occurred over the last five-year review period at the intersections of N Short Avenue/E 3rd Street and N Short Avenue/SR 903, or along the project frontage on N Short Avenue. One collision did occur at the intersection of N Short Avenue/E 2nd Street located between the two study intersections. This collision occurred in 2023 when a driver under the influence of alcohol collided with a fence along the roadway, resulting in property damage only.



# **Project Impacts**

This section of the report documents project-generated impacts within the study area. First, peak hour traffic volumes are estimated, distributed, and assigned to adjacent roadways and intersections within the study area. Next, future (2027) traffic volumes including project traffic are developed and the potential impact to traffic volumes and traffic operations are identified.

### **Trip Generation**

Trip generation for the proposed project was based on the established trip rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (12th Edition, 2025). For the proposed land uses, ITE's Day Care Center (LU 565) and Affordable Housing restricted by Income Limits (LU 223) were assumed. The anticipated trips generated by the proposed day care center on site were estimated based on the planned building size rather than the anticipated number of students as this provides a higher trip estimate and therefore a conservative analysis.

The proposed project trip generation was adjusted for pass-by trips which reflect traffic already on streets in the vicinity of the project site that would visit the Day Care Center on site while driving by the site on the way to their final destination. Based on the ITE *Trip Generation Manual (12th Edition, 2025*), the pass-by rate for the day care center use (LU 565) is 44 percent during the weekday PM peak hour. Transpo has conducted independent studies of pass-by trips for daycare facilities. These studies have shown a higher percentage of pass-by trips then identified by ITE. However, the ITE rates were used to provide a conservative estimate. Table 2 summarizes the estimated weekday trips generated by the proposed project. The detailed trip generation calculations are included in Appendix D.

Table 2. Estimated Weekd	lay Vehicle Trip	Generati	on					
		Daily	AM P	eak Hou	ır Trips	PM Pe	ak Hou	ır Trips
Land Use <sup>1</sup>	Size	Trips	In	Out	Total	In	Out	Total
Day Care Center (LU 565)	5,000 sf	196	29	25	54	25	29	54
Pass-B	у					-12	-12	-24
Affordable Housing (LU 223)	41 du	292	8	18	26	11	8	19
Total New Primary Trips		488	37	43	80	24	25	49

Note: sf = square feet, du = dwelling units

Average trip rates and pass-by rate from ITE *Trip Generation Manual*, 12th Edition (2025).

As shown in Table 2, the proposed project is estimated to generate 488 new weekday daily trips with 80 trips during the weekday AM peak hour and 49 new primary trips during the PM peak hour.

# **Trip Distribution and Assignment**

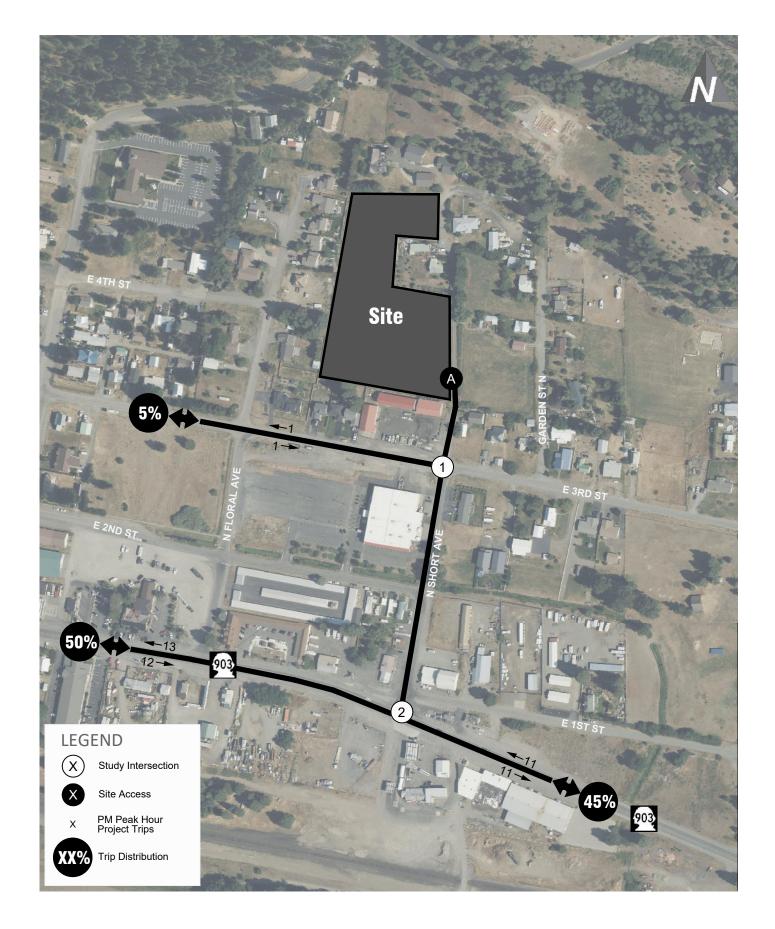
Trip distribution patterns for the proposed project trips to and from the site were based on existing travel patterns identified in the vicinity of the project site through traffic counts collected at the study intersections along N 3rd Street and SR 903 as well as a review of previously approved projects within the study area. The trip distribution for the proposed project is shown on Figure 5. The new weekday PM peak hour project trips were assigned within the study area based on the distribution for the proposed project and are also shown on Figure 5.



# **Future With-Project Traffic Volumes**

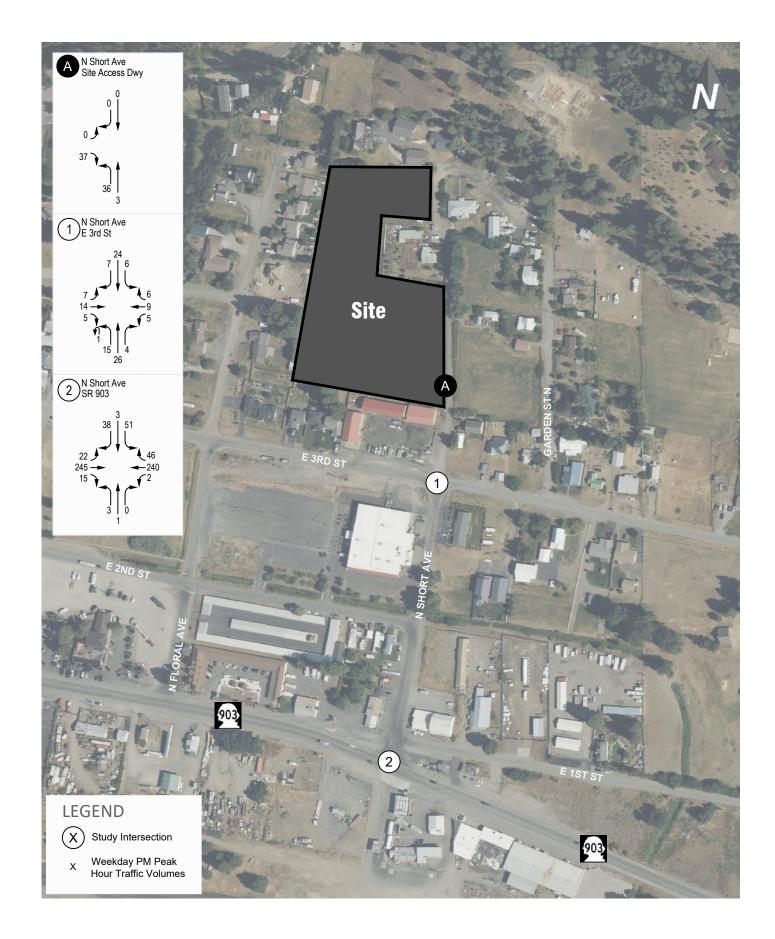
Site-generated weekday peak hour traffic volumes were added to the future without-project traffic volumes at the study intersections. The resulting future (2027) with-project peak hour traffic volumes are illustrated on Figure 6.





