## 47° North Final SEIS

Cle Elum, WA

## TRANSPORTATION ANALYSIS ADDENDUM April 2021

## **%**TENW

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### Introduction

The 47° North Draft SEIS Transportation Analysis (TENW, September 2020) was prepared to support the 47° North DSEIS and provided a detailed analysis of the potential transportation impacts of the proposed 47° North development. The transportation analysis included an analysis of baseline conditions, SEIS Alternative 5 (Approved Bullfrog Flats Master Site Plan), and SEIS Alternative 6 (Proposed 47° North Master Site Plan Amendment) conditions for three future development years (2025, 2031, and 2037) and three time periods (weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all during the summer). The 47° North Draft SEIS Transportation Analysis also identified potential mitigation and estimated pro-rata share contributions for roadway improvements necessary for SEIS Alternatives 5 and 6 to meet LOS standards for the weekday summer PM peak hour.

This *Transportation Analysis Addendum* is an update to the 47° *North Draft SEIS Transportation Analysis* and addresses transportation-related comments received on the Draft SEIS as part of the public comment period on that document. The Mitigation Measures section of this *Transportation Analysis Addendum* (section 4) has also been updated to recalculate trip generation for SEIS Alternative 6 based on revised projected occupancy data for the RV resort during the weekday summer PM peak hour; revised pro-rata share mitigation tables are also included with an alternative pro-rata share method, for comparison with the method used in the DSEIS. Additionally, the Mitigation Measures section identifies potential improvements at the site access intersections and study intersections anticipated to operate at non-compliant levels of service (LOS) in the future with the 47° North project.

#### **Affected Environment**

Section 2 has been updated to reflect LOS C as the adopted standard for the study intersections under WSDOT jurisdiction and to summarize additional information on the severity of historical collisions at the study intersections.

#### **Traffic Volumes**

#### Existing Traffic Volumes

Existing traffic volumes were collected at the 27 study intersections by All Traffic Data in August and December 2019. The detailed traffic data sheets are included in **Appendix A**.

#### **Intersection LOS**

There are two state routes in the vicinity, Interstate 90, and State Route 903, for which the LOS standard established by WSDOT is LOS C, rather than D as identified in the Draft SEIS.

State, regional, county and City plans reviewed for the DRAFT SEIS identify varied, and sometimes inconsistent, level of service standards for roads within the study area; the applicable LOS sometimes depends on whether a location is defined as "urban" or "rural" and which governmental entity has jurisdiction for roads. The Transportation Element of the City of Cle Elum Comprehensive Plan (May 2019) identifies a standard of LOS C for City streets. The Kittitas County Comprehensive Plan (June 2019) identifies LOS D as the minimum acceptable LOS for intersections in urban growth areas, including Bullfrog Road, and LOS C as the minimum acceptable LOS for intersections in rural areas. However, WSDOT, the agency with jurisdiction for I-90 ramps and SR 903, distinguishes between urban and rural areas based solely on population size, irrespective of whether a facility is within an incorporated city or a designated urban growth area. WSDOT uses a 7,500 population as the threshold for an urban designation; since the City of Cle Elum population is less than 7,500 people, WSDOT characterizes the City as "rural" and applies LOS C<sup>1</sup>. The 47° North Draft SEIS Transportation Analysis (TENW, September 2020) assumed that Cle Elum was considered an urban area, since it is a City and within an urban growth area, and applied WSDOT's LOS urban standard of LOS D. The Final SEIS applies the rural LOS C standard to the WSDOT intersections.

#### Existing Intersection LOS

Intersection LOS analyses were conducted at the study intersections for existing (2019) conditions during the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour during the summer peak period. The summary of the existing intersection LOS analysis is included in **Table 1** below and the LOS results are discussed in detail following the table.

It should be noted that **Table 1** has been updated to reflect WSDOT's LOS C standard for study intersections on state routes. As a result, study intersections currently operating at non-

<sup>&</sup>lt;sup>1</sup> Based on information provided by WSDOT Central Region on 11/18/20 and 12/2/20.

compliant LOS (LOS D, E, or F for City and WSDOT intersections, and LOS E or F for Kittitas County intersections) are shown in bold text in **Table 1**. Study intersections currently operating at non-compliant LOS based on the LOS C threshold for WSDOT intersections that were not identified in the DSEIS are shown as underlined, italicized, and bold text in **Table 1** in this *Addendum*. Refer to Footnote 1 following the table.

It should be noted that although **Table 1** in this *Addendum* has been updated to reflect the LOS C standard for WSDOT intersections and identify noncompliant intersections, the LOS and delay summarized in the table are the same as documented previously in **Table 7** of the *47° North Draft SEIS Transportation Analysis*. New or revised LOS evaluations were not necessary.

 Table 1

 EXISTING (2019) INTERSECTION LOS SUMMARY

		Existing Conditions (Summer Peak)									
		Wee	ekday	Frie	day	Sun	day				
		PM Pe	ak Hour	PM Pea	ak Hour	PM Pea	ak Hour				
	LOS										
Study Intersection	Standard	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>				
Signalized											
14. S Cle Elum Way / Stafford / W 1st St	С	В	10.2	В	12.8	В	11.2				
16. N Oakes Ave / W 1 <sup>st</sup> St (SR 903)	<u>C</u>	Α	7.9	Α	9.6	Α	13.1				
18. Pennsylvania Ave / 1 <sup>st</sup> St (SR 903)	<u>C</u>	Α	6.0	Α	5.4	Α	7.8				
Roundabout											
4. Bullfrog Rd / Suncadia Trail	D	Α	4.4	Α	5.4	В	12.2				
6. Bullfrog Rd / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	А	5.3	Α	7.0	В	13.6				
All-Way Stop-Controlled											
17. Pennsylvania Ave / 2 <sup>nd</sup> St	С	А	8.4	A	8.4	А	8.2				
Two-Way Stop-Controlled <sup>2</sup>											
1. Bullfrog Rd / I-90 EB Ramps	<u>C</u>	В	12.0	С	16.0	В	10.6				
2. Bullfrog Rd / I-90 WB Ramps	<u>C</u>	А	9.6	В	11.9	В	10.1				
3. Bullfrog Rd / Tumble Creek Dr	D	В	11.2	В	11.7	С	20.1				
5. Bullfrog Rd / Firehouse Rd	D	В	11.9	В	13.1	С	20.0				
7. Denny Ave / W 2 <sup>nd</sup> St (SR 903)	С	В	13.6	С	15.4	С	21.6				
8. Ranger Sta Rd / Miller / W 2 <sup>nd</sup> (SR 903)	<u>C</u>	С	16.4	С	22.4	E	35.8				
9. N Pine St / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	В	13.4	С	19.9	<u>D</u>	<u>29.5</u>				
10. Douglas Munro Blvd / Ranger Sta Rd	С	Α	7.7	Α	8.2	Α	7.3				
11. Douglas Munro Blvd / W 1 <sup>st</sup> St	С	D	33.1	F	90.4	D	29.2				
12. Pine St / W 1 <sup>st</sup> St	С	D	27.8	D	30.7	E	35.0				
13. N Stafford Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	С	16.6	С	19.1	F	51.6				
15. N Oakes Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	В	13.0	В	13.9	<u>D</u>	<u>33.9</u>				
19. Oakes Ave / I-90 EB Off-Ramp	<u>C</u>	Α	8.9	Α	9.0	В	11.3				
20. Oakes Ave / I-90 EB On-Ramp	<u>C</u>	A	0.0	Α	0.0	A	0.0				
21. SR 903 / E Pennsylvania Ave	<u>C</u>	В	12.5	В	10.2	В	11.0				
22. SR 903 / Pacific Ave	<u>C</u>	Α	9.8	Α	9.2	Α	9.5				
23. Rock Rose Rd / Morrel Rd / SR 903	<u>C</u>	Α	9.5	Α	9.0	Α	9.5				
24. SR 903 / SR 903 Ramp	<u>C</u>	Only and	alyzed for Su	nday PM p	eak hour	F	> 100				
25. White Road I/C / I-90 WB Ramps	<u>C</u>	Only analyzed for Sunday PM peak hour B 13									
26. White Road I/C / I-90 EB Ramps	<u>C</u>	Only analyzed for Sunday PM peak hour A 9.									
27. SR 970 / SR 970 Ramp	C	Only and	alyzed for Su	nday PM p	eak hour	F	59.4				

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. Bold indicates does not meet LOS standard.

Bold, underlined and italicized indicates changes non-compliant LOS intersections from the DSEIS.

#### Weekday Summer PM Peak Hour

As shown in **Table 1**, all study intersections currently operate at an acceptable LOS during the weekday summer PM peak hour, with the exception of the following two-way stop-controlled intersections:

- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS D
- #12 Pine Street / W 1<sup>st</sup> Street LOS D

#### Friday Summer PM Peak Hour

As shown in **Table 1**, all study intersections currently operate at an acceptable LOS during the Friday summer PM Peak hour, with the exception of the following two-way stop-controlled intersections:

- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS F
- #12 Pine Street / W 1<sup>st</sup> Street LOS D

#### <u>Sunday Summer PM Peak Hour</u>

As shown in **Table 1**, all study intersections currently operate at an acceptable LOS during the Sunday PM peak hour, with the exception of the following two-way stop-controlled intersections:

- #8 Ranger Station Rd / Miller Ave / W 2<sup>nd</sup> Street LOS E
- #9 N Pine St / W 2<sup>nd</sup> Street (SR 903) LOS D (not identified as non-compliant in DSEIS)
- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS D
- #12 Pine Street / W 1<sup>st</sup> Street LOS E
- #13 N Stafford Ave / W 2<sup>nd</sup> Street (SR 903) LOS F
- #15 -N Oakes Ave / W 2<sup>nd</sup> Street (SR 903) LOS D (not identified as non-compliant in DSEIS)
- #24 SR 903 / SR 903 Ramp LOS F
- #27 SR 970 / SR 970 Ramp LOS F

#### Future 'Baseline' Intersection LOS

Future 'Baseline' analysis results at the 27 study intersections for future years 2025, 2031, and 2037 are summarized in **Table 2** for the weekday PM peak hour, **Table 3** for the Friday PM peak hour, and **Table 4** for the Sunday peak hour during the peak summer period. The LOS results are discussed in detail following the tables.

The summary of the future 'Baseline" intersection LOS analysis has been updated in **Tables 2 to 4** below to reflect WSDOT's LOS C standard for study intersections on state routes. Study intersections forecast to operate at non-compliant LOS (LOS D, E, or F for City and WSDOT intersections and LOS E or F for Kittitas County intersections) are shown in bold text in the tables. The LOS results are discussed in detail following the tables. Study intersections currently operating at non-compliant LOS based on the updated LOS C threshold for WSDOT intersections that were not identified in the DSEIS are shown as underlined, italicized, and bold text in **Tables 2 to 4** in this *Addendum*. Please refer to footnote 1 in the tables for further explanation.

It should be noted that although **Tables 2 to 4** in this *Addendum* have been updated to reflect the LOS C standard for WSDOT intersections and identify noncompliant intersections, the LOS and delay summarized in the tables are the same as previously documented in **Tables 8 to 10** of the *47° North Draft SEIS Transportation Analysis*. New or revised LOS evaluations were not necessary.