# Project Trip Distribution and Assignment

**FIGURE** 



Future (2027) With-Project Weekday PM Peak Hour Traffic Volumes

**FIGURE** 

6

## **Future With-Project Traffic Operations**

Future (2027) with-project study intersection operations were evaluated for the weekday PM peak hour and calculated using the methodology described previously. Analysis parameters such as lane channelization and control type were assumed to be consistent for the existing, future without- and with-project conditions. The without-project conditions were compared to the with-project conditions to understand the potential traffic impacts of the proposed project. Table 3 summarizes the future (2027) without- and with-project intersection operations for the weekday PM peak hour. LOS worksheets are included in Appendix C.

Table 3. Future (2027) Weekday PM Peak Hour Intersection Operations	Table 3.	Future (202	7) Weekday I	PM Peak Hour	Intersection C	<b>Operations</b>
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	LOS	Future (2	2027) Withou	ıt-Project	Future	(2027) With-	Project
Intersection	Standard	LOS <sup>1</sup>	Delay <sup>2</sup>	WM <sup>3</sup>	LOS	Delay	WM
1. N Short Ave/E 3rd St	С	Α	9.1	NB	Α	9.8	NB
2. N Short Ave/SR 903	D	С	15.1	NB	С	16.2	SB

- 1. Level of Service (A-F) as defined by the 7th Edition Highway Capacity Manual (HCM), Transportation Research Board.
- 2. Average delay per vehicle in seconds.
- 3. Worst movement (WM) reported for side-street stop-controlled intersections where NB = northbound, SB = southbound.

As shown in Table 3, with the addition of project traffic, the off-site study intersections are anticipated to continue operating at the same LOS as under future (2027) without-project conditions at LOS C or better during the weekday PM peak hour with an overall increase in intersection delay of approximately 1 second or less, continuing to meet the required LOS standards.

## Site Access Analysis

As noted above, access to the site will be provided via one access driveway located in the southeast corner of the project site along N Short Avenue, as illustrated in Figure 2. A site access evaluation including a review of traffic operations and site access spacing is included below. Due to the low traffic volumes along N Short Avenue, no dedicated turn lanes are required at the proposed site access.

#### Traffic Operations

The traffic operations were evaluated at the side-street stop-controlled intersection of the proposed access driveway/N Short Avenue under future (2027) with-project conditions for the weekday PM peak hour, consistent with methodologies described above. The access driveway/N Short Avenue intersection is forecast to operate at LOS A with 8.5 seconds of delay under future (2027) with-project conditions during the weekday PM peak hour, meeting the established level of service standards.

#### Spacing

The roadway spacing of the proposed site access intersection has been designed to meet the City of Cle Elum spacing requirements as outlined in the City of Cle Elum 2024 Construction Standards, Chapter 7. Based on the City's requirements a minimum distance of 50 feet is required between a driveway and adjacent intersection. The proposed site access is located approximately 235 feet north of E 3rd Street along N Short Avenue, exceeding the City's minimum spacing requirement.

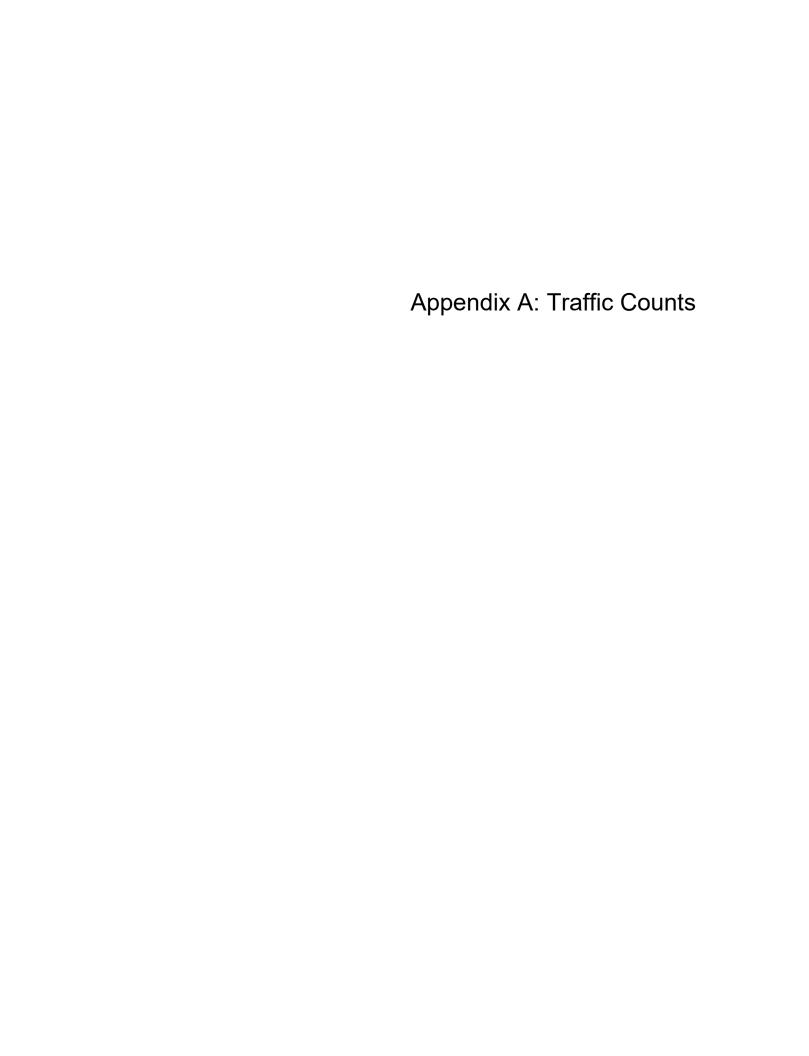


# **Findings and Recommendations**

This traffic impact analysis summarizes the project traffic impacts of the proposed Teanaway Court Daycare Center and Affordable Housing development project located west of N Short Avenue and north of E 3rd Street in Cle Elum, WA. General findings and recommendations include:

- Project Description The proposed project will construct 41 affordable housing units
  within seven buildings on site in addition to a 5,000 square foot day care center serving
  up to 66 students on a currently vacant lot located north of E 3rd Street and west of N
  Short Avenue in Cle Elum, WA.
- **Trip Generation** The proposed project is estimated to generate 488 new weekday daily trips with 80 trips during the weekday AM peak hour and 49 new primary trips during the PM peak hour.
- Traffic Operations The operational analysis shows that with the addition of project traffic, the off-site study intersections are anticipated to continue to meet the adopted LOS standards operating at LOS C or better during the weekday PM peak hour with an overall increase in intersection delay of approximately 1 second or less.
- Site Access Evaluation The site access driveway located in the southeast corner of the project site along N Short Avenue is forecast to operate at LOS A under future (2027) with-project conditions during the weekday PM peak hour, meeting the established level of service standards. The City's required spacing standards are met without the need for dedicated turn lanes at the driveway, given the low traffic volumes along N Short Avenue.
- Mitigation Measures The analysis shows that the proposed project does not have significant off-site transportation impacts and the existing transportation system can accommodate the proposed project, not requiring any mitigation measures.

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Transpo Cle Elum PROJECT:

JOB NO. 26-106 DATE OF COUNT: 8/27/2025 Analyst

Counter

**Short Avenue** & 3rd Street

PM PEAK HOURS

Traffic Counts & Surveys ...

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Right 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Left	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	0	0
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Eastbound	Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0
Westbound	Crosswalk	2	0	0	0	0	0	0	0	0	0	0	0
	Crosswalk		0	0	0	0	0	0	0	0	0	0	0
Southbound	Crosswalk	0	0	0	0	0	1	0	0	0	0	0	0
Tot	al	2	0	0	0	0	1	0	0	0	0	0	0

App.= Approach Pct= Percent

Bike (BK)	Miovision Vehicle Clas Passenger Car (PC)	Heavy Vehicle (HV)
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_Ø\o_		
Bicycles on Road	Motorcycles Cars Light Goods Vehicles	Buses Single-Unit Articulated Trucks Trucks
	Lights	Mediums
	All Vehicles	no classification)

	Intersectio	n Total	Pct
	One Hour V	olumes/	HV
	3:30 PM	57	3.5%
	3:45 PM	49	4.1%
	4:00 PM	59	3.4%
	4:15 PM	54	5.6%
	4:30 PM	59	5.1%
	4:45 PM	61	3.3%
	5:00 PM	45	4.4%
	5:15 PM	41	2.4%
	5:30 PM	29	0.0%
•			

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PROJECT: Transpo Cle Elum Short Avenue & 3rd Street

JOB NO. 26-106 DATE OF COUNT: 8/27/2025

Counter Analyst Approach **BNG** PM PEAK HOURS Miovision Receiving Departing APPROACH MOVEMENT 4:45 PM 5:00 PM 5:15 PM 5:30 PM TOTAL Percentage of: Percentage of: Mvmt Mvmt Total App. HV Approach HV Approach BK PC HV BK PC HV BK PC HV BK PC HV HV Veh Eastbound U-Turn 0 0 **EBU** 0.00% 0.00% 0 0 0 0 0 0 0 0 0 0 0 **EBU** 0 0 0 EBL Left 0 0 0 0 0 0 0 0 0 0 0 0 0.00% **NBL** 15 0% 55.56% Through 0 6 0 0 3 0 0 5 0 0 2 0 **EBT** 0 16 0% 76.19% WBT 12 0% 44.44% Right 3 SBR 0 1 0 0 0 0 0 0 0 **EBR** 1 5 20% 23.81% 0.00% 1 0 0 0 7 0 3 0 5 0 5 0 21 0.75 5% 100.00% Total 27 0% 100.00% App. Total 0 1 0 Total 0% 25% 0% 0% Pct HV Westbound U-Turn 0 0 0 0 0 0 0 0 0 WBU 0 0 0 0 0.00% **WBU** 0 0.00% 0 0 2 0 0 2 0 0 0 0 WBL Left 0 0 5 0% 29.41% SBL 0 0.00% Through 0 7 0 0 0 0 4 0 0 0 0 **WBT** 0 12 0% 70.59% **EBT** 16 0% 80.00% Right 0 0 0 0 0 0 0 0 **WBR** 0 **NBR** 0% 20.00% 0 0 0 0 0 0.00% 4 20 0% 100.00% App. Total 0 8 0 0 3 0 0 6 0 0 0 0 Total 0 17 0.53 0% 100.00% Total 0% 0% 0% Pct HV Northbound U-Turn 0 1 0 0 0 0 0 0 0 0 0 0 NBU 0% 4.35% NBU 9.09% 0% 0 0 6 **NBL** 15 0% 65.22% WBL 5 45.45% Left 4 0 0 0 0 5 0 0 0 0 0% Through 0 1 0 0 0 0 0 1 0 0 0 **NBT** 1 3 33% 13.04% **SBT** 0 0.00% 0 0 1 0 0 17.39% 20% 45.45% Right 0 0 n 0 1 **NBR** 0 4 0% **EBR** 5 23 4% 9% App. Total 0 0 0 0 0 Total 0.72 100.00% Total 11 100.00% 0 0 0% 0% 13% 0% Pct HV SBU 0 SBU 0.00% Southbound U-Turn 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Left 0 0 0 0 0 0 0 0 0 0 0 0 SBL 0 0 EBL 0 0.00% Through 0 0 0 0 0 0 0 0 0 0 0 0 **SBT** 0 0 **NBT** 3 33% 100.00% Right 0 0 SBR **WBR** 0 0 0 0 0 0 0 0 0 0 0 0 0 0.00% App. Total 0 0 0 0 0 0 0 0 0 0 0 0 Total 0 0 Total 3 | 33% | 100.00% 61 0.69 Pct HV 2 Total Total Class Volume 0 22 0 0 0 18 0 12 Total Interval Volume 22 8 19 12 61 PEDS 0 0% 13% 5% 0% **PEDS** Intersection Pct Trucks 3% ← 0 Confli. Pedestrian Volumes Ped 5:00 5 5:30 5:1 APPROACH MOVEMENT TOTAL Departing ← 17 0 0 0 0 61 Eastbound Crosswalk 0 Westbound Crosswalk 0 0 0 0 0 21 P.H.F. 0.69 20 Northbound Crosswalk 0 0 0 0 0 Receiving 0 0 0 Southbound Crosswalk 1 Traffic Counts Total 0 → PEDS 0 & Surveys Inc. **PEDS** 33 P.H.F.= Peak Hour Factor Movement = Mvmt 1 Pedestrian = Ped App.= Approach Ν Pct= Percent

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Transpo Cle Elum PROJECT:

26-106 JOB NO. DATE OF COUNT: 8/27/2025 Analyst

Counter

**Short Avenue** & SR 903

PM PEAK HOURS

Traffic Counts & Surveys Inc. /

Eastbound   Color   Color	sion BNG		15 Minute Period Beginning @																,	,																	
Eastbound   Color   Color	ROACH Move	ovement	3	:30 P	M	3	:45 PI	M	4	:00 P	M	4	:15 PN		4	:30 PN	ı	4:	:45 PI	M	5	:00 PI	M	5	:15 P	M	5	:30 PN	M	5	:45 P	M	6	:00 P	M	6	:15 PM
Left	Type		BK	PC	HV	BK	PC	ΗV	BK	PC	HV	BK	PC	ΗV	BK	PC	ΗV	BK	PC	HV	BK	PC	HV	BK	PC	HV	BK	PC	HV	BK	PC	ΗV	BK	PC	HV	BK	PC H
Through	bound U-Tu	Turn	-		_	•	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
Right	Left	ft	_		0	0			0	4	0	•	4	0	0	1	0	0		0	0	1	•	0		1	0	4	0	0			0	1	0	0	1 0
App. Total   0   55   6   0   48   6   0   64   1   0   58   1   0   60   6   0   38   3   0   74   4   0   56   2   0   57   0   0   53   2   0   52   1   0   50   2   1   0   50   1   0   50   1   0   50   1   0   50   1   0   50   1   0   0   0   0   0   0   0   0		J	0	52	4	0	42	3	0	59	0	0	52	0	0	58	_	0	33	1	0	67	2	0	51	0	0	50	0	0	48	2	0	49	1	0	46 0
Pct HV			0	1	2	0	0	3	0	1	1	0	2	1	0	1	2	0	0	2	0	6	2	0	3	1	0	3	0	0	0	0	0	2	0	0	0 0
Westbound   U-Turn   0   0   0   0   0   0   0   0   0	App.	p. Total	0	55	6	0	48	6	0	64	1	0	58	1	0	60	6	0	38	3	0	74	4	0	56	2	0	57	0	0	53	2	0	52	1	0	47 0
Left	Pct H	t HV		10%			11%			2%			2%			9%			7%			5%			3%			0%			4%			2%			0%
Through	tbound U-Tu	Turn	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	0 0
Right	Left	ft	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	4	0	0	0	0	0	1 2
App. Total 0 55 1 0 73 1 0 53 2 0 63 7 0 52 1 0 60 1 0 64 2 0 59 1 0 45 2 0 49 3 0 41 2 0 60 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Thro	rough	0	48	1	0	66	1	0	47	1	0	56	6	0	45	1	0	47	1	0	57	1	0	52	0	0	38	1	0	45	3	0	40	1	0	37 1
Pct HV	Righ	ght	0	6	0	0	7	0	0	6	0	0	7	1	0	6	0	0	13	0	0	7	0	0	7	0	0	7	0	0	0	0	0	1	1	0	7 0
Northbound U-Turn 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	App.	p. Total	0	55	1	0	73	1	0	53	2	0	63	7	0	52	1	0	60	1	0	64	2	0	59	1	0	45	2	0	49	3	0	41	2	0	45 3
Left   0   0   0   0   1   0   0   1   0   0				2%			1%			4%			10%		•	2%		•	2%	•		3%			2%			4%			6%			5%			6%
Left         0         0         0         1         0         0         1         0         0         1         0         0         1         0	bound U-Tu	Turn	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	0 0
Right			0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0 0
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Left 0 9 0 0 5 0 0 16 0 0 9 0 0 0 9 0 0 0 1 0 0 0 0 0 0 0 0 0		-					0%			0%	•		0%			•			0%			0%			0%								1	0%			· ·
Through 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nbound U-Tu	Turn	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	0 0
Right 0 4 0 0 5 0 0 8 0 0 6 0 0 4 0 0 0 5 0 0 8 0 0 6 0 0 4 0 0 0 6 0 0 10 1 0 9 0 0 12 2 0 3 0 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Left	ft	0	9	0	0	5	0	0	16	0	0	9	0	0	9	0	0	3	0	0	19	1	0	11	0	0	2	1	0	10	1	0	8	1	0	9 0
App. Total         0         13         0         0         11         0         0         24         0         0         17         0         0         13         0         0         14         3         0         13         1         0         13 </td <td>Thro</td> <td>rough</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0 0</td>	Thro	rough	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0 0
App. Total         0         13         0         0         11         0         0         24         0         0         17         0         0         13         0         0         14         3         0         13         1         0         13         1         0           Pct HV         0%         0%         0%         0%         0%         0%         0%         0%         18%         7%         7%	Righ	ght	0	4	0	0	5	0	0	8	0	0	6	0	0	4	0	0	6	0	0	10	1	0	9	0	0	12	2	0	3	0	0	4	0	0	4 0
Pct HV 0% 0% 0% 0% 0% 0% 0% 6% 0% 18% 7% 7%			0	13	0	0	11	0	0	24	0	0	17	0	0	13	0	0	10	0	0	29	2	0	21	0	0	14	3	0	13	1	0	13	1	0	13 0
											•		0%																								0%
			0	123	7	0	133	7	0	142	3	0	139	8	0	125	7	0	109	4	0	169	8	0	137	3	0	116	5	0	115	6	0	107	4	0	105 3
Total Interval Volume 130 140 145 147 132 113 177 140 121 121 111	Interval Volui	lume		130			140						147			132			113			177			140			121			121			111			108
Intersection Pct HV 5% 5% 2% 5% 5% 4% 5% 2% 4% 5% 4%	ection Pct H\	HV		5%			5%			2%			5%			5%			4%			5%			2%			4%			5%			4%			3%

Pedestrian Vo	olumes			1	5 M	inute F	Perio	od B	eginniı	าg (	D)		
APPROACH	Movement	3:30	3:45	4:00	4:15	4:30	4:45	5:00	5:15	5:30	5:45	00:9	6:15
Eastbound	Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0
Westbound	Crosswalk	0	0	0	1	0	0	0	0	0	0	0	0
Northbound	Crosswalk	0	0	0	1	0	0	0	0	0	0	0	0
Southbound	Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0
Tot	al	0	0	0	2	0	0	0	0	0	0	0	0

Passenger Car (PC) Bike (BK) Heavy Vehicle (HV) All Vehicles (no classification)

Miovision Vehicle Classification

Intersectio	n Total	Pct
One Hour V	olumes/	HV
3:30 PM	562	4.4%
3:45 PM	564	4.4%
4:00 PM	537	4.1%
4:15 PM	569	4.7%
4:30 PM	562	3.9%
4:45 PM	551	3.6%
5:00 PM	559	3.9%
5:15 PM	493	3.7%
5:30 PM	461	3.9%

App.= Approach Pct= Percent

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PROJECT: Transpo Cle Elum Short Avenue & SR 903