# Table 2FUTURE 'BASELINE' INTERSECTION LOS SUMMARY – WEEKDAY PM PEAKHOUR (SUMMER)

		Weekday PM Peak Hour Conditions (Summer Peak)									
		Year 'Bas	r 2025 seline'	Year 'Bas	r 2031 seline'	Year 'Bas	r 2037 seline'				
Study Intersection	LOS Standard	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>				
Signalized											
14. S Cle Elum Way / Stafford / W 1 <sup>st</sup> St	С	В	11.5	В	12.8	В	13.8				
16. N Oakes Ave / W 1 <sup>st</sup> St (SR 903)	<u>C</u>	В	10.4	В	11.7	В	15.9				
18. Pennsylvania Ave / 1 <sup>st</sup> St (SR 903)	<u>C</u>	А	7.6	А	8.0	А	9.1				
Roundabout											
4. Bullfrog Rd / Suncadia Trail	D	А	5.1	А	5.9	А	7.3				
6. Bullfrog Rd / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	А	6.2	А	6.9	А	7.7				
All-Way Stop-Controlled											
17. Pennsylvania Ave / 2 <sup>nd</sup> St	С	А	9.6	В	11.9	С	16.8				
Two-Way Stop-Controlled <sup>3</sup>											
1. Bullfrog Rd / I-90 EB Ramps	<u>C</u>	В	13.0	С	17.0	D	<u>27.3</u>				
2. Bullfrog Rd / I-90 WB Ramps	<u>C</u>	В	10.6	В	12.7	С	19.4				
3. Bullfrog Rd / Tumble Creek Dr	D	В	12.4	С	16.3	С	24.8				
5. Bullfrog Rd / Firehouse Rd	D	В	11.5	В	11.8	В	11.9				
7. Denny Ave / W 2 <sup>nd</sup> St (SR 903)	С	С	16.6	С	20.1	<u>D</u>	<u>25.8</u>				
8. Ranger Sta Rd / Miller / W 2 <sup>nd</sup> (SR 903)	<u>C</u>	D	26.1	E	47.8	F	> 100				
9. N Pine St / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	С	18.1	С	23.5	<u>D</u>	<u>27.4</u>				
10. Douglas Munro Blvd / Ranger Sta Rd	С	А	7.7	А	7.9	A	8.4				
11. Douglas Munro Blvd / W 1 <sup>st</sup> St	С	E	46.2	F	74.7	F	> 100				
12. Pine St / W 1 <sup>st</sup> St	С	D	27.9	D	27.9	E	35.2				
13. N Stafford Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	E	46.7	F	> 100	F	> 100				
15. N Oakes Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	<u>D</u>	<u>33.9</u>	E	45.0	F	> 100				
19. Oakes Ave / I-90 EB Off-Ramp	<u>C</u>	С	20.3	В	10.2	В	10.8				
20. Oakes Ave / I-90 EB On-Ramp	<u>C</u>	А	0.0	А	0.0	Α	0.0				
21. SR 903 / E Pennsylvania Ave	<u>C</u>	С	19.3	С	22.1	<u>D</u>	<u>25.4</u>				
22. SR 903 / Pacific Ave	<u>C</u>	В	12.0	В	14.5	C	17.2				
23. Rock Rose Rd / Morrel Rd / SR 903	<u>C</u>	В	10.7	В	11.2	В	12.2				

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. Bold indicates does not meet LOS standard.

Bold, underlined and italicized indicates changes non-compliant LOS intersections from the DSEIS..

# Table 3FUTURE 'BASELINE' INTERSECTION LOS SUMMARY – FRIDAY PM PEAK HOUR<br/>(SUMMER)

	<u> </u>	Friday PM Peak Hour Conditions (Summer Peak)									
		Year	2025	Year	2031	Yea	r 2037				
	F	'Bas	eline'	'Bas	eline'	'Bas	seline'				
	LOS										
Study Intersection	Standard	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>				
Signalized											
14. S Cle Elum Way / Stafford / W 1 <sup>st</sup> St	С	В	15.5	В	17.5	В	19.1				
16. N Oakes Ave / W 1 <sup>st</sup> St (SR 903)	<u>C</u>	В	13.3	В	15.1	С	20.9				
18. Pennsylvania Ave / 1 <sup>st</sup> St (SR 903)	<u>C</u>	А	7.7	А	8.9	В	10.5				
Roundabout											
4. Bullfrog Rd / Suncadia Trail	D	А	7.2	В	10.1	В	14.9				
6. Bullfrog Rd / W 2 <sup>nd</sup> Street (SR 903)	<u>C</u>	А	8.2	А	9.6	В	11.0				
All-Way Stop-Controlled											
17. Pennsylvania Ave / 2 <sup>nd</sup> St	С	А	9.5	В	12.3	С	20.2				
Two-Way Stop-Controlled <sup>3</sup>											
1. Bullfrog Rd/I-90 EB Ramps	<u>C</u>	С	23.5	F	> 100	F	> 100				
2. Bullfrog Rd / I-90 WB Ramps	<u>C</u>	С	15.9	E	41.5	F	> 100				
3. Bullfrog Rd / Tumble Creek Dr	D	В	12.5	С	17.3	С	24.6				
5. Bullfrog Rd / Firehouse Rd	D	В	12.2	В	12.5	В	12.5				
7. Denny Ave / W 2 <sup>nd</sup> Street (SR 903)	С	С	19.6	<u>D</u>	<u>25.0</u>	E	36.3				
8. Ranger Sta Rd / Miller / W 2 <sup>nd</sup> (SR 903)	<u>C</u>	F	62.6	F	> 100	F	> 100				
9. N Pine St / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	<u>D</u>	<u>30.5</u>	F	77.5	F	> 100				
10. Douglas Munro Blvd / Ranger Sta Rd	С	А	8.2	А	8.6	А	9.5				
11. Douglas Munro Blvd / W 1 <sup>st</sup> St	С	F	> 100	F	> 100	F	> 100				
12. Pine St / W 1 <sup>st</sup> St	С	E	38.1	E	42.5	F	54.0				
13. N Stafford Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	> 100	F	> 100	F	> 100				
15. N Oakes Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	С	24.7	F	95.1	F	> 100				
19. Oakes Ave / I-90 EB Off-Ramp	<u>C</u>	А	9.8	В	10.2	В	11.1				
20. Oakes Ave / I-90 EB On-Ramp	<u>C</u>	А	0.0	А	0.0	А	0.0				
21. SR 903 / E Pennsylvania Ave	<u>C</u>	С	20.0	С	23.4	<u>D</u>	<u>34.4</u>				
22. SR 903 / Pacific Ave	<u>C</u>	В	11.6	В	13.9	С	16.0				
23. Rock Rose Rd / Morrel Rd / SR 903	<u>C</u>	В	10.7	В	10.9	В	12.5				

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. Bold indicates does not meet LOS standard.