JOB NO. 26-106 DATE OF COUNT: 8/27/2025

DATE OF CC		0/2//202	23																			<b>a</b>
Counter	Analyst	1												1				Approach	_			-
Miovision	BNG			_	1		M PEA	K HOUR		_	1					ceivin	_			<u>Der</u>	parting	
APPROACH	MOVEMENT		4:15 PN	-		4:30 PM	1.15.7		4:45 PN			5:00 PN		II Mymt	OTAL	PHF		entage of:	Mvr	nt Total	Percentage of	– l ∧nn
E th d		BK	PC	HV	BK	PC	HV	BK	PC	HV	BK	PC	HV	HV	Veh	<u> </u>	HV	Approach			HV Approac	<u>n</u>
Eastbound	U-Turn	0	0 4	0	0	0 1	0	0	5	0	0	<u>0</u>	0	EBU 0 EBL 0	11		00/	0.00%	EB		0.00%	- 8
	Left Through	0	52	0	0	58	4	0	33	1	0	67	2	EBT 7	217		0% 3%	4.51% 88.93%	NB WE		0% 1.23% 4% 87.70%	- 5
	Right	0	2	1	0	1	2	0	0	2	0	6	2	EBR 7	16		44%	6.56%	SB	_	4% 07.70%	- 1
		0	58	1	0	60	6	0	38	3	0	74	4	Total 14	244	0.78		100.00%			4% 100.009	48
	App. Total Pct HV	U	2%	1	U	9%	O	U	7%	S	U	5%	4	10tai 14	244	0.76	070	100.00%	Tot	al 244	4% 100.003	0
Westbound	1	0	0	0	0	0	0	0	0	0	0	0	0	WBU 0	0	1		0.00%	WB	SU 0	0.00%	
	Left	0	0	0	0	1	0	0	0	0	0	0	1	WBL 1	2		50%	0.80%	SB		2% 15.89%	۵
	Through	0	56	6	0	45	1	0	47	1	0	57	1	WBT 9	214		4%	85.60%	EB		3% 84.11%	رِي
	Right	0	7	1	0	6	0	0	13	0	0	7	0	WBR 1	34		3%	13.60%	NB		0.00%	Nestbound
	App. Total	0	63	7	0	52	1	0	60	1	0	64	2	Total 11	250	0.89	4%	100.00%	Tot	al 258	3% 100.009	2
	Pct HV		10%	•		2%			2%	•		3%										
Northbound	U-Turn	0	0	0	0	0	0	0	0	0	0	0	0	NBU 0	0			0.00%	NB	U 0	0.00%	
	Left	0	1	0	0	0	0	0	1	0	0	1	0	NBL 0	3		0%	75.00%	WE	3L 2	50% 9.52%	100
	Through	0	0	0	0	0	0	0	0	0	0	1	0	NBT 0	1		0%	25.00%	SB		0% 14.29%	20
	Right	0	0	0	0	0	0	0	0	0	0	0	0	NBR 0	0			0.00%	EB	R 16	44% 76.19%	Northboung
	App. Total	0	1	0	0	0	0	0	1	0	0	2	0	Total 0	4	0.50	0%	100.00%	Tot	al 21	38% 100.009	6
	Pct HV		0%						0%			0%						_				
Southbound		0	0	0	0	0	0	0	0	0	0	0	0	SBU 0	0			0.00%	SB		0.00%	
	Left	0	9	0	0	9	0	0	3	0	0	19	1	SBL 1	41		2%	57.75%	EB		0% 23.91%	Soumbound
	Through	0	2	0	0	0	0	0	1	0	0	0	0	SBT 0	3		0%	4.23%	NB		0% 2.17%	- ZŽ
	Right	0	6	0	0	4	0	0	6	0	0	10	1	SBR 1	27	0.55	4%	38.03%	WB	_	3% 73.91%	S
	App. Total Pct HV	0	17 0%	0	0	13 0%	0	0	10 0%	0	0	29 6%	2	Total 2	71	0.57	3%	100.00%	Tot	al 46	2% 100.009	o
Total Class V		0	139	8	0	125	7	0	109	4	0	169	8	Total 27	569	0.00					7	
Total Interval			147	0	0	132	-	- 0	113	4	U	177	0	569				m		<u>ا ا</u>	46	
Intersection F			5%			5%			4%			5%		5%				PEDS			PE PE	DS
<u> </u>											l <u> </u>			<u></u>				₽ 1		$\downarrow$	←	
						Confli.																
Pedestrian V		4:45	5:00	5:15	5:30	Ped							1									
	_					TOTAL						100	111	1//	Dep	arting	$\leftarrow$	244			←	250
Eastbound	Crosswalk	0	0	0	0	0						-		1						569		
Westbound	Crosswalk Crosswalk	0	0	0	0	0				-		-4	( )	-	Boo	eiving		244 →	-	P.H.F. 0.8	90	258 →
Northbound Southbound	Crosswalk	0	0	0	0	0							1		Red	eiving		244 →		.п.г. 0.	80	250
Coulibouria	Total	0	0	0	0		T	-£	Fi.		···		11'//									
						l	- 11	dII	IL	Co	ull	しつ /	1//					0 →			<b>Λ Λ 0</b>	)
												11	//					PEDS			↑ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	)
Movement =	: Mvmt	P.H.F.=	Peak Ho	our Facto	or		C	כי	u۱۱	/eL	15 In	c. / 1	/							24	4	•
Pedestrian =	: Ped		Approa				3.0			_	,	/ /										N
		Pct=	Percen	t																√ <u> </u>		

# Appendix B: LOS Definitions

#### **Highway Capacity Manual 7th Edition**

**Signalized intersection** level of service (LOS) is defined in terms of a weighted average control delay for the entire intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control as well as provides a surrogate measure for driver discomfort and fuel consumption. Signalized intersection LOS is stated in terms of average control delay per vehicle (in seconds) during a specified time period (e.g., weekday PM peak hour). Control delay is a complex measure based on many variables, including signal phasing and coordination (i.e., progression of movements through the intersection and along the corridor), signal cycle length, and traffic volumes with respect to intersection capacity and resulting queues. Table 1 summarizes the LOS criteria for signalized intersections, as described in the *Highway Capacity Manual* 7th Edition (Transportation Research Board, 2022).

Table 1. Level of	Service Criteria for Signa	lized Intersections
Level of Service	Average Control Delay (seconds/vehicle)	General Description
Α	≤10	Free Flow
В	>10 – 20	Stable Flow (slight delays)
С	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F <sup>1</sup>	>80	Forced flow (congested and queues fail to clear)

Source: Highway Capacity Manual 7th Edition, Transportation Research Board, 2022, respectively.

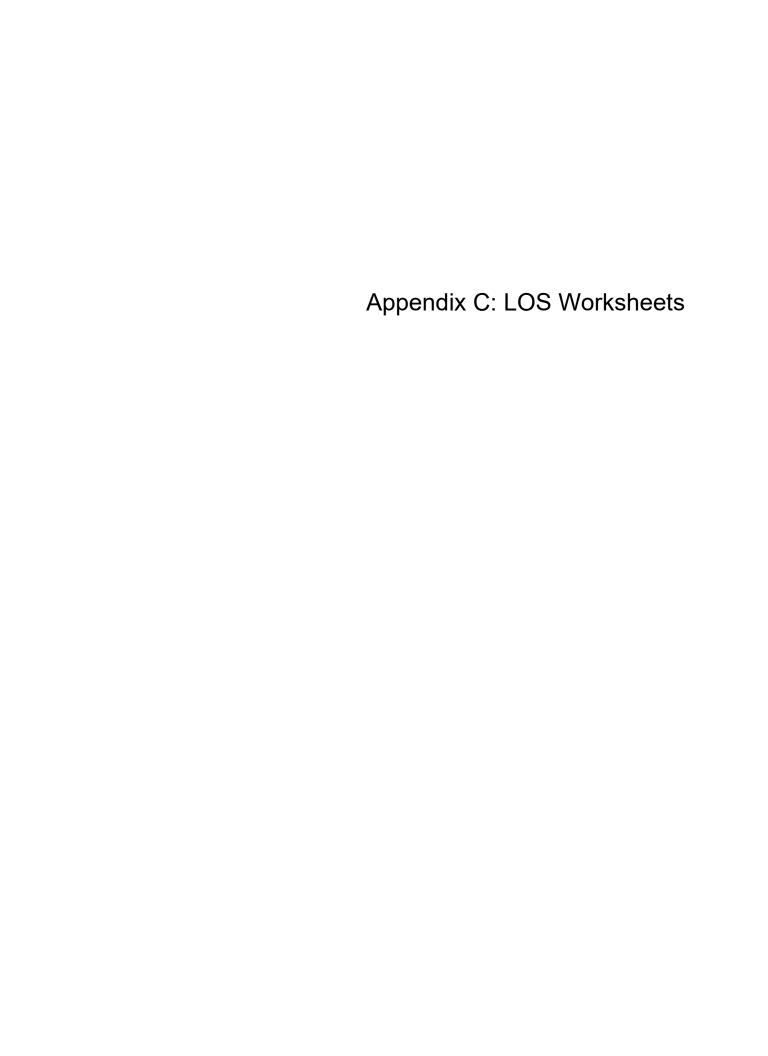
**Unsignalized intersection** LOS criteria can be further reduced into two intersection types: all-way stop and two-way stop controlled. All-way stop controlled intersection LOS is expressed in terms of the weighted average control delay of the overall intersection or by approach. Two-way stop-controlled intersection LOS is defined in terms of the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns. This approach is because major-street through vehicles are assumed to experience zero delay, a weighted average of all movements results in very low overall average delay, and this calculated low delay could mask deficiencies of minor movements. Table 2 shows LOS criteria for unsignalized intersections.

able 2. Level of Service Criteria for	r Unsignalized Intersections
Level of Service	Average Control Delay (seconds/vehicle)
A	0 – 10
В	>10 – 15
С	>15 – 25
D	>25 – 35
E	>35 – 50
F <sup>1</sup>	>50

Source: Highway Capacity Manual 7th Edition, Transportation Research Board, 2022, respectively.

<sup>1.</sup> If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0 LOS F is assigned to the individual lane group. LOS for overall approach or intersection is determined solely by the control delay.

If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.



Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	15	5	5	10	0	16	3	4	0	0	0
Future Vol, veh/h	0	15	5	5	10	0	16	3	4	0	0	0
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	_	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	5	5	5	0	0	0	4	4	4	0	0	0
Mvmt Flow	0	22	7	7	14	0	23	4	6	0	0	0
Major/Minor I	Major1			Major2		I	Minor1		<u> </u>	/linor2		
Conflicting Flow All	15	0	0	30	0	0	56	56	26	54	60	16
Stage 1	-	-	-	-	-	-	26	26	-	30	30	-
Stage 2	-	-	-	-	-	-	30	30	-	24	30	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.14	6.54	6.24	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-		4.036		3.5	4	3.3
Pot Cap-1 Maneuver	1583	-	-	1596	-	-	936	831	1044	949	835	1068
Stage 1	-	-	-	-	-	-	986	869	-	992	874	-
Stage 2	-	-	-	-	-	-	982	866	-	999	874	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1581	-	-	1594	-	-	930	826	1043	934	829	1066
Mov Cap-2 Maneuver	-	-	-	-	-	-	930	826	-	934	829	-
Stage 1	-	-	-	-	-	-	985	868	-	986	869	-
Stage 2	-	-	-	-	-	-	976	861	-	989	873	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0			2.42			9.01			0		
HCM LOS							Α			Α		
Minor Lane/Major Mvm	nt 1	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SBL <sub>n1</sub>			
Capacity (veh/h)		932	1581	-	-	600	-	-	-			
HCM Lane V/C Ratio		0.036	-	-	-	0.005	-	-	-			
HCM Ctrl Dly (s/v)		9	0	-	-	7.3	0	-	0			
HCM Lane LOS		Α	Α	-	-	Α	Α	-	Α			
HCM 95th %tile Q(veh)	)	0.1	0	-	-	0	-	-	-			
HOW 95th %tile Q(veh)	)	0.1	U	-	-	U	-	-	-			

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	215	15	2	215	35	3	1	0	40	3	25
Future Vol, veh/h	10	215	15	2	215	35	3	1	0	40	3	25
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	e, # -	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, %	6	6	6	4	4	4	0	0	0	3	3	3
Mvmt Flow	13	269	19	3	269	44	4	1	0	50	4	31
Major/Minor I	Major1		ľ	Major2		ı	Minor1		ı	Minor2		
Conflicting Flow All	313	0	0	288	0	0	579	621	278	590	608	291
Stage 1	-	-	-	-	-	-	303	303	-	296	296	-
Stage 2	_	-	_	_	_	-	276	318	_	294	313	_
Critical Hdwy	4.16	-	-	4.14	-	-	7.1	6.5	6.2	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.13	5.53	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.5	4	3.3	3.527	4.027	3.327
Pot Cap-1 Maneuver	1226	-	-	1263	-	-	430	406	766	418	409	746
Stage 1	-	-	-	-	-	-	711	667	-	711	667	-
Stage 2	-	-	-	-	-	-	735	658	-	712	655	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1226	-	-	1263	-	-	402	400	766	410	403	746
Mov Cap-2 Maneuver	-	-	-	-	-	-	402	400	-	410	403	-
Stage 1	-	-	-	-	-	-	702	659	-	709	665	-
Stage 2	-	-	-	-	-	-	699	656	-	702	647	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.33			0.06			14.08			13.85		
HCM LOS	0.00			0.00			14.00 B			13.03 B		
TIOW LOO							U			U		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SRI n1			
Capacity (veh/h)	. 1	401	74	LDI	LDIX	14	-	- 1001	491			
HCM Lane V/C Ratio		0.012	0.01	-		0.002	-		0.173			
HCM Ctrl Dly (s/v)		14.1	8	0	_	7.9	0	_	13.9			
HCM Lane LOS		В	A	A	_	7.9 A	A	_	13.9 B			
HCM 95th %tile Q(veh)	<b>\</b>	0	0	-	_	0	-	_	0.6			
. Tom Cour /our ox (Vor)		- 0							0.0			