Bold, underlined and italicized indicates changes non-compliant LOS intersections from the DSEIS..

#### Table 4 FUTURE 'BASELINE' INTERSECTION LOS SUMMARY - SUNDAY PM PEAK HOUR (SUMMER)

	Sunday PM Peak Hour Conditions (Summer Peak)										
		Year 'Bas	2025 eline'	Year 'Bas	2031 eline'	Yea 'Bas	r 2037 seline'				
Study Intersection	LOS Standard	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>				
Signalized											
14. S Cle Elum Way / Stafford / W $1^{st}$ St	С	В	13.9	В	15.7	В	16.9				
16. N Oakes Ave / W 1 <sup>st</sup> St (SR 903)	<u>C</u>	В	17.1	С	21.2	<u>D</u>	<u>45.0</u>				
18. Pennsylvania Ave / 1 <sup>st</sup> St (SR 903)	<u>C</u>	А	9.2	А	9.8	В	10.6				
Roundabout											
4. Bullfrog Rd / Suncadia Trail	D	В	13.7	С	20.9	F	57.4				
6. Bullfrog Rd / W 2 <sup>nd</sup> Street (SR 903)	<u>C</u>	С	18.6	С	24.9	Е	35.1				
All-Way Stop-Controlled											
17. Pennsylvania Ave / 2 <sup>nd</sup> St	С	А	8.5	В	10.1	В	12.9				
Two-Way Stop-Controlled <sup>3</sup>											
1. Bullfrog Rd/I-90 EB Ramps	<u>C</u>	В	11.9	С	15.3	С	19.7				
2. Bullfrog Rd / I-90 WB Ramps	<u>C</u>	В	10.6	В	12.4	С	18.5				
3. Bullfrog Rd / Tumble Creek Dr	D	С	22.2	D	32.7	F	63.3				
5. Bullfrog Rd / Firehouse Rd	D	С	22.5	С	22.1	D	25.7				
7. Denny Ave / W 2 <sup>nd</sup> Street (SR 903)	С	С	23.4	<u>D</u>	<u>29.6</u>	E	43.9				
8. Ranger Sta Rd / Miller / W 2 <sup>nd</sup> (SR 903)	<u>C</u>	F	56.6	F	> 100	F	> 100				
9. N Pine St / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	60.1	F	> 100	F	> 100				
10. Douglas Munro Blvd / Ranger Sta Rd	С	А	7.4	А	7.6	А	7.9				
11. Douglas Munro Blvd / W 1 <sup>st</sup> St	С	E	46.7	F	83.2	F	> 100				
12. Pine St / W 1 <sup>st</sup> St	С	E	49.6	E	48.5	F	54.3				
13. N Stafford Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	> 100	F	> 100	F	> 100				
15. N Oakes Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	91.6	F	> 100	F	> 100				
19. Oakes Ave / I-90 EB Off-Ramp	<u>C</u>	В	14.4	С	18.1	E	35.3				
20. Oakes Ave / I-90 EB On-Ramp	<u>C</u>	А	0.0	А	0.0	А	0.0				
21. SR 903 / E Pennsylvania Ave	<u>C</u>	С	17.2	С	22.5	<u>D</u>	<u>28.3</u>				
22. SR 903 / Pacific Ave	<u>C</u>	В	12.0	В	13.3	С	16.6				
23. Rock Rose Rd / Morrel Rd / SR 903	<u>C</u>	В	10.6	В	11.1	В	12.1				
24. SR 903 / SR 903 Ramp	<u>C</u>	F	> 100	F	> 100	F	> 100				
25. White Road I/C / I-90 WB Ramps	<u> </u>		С	23.9	F	52.5					
26. White Road I/C / I-90 EB Ramps	<u><u></u></u>	А	9.4	В	10.1	В	11.1				
27. SR 970 / SR 970 Ramp	<u>C</u>	F	> 100	F	> 100	F	> 100				

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. Bold indicates does not meet LOS standard. Bold, underlined and italicized indicates changes non-compliant LOS intersections from the DSEIS.



#### <u>Weekday Summer PM Peak Hour</u>

As shown in **Table 2**, the following intersections are expected to operate at non-compliant LOS for future 'Baseline' conditions during the summer weekday PM peak hour:

- #1 Bullfrog Rd / I-90 EB Ramps LOS D by 2037 (not identified as non-compliant in DSEIS)
- #7 Denny Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2037 (not identified as noncompliant in DSEIS)
- #8 Ranger Station Rd / Miller Ave / W 2<sup>nd</sup> Street (SR 903) LOS E by 2031
- #9 N Pine St / W 2<sup>nd</sup> St (SR 903) LOS D by 2037 (not identified as non-compliant in DSEIS)
- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS E by 2025
- #12 Pine Street / W 1<sup>st</sup> Street LOS D by 2025
- #13 N Stafford Ave / W 2<sup>nd</sup> Street (SR 903) LOS E by 2025
- #15 N Oakes Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2025 (identified as non-compliant in 2031 in DSEIS)
- #21 SR 903 / Pennsylvania Ave (SR 903) LOS D by 2037 (not identified as noncompliant in DSEIS)