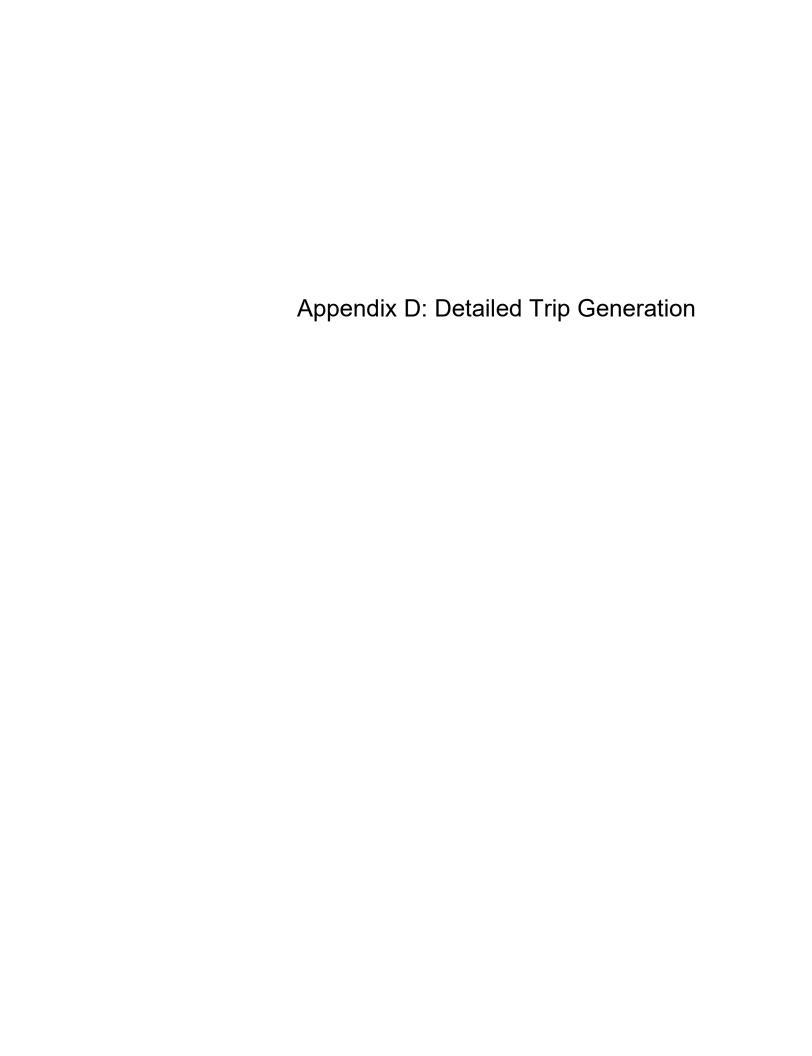
Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	20	5	5	15	0	16	3	4	0	0	0
Future Vol, veh/h	0	20	5	5	15	0	16	3	4	0	0	0
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0	0	0	1
Sign Control	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	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	5	5	5	0	0	0	4	4	4	0	0	0
Mvmt Flow	0	29	7	7	22	0	23	4	6	0	0	0
Major/Minor N	Major1			Major2			Minor1		<u> </u>	Minor2		
Conflicting Flow All	23	0	0	37	0	0	71	71	34	68	74	24
Stage 1	-	-	-	-	-	-	34	34	-	37	37	-
Stage 2	-	-	-	-	-	-	37	37	-	31	37	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.14	6.54	6.24	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.536	4.036		3.5	4	3.3
Pot Cap-1 Maneuver	1573	-	-	1586	-	-	916	816	1034	929	820	1059
Stage 1	-	-	-	-	-	-	977	863	-	983	868	-
Stage 2	-	-	-	-	-	-	973	860	-	991	868	-
Platoon blocked, %	4===	-	-		-	-			10			40==
Mov Cap-1 Maneuver	1572	-	-	1585	-	-	910	810	1033	914	814	1057
Mov Cap-2 Maneuver	-	-	-	-	-	-	910	810	-	914	814	-
Stage 1	-	-	-	-	-	-	976	862	-	978	863	-
Stage 2	-	-	-	-	-	-	968	855	-	980	867	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0			1.82			9.09			0		
HCM LOS							Α			Α		
Minor Lane/Major Mvm	t N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		914		-	-		-	-	-			
HCM Lane V/C Ratio		0.036	-	-	_	0.005	-	-	_			
HCM Ctrl Dly (s/v)		9.1	0	-	-		0	-	0			
HCM Lane LOS		Α	A	-	-	A	A	-	A			
HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	-			

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	245	15	2	240	35	3	1	0	40	3	25
Future Vol, veh/h	10	245	15	2	240	35	3	1	0	40	3	25
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	e,# -	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, %	6	6	6	4	4	4	0	0	0	3	3	3
Mvmt Flow	13	306	19	3	300	44	4	1	0	50	4	31
Major/Minor I	Major1		ľ	Major2		N	Minor1		N	Minor2		
Conflicting Flow All	344	0	0	325	0	0	648	689	316	659	677	322
Stage 1	-	-	-	-	-	-	341	341	-	327	327	-
Stage 2	_	_	_	_	-	_	307	349	_	332	350	_
Critical Hdwy	4.16	-	-	4.14	-	-	7.1	6.5	6.2	7.13	6.53	6.23
Critical Hdwy Stg 1	-	_	_		_	_	6.1	5.5	-	6.13	5.53	-
Critical Hdwy Stg 2	_	-	-	-	-	-	6.1	5.5	-	6.13	5.53	-
Follow-up Hdwy	2.254	_	_	2.236	_	_	3.5	4		3.527	4.027	3.327
Pot Cap-1 Maneuver	1193	-	-	1224	-	-	387	371	730	376	373	717
Stage 1		_	_		_	_	678	642	-	684	646	-
Stage 2	-	-	-	-	-	-	707	637	-	679	631	-
Platoon blocked, %		_	_		_	_						
Mov Cap-1 Maneuver	1193	-	-	1224	_	-	360	365	730	369	368	717
Mov Cap-2 Maneuver	-	_	_	-	_	_	360	365	-	369	368	-
Stage 1	_	-	-	-	-	-	670	634	-	682	644	-
Stage 2	_	_	_	_	_	_	671	636	_	669	623	_
-												
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.3			0.06			15.1			14.89		
HCM LOS	0.5			0.00			15.1 C			14.09 B		
TIOWI LOG							U			Б		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBI n1			
Capacity (veh/h)	it I	362	66		EDR -	13	VVDI	WDR (	449			
HCM Lane V/C Ratio		0.014	0.01	-		0.002	-		0.189			
		15.1			-	7.9		-	14.9			
HCM Ctrl Dly (s/v) HCM Lane LOS		15.1 C	8	0			0	-				
HCM 95th %tile Q(veh)	١	0	A 0	A -	-	A 0	A -	-	0.7			
HOW SOUT WHIE Q(VEII)	)	U	U	-	-	U	-	-	0.7			

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	7	14	5	5	9	6	16	26	4	6	24	7
Future Vol, veh/h	7	14	5	5	9	6	16	26	4	6	24	7
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	5	5	5	0	0	0	4	4	4	0	0	0
Mvmt Flow	10	20	7	7	13	9	23	38	6	9	35	10
Major/Minor I	Major1		<u> </u>	Major2		<u> </u>	Minor1		<u> </u>	/linor2		
Conflicting Flow All	23	0	0	29	0	0	91	82	25	92	82	19
Stage 1	-	-	-	-	-	-	45	45	-	33	33	-
Stage 2	-	-	-	-	-	-	46	37	-	59	49	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.14	6.54	6.24	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.536	4.036	3.336	3.5	4	3.3
Pot Cap-1 Maneuver	1573	-	-	1598	-	-	888	804	1046	896	812	1064
Stage 1	-	-	-	-	-	-	964	853	-	988	872	-
Stage 2	-	-	-	-	-	-	963	860	-	957	858	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1572	-	-	1596	-	-	831	793	1045	839	802	1062
Mov Cap-2 Maneuver	-	-	-	-	-	-	831	793	-	839	802	-
Stage 1	-	-	-	-	-	-	956	847	-	983	867	-
Stage 2	-	-	-	-	-	-	910	855	-	904	852	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	1.97			1.82			9.76			9.54		
HCM LOS							Α			Α		
Minor Lane/Major Mvm	nt 1	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		824	460	-	-	417	-	-	847			
HCM Lane V/C Ratio		0.081	0.006	-	-	0.005	-	-	0.063			
HCM Ctrl Dly (s/v)		9.8	7.3	0	-	7.3	0	-	9.5			
HCM Lane LOS		Α	Α	Α	-	Α	Α	-	Α			
HCM 95th %tile Q(veh)	)	0.3	0	-	-	0	-	-	0.2			
	)							-	0.2			

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	22	245	15	2	240	46	3	1	0	51	3	38
Future Vol, veh/h	22	245	15	2	240	46	3	1	0	51	3	38
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	e, # -	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, %	6	6	6	4	4	4	0	0	0	3	3	3
Mvmt Flow	28	306	19	3	300	58	4	1	0	64	4	48
Major/Minor	Major1		_	Major2		ı	Minor1		ı	Minor2		
Conflicting Flow All	358	0	0	325	0	0	678	733	316	696	714	329
Stage 1	-	-	-	-	-	-	371	371	-	334	334	-
Stage 2	_	_	_	_	_	_	307	363	_	362	380	_
Critical Hdwy	4.16	_	_	4.14	_	_	7.1	6.5	6.2	7.13	6.53	6.23
Critical Hdwy Stg 1	-	_	_		_	_	6.1	5.5	-	6.13	5.53	-
Critical Hdwy Stg 2	-	_	-	-	_	-	6.1	5.5	-	6.13	5.53	-
Follow-up Hdwy	2.254	_	_	2.236	_	_	3.5	4	3.3	3.527	4.027	3.327
Pot Cap-1 Maneuver	1179	_	-	1224	_	-	369	350	730	355	356	710
Stage 1		_	_		_	_	654	623	-	678	642	-
Stage 2	_	-	_	_	_	_	707	628	_	655	612	-
Platoon blocked, %		_	_		_	_						
Mov Cap-1 Maneuver	1179	_	-	1224	-	-	330	339	730	343	345	710
Mov Cap-2 Maneuver	-	-	-	-	-	-	330	339	-	343	345	-
Stage 1	-	-	-	-	-	-	635	606	-	676	640	-
Stage 2	-	-	-	-	-	-	654	627	-	635	595	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.63			0.06			15.99			16.19		
HCM LOS	0.03			0.00			15.99 C			10.19 C		
TIOWI LOO							U			U		
Minor Long Major Maria	.4	JDL 1	EDI	ГРТ	EDD	WDI	WDT	WDD	ODL 4			
Minor Lane/Major Mvm	it f	VBLn1	EBL	EBT	EBR -	WBL 12	WBT	WBR				
Capacity (veh/h)		332	139	-		0.002	-	-	436			
HCM Ctrl Div (a/v)		0.015		-			-		0.264			
HCM Lang LOS		16	8.1	0	-	7.9	0	-	16.2			
HCM 05th % tile O(voh)	\	С	0.1	Α	-	A 0	Α	-	C 1			
HCM 95th %tile Q(veh)	)	0	U. I	-	-	U	-	-				

Intersection						
Int Delay, s/veh	7.5					
		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥	07	20	र्नु	<b>₽</b>	0
Traffic Vol, veh/h	0	37	36	3	0	0
Future Vol, veh/h	0	37	36	3	0	0
Conflicting Peds, #/hr	0	0	0	_ 0	0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	2	2	4	4	0	0
Mvmt Flow	0	54	52	4	0	0
Major/Minor N	Minor2		Major1	N	/lajor2	
Conflicting Flow All	110	1	1	0	- -	0
Stage 1	1	-	-	-	_	-
Stage 2	109	_	_	_	_	_
Critical Hdwy	6.42	6.22	4.14		_	
Critical Hdwy Stg 1	5.42	0.22	4.14	-	_	_
Critical Hdwy Stg 2	5.42	-	-	-		_
	3.518	3.318	2.236	_	-	-
Follow-up Hdwy		1083	1608	-		-
Pot Cap-1 Maneuver	887		1000	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %	050	4000	4000	-	-	-
Mov Cap-1 Maneuver	858	1083	1608	-	-	-
Mov Cap-2 Maneuver	858	-	-	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Approach	EB		NB		SB	
HCM Ctrl Dly, s/v	8.5		6.75		0	
HCM LOS	Α		0.75		U	
TICIVI LOS	^					
Minor Lane/Major Mvm	ıt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1604	-	1083	-	-
HCM Lane V/C Ratio		0.032	-	0.05	-	-
HCM Ctrl Dly (s/v)		7.3	0	8.5	-	-
HCM Lane LOS		Α	Α	Α	-	-
HCM 95th %tile Q(veh)		0.1	-	0.2	-	-
, ,						



### **Teanaway Court**

					Proj	posed	Use										
									Gross Trips	;		Pass-E	By Trips		- 1	Primary Trips	3
Land Use	Setting	Size	Units	Model	Equation	Rate	Inbound %	Inbound	Outbound	Subtotal	%	ln	Out	Total	Inbound	Outbound	Total
Day Care Center (LU	565)	5,000	sf														
Daily	General Urban/Suburban			Rate	-	39.30	50%	98	98	196		-	-	-	98	98	196
AM Peak Hour	General Urban/Suburban			Rate	-	10.88	53%	29	25	54		-	-	-	29	25	54
PM Peak Hour	General Urban/Suburban			Rate	-	10.75	47%	25	29	54	44%	12	12	24	13	17	30
Affordable Housing (	LU 223)	41	du														
Daily	General Urban/Suburban			Equation (lin)	T = 3.73(X) + 139.35	-	50%	146	146	292		-	-	-	146	146	292
AM Peak Hour	General Urban/Suburban			Equation (lin)	T = 0.21(X) + 17.21	-	29%	8	18	26		-	-	-	8	18	26
PM Peak Hour	General Urban/Suburban			Rate	-	0.46	59%	11	8	19		-	-	-	11	8	19
Subtotal																	
Daily								244	244	488		0	0	0	244	244	488
AM Peak Hour								37	43	80		0	0	0	37	43	80
PM Peak Hour								36	37	73		12	12	24	24	25	49

#### Notes:

<sup>1.</sup> Trip rates and pass-by rates based on Institute of Transportation Engineers' (ITE) Trip Generation Manual (12th Edition) equation and average trip rates as shown above.