#### Friday Summer PM Peak Hour

As shown in **Table 3**, the following intersections are expected to operate at non-compliant LOS for future 'Baseline' conditions during the summer Friday PM peak hour:

- #1 Bullfrog Rd / I-90 EB Ramps LOS F by 2031
- #2 Bullfrog Rd / I-90 WB Ramps LOS E by 2031
- #7 Denny Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2031 (identified as non-compliant in 2037 in DSEIS)
- #8 Ranger Station Rd / Miller Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #9 N Pine St / W 2<sup>nd</sup> St (SR 903) LOS D by 2025 (identified as non-compliant in 2031 in DSEIS)
- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS F by 2025
- #12 Pine Street / W 1<sup>st</sup> Street LOS E by 2025
- #13 N Stafford Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #15 N Oakes Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2031
- #21 SR 903 / Pennsylvania Ave (SR 903) LOS D by 2037 (not identified as noncompliant in DSEIS)

#### <u>Sunday Summer PM Peak Hour</u>

As shown in **Table 4**, the following intersections are expected to operate at non-compliant LOS for future 'Baseline' conditions during the summer Sunday PM peak hour:

- #3 Bullfrog Rd / Tumble Creek LOS F by 2037
- #4 Bullfrog Rd / Suncadia Trail LOS F by 2037
- #6 Bullfrog Rd / W 2<sup>nd</sup> St (SR 903) LOS E by 2037

- #7 Denny Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2031 (identified as non-compliant in 2037 in DSEIS)
- #8 Ranger Station Rd / Miller Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #9 N Pine St / W 2<sup>nd</sup> St (SR 903) LOS F by 2025
- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS E by 2025
- #12 Pine Street / W 1<sup>st</sup> Street LOS E by 2025
- #13 N Stafford Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #15 N Oakes Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #16 N Oakes Ave / W 1<sup>st</sup> Street (SR 903) LOS D by 2037 (not identified as noncompliant in DSEIS)
- #19 Oakes Ave / I-90 EB off-ramp LOS E by 2037
- #21 SR 903 / Pennsylvania Ave (SR 903) LOS D by 2037 (not identified as noncompliant in DSEIS)
- #24 SR 903 / SR 903 Ramp LOS F by 2025
- #25 White Road I/C & I-90 WB Ramps LOS F by 2037
- #27 SR 970 / SR 970 Ramp LOS F by 2025

#### **Collision History and Traffic Safety**

Collisions at the study intersections were reviewed and summarized for the most recent fiveyear period data available – from January 1, 2015 to December 31, 2019. Collision data was provided by the Washington State Department of Transportation (WSDOT). Summaries of the collisions by year, collisions by severity, total, and annual average collisions are provided in **Table 5**.

As shown in **Table 5**, all the collisions at the study intersections over the 5-year period were classified as either "no injury" or "minor/possible injury", with no collisions classified as "major injury" or "fatality".

COLLISION DATA SUMMARY (2015 TO 2019)												
	C	ollisi	ons b	y Yea	ar	Col	lisions	by				
						S	Severity	/				
Study Intersection	2015	2016	2017	2018	2019	Major Injury	Minor/Possible Injury	No Injury	5-Year Total Collisio ns	Average Annual Collisions		
Signalized												
14. S Cle Elum Way / Stafford / W 1 <sup>st</sup> St	0	1	2	0	0	0	1	2	3	0.60		
16. N Oakes Ave / W 1 <sup>st</sup> St (SR 903)	3	1	1	0	0	0	1	4	5	1.00		
18. Pennsylvania Ave / 1 <sup>st</sup> St (SR 903)	1	3	1	3	1	0	5	4	9	1.80		
Roundabout												
4. Bullfrog Rd / Suncadia Trail	0	0	1	0	0	0	0	1	1	0.20		
6. Bullfrog Rd / W 2 <sup>nd</sup> Street (SR 903)	1	0	1	0	1	0	2	1	3	0.60		
All-Way Stop-Controlled												
17. Pennsylvania Ave / 2 <sup>nd</sup> St	0	0	0	0	1	0	0	1	1	0.20		
Two-Way Stop-Controlled												
1. Bullfrog Rd / I-90 EB Ramps	0	0	1	0	0	0	0	1	1	0.20		
2. Bullfrog Rd / I-90 WB Ramps	0	2	0	2	2	0	1	5	6	1.20		
3. Bullfrog Rd / Tumble Creek Dr	0	0	0	0	0	0	0	0	0	0.00		
5. Bullfrog Rd / Firehouse Rd	0	0	0	0	0	0	0	0	0	0.00		
7. Denny Ave / W 2 <sup>nd</sup> Street (SR 903)	1	0	0	1	0	0	1	1	2	0.40		
8. Ranger Sta Rd /Miller / W 2 <sup>nd</sup> (SR 903)	0	1	0	0	2	0	1	2	3	0.60		
9. N Pine St / W 2 <sup>nd</sup> St (SR 903)	0	0	0	0	0	0	0	0	0	0.00		
10. Douglas Munro Blvd / Ranger Sta Rd	0	0	0	0	1	0	1	0	1	0.20		
11. Douglas Munro Blvd / W 1 <sup>st</sup> St	2	1	4	1	1	0	3	6	9	1.80		
12. Pine St / W 1 <sup>st</sup> St	2	0	0	1	2	0	1	4	5	1.00		
13. N Stafford Ave / W 2 <sup>nd</sup> St (SR 903)	0	0	0	0	0	0	0	0	0	0.00		
15. N Oakes Ave / W 2 <sup>nd</sup> St (SR 903)	1	1	0	0	0	0	0	2	2	0.40		
19. Oakes Ave / I-90 EB Off-Ramp	0	0	0	0	1	0	0	1	1	0.20		
20. Oakes Ave / I-90 EB On-Ramp	1	0	1	0	0	0	0	2	2	0.40		
21. SR 903 / E Pennsylvania Ave	0	0	0	0	0	0	0	0	0	0.00		
22. SR 903 / Pacific Ave	0	0	0	0	0	0	0	0	0	0.00		
23. Rock Rose Rd / Morrel Rd / SR 903	0	0	0	0	0	0	0	0	0	0.00		
24. SR 903 / SR 903 Ramp	0	0	1	0	2	0	1	2	3	0.60		
25. White Road I/C / I-90 WB Ramps	0	2	0	0	0	0	0	2	2	0.40		
26. White Road I/C / I-90 EB Ramps	0	0	0	0	0	0	0	0	0	0.00		
27. SR 970 / SR 970 Ramp	2	0	1	0	0	0	1	2	3	0.60		

Table 5			
COLLISION DATA SUMMARY (	(2015	ТО	2019)

#### **Impacts of the SEIS Alternatives**

#### **Future Year Intersection LOS with SEIS Alternative 5 and Alternative 6**

Intersection LOS analysis results at the 27 study intersections with SEIS Alternative 5 (Approved Bullfrog Flats Master Site Plan) and SEIS Alternative 6 (47° North Master Site Plan Amendment) for future years 2025, 2031, and 2037 are summarized in **Table 6** for the weekday PM peak hour, **Table 7** for the Friday PM peak hour, and **Table 8** for the Sunday peak hour during the peak summer period. Year 2025, 2031, and 2037 'Baseline' LOS results are also presented in **Table 6 to Table 8** for comparison purposes. The LOS results are discussed in detail following the tables.

The future intersection LOS analysis summary with SEIS Alternative 5 and Alternative 6 has been updated in **Tables 6 to 8** below to reflect WSDOT's LOS C standard for study intersections on state routes. Study intersections forecast to operate at non-compliant LOS (LOS D, E, or F for City and WSDOT intersections and LOS E or F for Kittitas County intersections) are shown in bold text in the tables. Study intersections currently operating at non-compliant LOS based on the updated LOS C threshold for WSDOT intersections are shown as underlined, italicized, and bold text in **Tables 6 to 8** in this Addendum.

It should be noted that although **Tables 6 to 8** in this *Addendum* have been updated to reflect the LOS C standard for WSDOT intersections and identify non-compliant intersections, the LOS and delay summarized in the tables are the same as previously documented in **Tables 20 to 22** of the 47° North Draft SEIS Transportation Analysis. Study intersections forecast to operate at non-compliant LOS in alternate years or scenarios (i.e. baseline vs. with SEIS Alternative 5 or Alternative 6) based on the updated LOS C threshold for WSDOT intersections are noted in italics in the detailed LOS discussion following **Tables 6 to 8**.

Study intersections forecast to operate at non-compliant LOS during the weekday summer PM peak hour with SEIS Alternative 5 or Alternative 6 are identified for potential improvements to meet the adopted LOS standards in **Section 4** (Mitigation Measures).

Weekday PM Peak Hour Conditions (Summer Peak) Year 2025 Year 2031 With SEIS Alt 5 'Ba 'Baseline' With SEIS Alt 5 With SEIS Alt 6 'Baseline' With SEIS Alt 6 LOS LOS<sup>1</sup> LOS<sup>1</sup> Delay<sup>1</sup> LOS<sup>1</sup> LOS<sup>1</sup> Delay<sup>1</sup> LOS<sup>1</sup> Delay<sup>1</sup> LOS<sup>1</sup> LOS<sup>1</sup> Study Intersection Standard Delay<sup>1</sup> Delay<sup>1</sup> Delay<sup>1</sup> Signalized С В 11.5 В 12.1 В 12.0 В 12.8 В 13.6 В 13.7 В 14. S Cle Elum Way / Stafford / W 1<sup>st</sup> St В 10.9 В 10.8 11.7 В 12.8 В 13.0 В 16. N Oakes Ave / W 1<sup>st</sup> St (SR 903) С 10.4 В В 7.6 7.8 А 7.5 А 8.0 8.8 А А А А А 8.6 18. Pennsylvania Ave / 1<sup>st</sup> St (SR 903) С Roundabout D 5.6 5.9 6.5 7.5 4. Bullfrog Rd / Suncadia Trail А 5.1 А 5.4 А А Α А А 6. Bullfrog Rd / W 2<sup>nd</sup> St (SR 903) С А 6.2 А 6.6 А 6.8 А 6.9 А 7.6 А 8.0 А **All-Way Stop-Controlled** 17. Pennsylvania Ave / 2<sup>nd</sup> St С А 9.6 В 10.3 В 10.1 В 11.9 В 14.4 В 14.3 С **Two-Way Stop-Controlled**<sup>3</sup> 1. Bullfrog Rd / I-90 EB Ramps С В 13.0 В 14.8 С 15.3 С 17.0 С 23.3 D 30.4 D В 12.7 С С С С В 10.6 В 11.5 11.7 В 15.2 16.9 2. Bullfrog Rd / I-90 WB Ramps 12.4 В С 16.3 С С D В В 13.9 13.9 С 20.7 23.9 3. Bullfrog Rd / Tumble Creek Dr D В 11.5 В 11.9 В 12.5 В 11.8 В 12.8 В 13.4 В 5. Bullfrog Rd / Firehouse Rd 7. Denny Ave / W 2<sup>nd</sup> St (SR 903) С С 16.6 С 23.6 С 23.3 С 20.1 Ε 36.4 Ε 38.1 D D 26.1 F > 100 F 95.7 Ε 47.8 F > 100 F > 100 F 8. Ranger Sta Rd / Miller / W 2<sup>nd</sup> (SR 903) С 9. N Pine St / W 2<sup>nd</sup> St (SR 903) С С 18.1 D 34.2 D <u>33.3</u> С 23.5 F 78.5 F > 100 D С 7.9 7.9 10. Douglas Munro Blvd / Ranger Sta Rd А 7.7 А 7.9 А А Α 8.2 Α 8.3 А С Ε 46.2 F 56.1 F 56.1 F 74.7 F > 100 F > 100 F 11. Douglas Munro Blvd / W 1<sup>st</sup> St С D D 27.9 Ε 27.9 D 30.6 30.4 D D 31.5 D 32.9 12. Pine St / W 1<sup>st</sup> St Ε F > 100 F F С 46.7 F > 100 > 100 F > 100 F > 100 13. N Stafford Ave / W 2<sup>nd</sup> St (SR 903) F 15. N Oakes Ave / W 2<sup>nd</sup> St (SR 903) С С D Ε F F 20.3 32.9 D 33.3 45.0 > 100 > 100 В С А 9.7 А 9.9 А 9.8 В 10.2 В 10.4 В 10.6 19. Oakes Ave / I-90 EB Off-Ramp С А А 20. Oakes Ave / I-90 EB On-Ramp А 0.0 А 0.0 А 0.0 А 0.0 А 0.0 0.0 19.3 С С 21.7 С 22.1 D С С 21.2 D <u>25.3</u> D <u>29.3</u> 21. SR 903 / E Pennsylvania Ave С С В 12.0 В 12.7 В 12.8 В 14.5 С 15.7 С 16.8 22. SR 903 / Pacific Ave 23. Rock Rose Rd / Morrel Rd / SR 903 С В 10.7 В 10.8 В 11.0 В 11.2 В 11.5 В 11.9 В

 Table 6

 SEIS ALTERNATIVE 6 INTERSECTION LOS SUMMARY – WEEKDAY PM PEAK HOUR (SUMMER)

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. Bold indicates does not meet LOS standard. Bold, underlined and italicized indicates changes non-compliant LOS intersections from the DSEIS. 2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

	Year 2037													
se	eline'	With SE	EIS Alt 5	With S	EIS Alt 6									
	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>									
	13.8	В	14.7	В	14.6									
	15.9	С	21.4	С	21.1									
	9.1	В	11.2	В	10.7									
	7.3	A	8.5	В	10.3									
	7.7	А	8.8	А	9.7									
	16.8	D	25.8	С	20.6									
	<u>27.3</u>	F	63.5	F	> 100									
	19.4	<u>D</u>	<u>33.7</u>	Е	42.1									
	24.8	E	46.4	F	61.1									
	11.9	В	14.0	В	14.0									
	<u>25.8</u>	F	78.1	F	65.5									
	> 100	F	> 100	F	> 100									
	<u>27.4</u>	F	> 100	F	> 100									
	8.4	А	8.9	А	9.0									
	> 100	F	> 100	F	> 100									
	35.2	E	45.9	F	51.7									
	> 100	F	> 100	F	> 100									
	> 100	F	> 100	F	> 100									
	10.8	В	11.4	В	11.3									
	0.0	Α	0.0	Α	0.0									
	<u>25.4</u>	E	35.6	E	42.6									
	17.2	С	19.5	С	22.2									
	12.2	В	12.6	В	13.2									

Table 7 SEIS ALTERNATIVE 6 INTERSECTION LOS SUMMARY – FRIDAY PM PEAK HOUR (SUMMER)

	-	Friday PM Peak Hour Conditions (Summer Peak)																	
		Year 2025 Year 2031													Year	2037			
		'Bas	eline'	With S	EIS Alt 5	With S	EIS Alt 6	'Bas	'Baseline' With SEIS Alt 5			With S	EIS Alt 6	'Baseline'		With SI	EIS Alt 5	With SEIS Alt 6	
	LOS																		
Study Intersection	Standard	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>
Signalized																			
14. S Cle Elum Way / Stafford / W 1 <sup>st</sup> St	С	В	15.5	В	16.2	В	16.1	В	17.5	В	18.5	В	18.6	В	19.1	С	20.3	С	20.2
16. N Oakes Ave / W 1 <sup>st</sup> St (SR 903)	<u>C</u>	В	13.3	В	14.2	В	14.0	В	15.1	В	16.5	В	16.7	С	20.9	<u>D</u>	<u>41.8</u>	С	27.9
18. Pennsylvania Ave / 1 <sup>st</sup> St (SR 903)	<u>C</u>	A	7.7	А	8.6	А	8.3	А	8.9	В	10.7	А	9.9	В	10.5	В	13.5	В	12.8
Roundabout																			
4. Bullfrog Rd / Suncadia Trail	D	А	7.2	А	7.8	А	8.1	В	10.1	В	11.7	С	15.0	В	14.9	С	19.8	D	31.4
6. Bullfrog Rd / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	А	8.2	А	8.9	А	8.0	А	9.6	В	11.0	В	11.5	В	11.0	В	13.1	В	14.8
All-Way Stop-Controlled																			
17. Pennsylvania Ave / 2 <sup>nd</sup> St	С	А	9.5	В	10.2	В	10.1	В	12.3	В	15.0	В	14.7	С	20.2	D	32.8	D	26.5
Two-Way Stop-Controlled <sup>3</sup>																			
1. Bullfrog Rd / I-90 EB Ramps	<u>C</u>	C	23.5	<u>D</u>	<u>33.8</u>	Е	36.7	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
2. Bullfrog Rd / I-90 WB Ramps	<u>C</u>	C	15.9	С	19.2	С	19.4	E	41.5	F	85.8	F	> 100						
3. Bullfrog Rd / Tumble Creek Dr	D	В	12.5	В	14.2	В	14.2	С	17.3	С	22.8	D	28.0	С	24.6	Е	49.6	F	71.7
5. Bullfrog Rd / Firehouse Rd	D	В	12.2	В	12.9	В	13.4	В	12.5	В	13.6	В	14.3	В	12.5	В	13.8	В	14.7
7. Denny Ave / W 2 <sup>nd</sup> St (SR 903)	С	C	19.6	<u>D</u>	<u>28.9</u>	<u>D</u>	<u>28.3</u>	<u>D</u>	<u>25.0</u>	E	48.4	F	52.3	E	36.3	F	> 100	F	> 100
8. Ranger Sta Rd / Miller / W 2 <sup>nd</sup> (SR 903)	<u>C</u>	F	62.6	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
9. N Pine St / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	<u>D</u>	<u>30.5</u>	F	83.0	F	81.5	F	77.5	F	> 100								
10. Douglas Munro Blvd / Ranger Sta Rd	С	А	8.2	А	8.5	А	8.5	Α	8.6	А	9.0	А	9.1	А	9.5	В	10.3	В	10.4
11. Douglas Munro Blvd / W 1 <sup>st</sup> St	С	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
12. Pine St / W 1 <sup>st</sup> St	С	E	38.1	E	43.8	E	43.4	E	42.5	F	54.4	F	57.3	F	54.0	F	92.4	F	> 100
13. N Stafford Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
15. N Oakes Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	C	24.7	E	47.7	E	48.0	F	95.1	F	> 100								
19. Oakes Ave / I-90 EB Off-Ramp	<u>C</u>	A	9.8	В	10.0	А	9.9	В	10.2	В	10.6	В	10.6	В	11.1	В	11.8	В	11.7
20. Oakes Ave / I-90 EB On-Ramp	<u>C</u>	A	0.0	A	0.0	А	0.0	А	0.0	А	0.0	А	0.0	А	0.0	А	0.0	А	0.0
21. SR 903 / E Pennsylvania Ave	<u>C</u>	C	20.0	C	22	С	22.8	С	23.4	<u>D</u>	<u>26.7</u>	<u>D</u>	<u>31.2</u>	<u>D</u>	<u>34.4</u>	E	45.1	F	64.3
22. SR 903 / Pacific Ave	<u>C</u>	В	11.6	В	12.1	В	12.2	В	13.9	В	14.9	С	16.0	С	16	С	17.9	С	20.1
23. Rock Rose Rd / Morrel Rd / SR 903	<u>C</u>	В	10.7	В	10.7	В	10.8	В	10.9	В	11.2	В	11.7	В	12.5	В	12.9	В	13.6

1. LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. Bold indicates does not meet LOS standard. Bold, underlined and italicized indicates changes non-compliant LOS intersections from the DSEIS. 2. LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

 Table 8

 SEIS ALTERNATIVE 6 INTERSECTION LOS SUMMARY – SUNDAY PM PEAK HOUR (SUMMER)

	-	Sunday PM Peak Hour Conditions (Summer Peak)										er Peak)							
				Year	2025			Year 2031						Year 2037					
		'Bas	eline'	With S	EIS Alt 5	With S	EIS Alt 6	'Bas	'Baseline' With SEIS Alt 5		With SEIS Alt 6		'Baseline'		With SEIS Alt 5		With SEIS Alt 6		
	LOS																		
Study Intersection	Standard	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>
Signalized																			
14. S Cle Elum Way / Stafford / W 1 <sup>st</sup> St	С	В	13.9	В	14.8	В	14.7	В	15.7	В	16.8	В	17.3	В	16.9	В	18.4	В	18.4
16. N Oakes Ave / W 1 <sup>st</sup> St (SR 903)	<u>C</u>	В	17.1	В	18.5	В	18.0	С	21.2	С	24.9	С	25.5	<u>D</u>	<u>45.0</u>	E	55.1	E	56.5
18. Pennsylvania Ave / 1 <sup>st</sup> St (SR 903)	<u>C</u>	А	9.2	В	11.0	В	10.5	А	9.8	В	12.6	В	11.2	В	10.6	В	12.9	В	13.3
Roundabout																			
4. Bullfrog Rd / Suncadia Trail	D	В	13.7	C	15.3	С	15.7	С	20.9	D	26.3	E	37.0	F	57.4	F	73.5	F	90.2
6. Bullfrog Rd / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	С	18.6	C	21.7	С	22.4	С	24.9	<u>D</u>	<u>31.7</u>	E	40.4	E	35.1	E	49.0	F	60.7
All-Way Stop-Controlled																			
17. Pennsylvania Ave / 2 <sup>nd</sup> St	С	А	8.5	А	8.9	А	8.9	В	10.1	В	11.1	В	10.9	В	12.9	С	15.1	В	14.7
Two-Way Stop-Controlled <sup>3</sup>																			
1. Bullfrog Rd / I-90 EB Ramps	<u>C</u>	В	11.9	В	13.4	В	13	С	15.3	С	19.0	С	20.9	C	19.7	D	<u>29.3</u>	D	<u>32.3</u>
2. Bullfrog Rd / I-90 WB Ramps	<u>C</u>	В	10.6	В	11.0	В	11	В	12.4	В	13.6	В	14.5	C	18.5	С	24.7	D	<u>26.9</u>
3. Bullfrog Rd / Tumble Creek Dr	D	С	22.2	D	25.8	D	26.1	D	32.7	E	43.4	F	57.7	F	63.3	F	> 100	F	> 100
5. Bullfrog Rd / Firehouse Rd	D	С	22.5	С	24.4	D	25.1	С	22.1	С	24.1	D	25.7	D	25.7	D	29.0	D	29.7
7. Denny Ave / W 2 <sup>nd</sup> St (SR 903)	С	С	23.4	<u>D</u>	<u>33.1</u>	<u>D</u>	<u>31.4</u>	<u>D</u>	<u>29.6</u>	E	48.1	F	56.6	E	43.9	F	> 100	F	> 100
8. Ranger Sta Rd / Miller / W 2 <sup>nd</sup> (SR 903)	<u>C</u>	F	56.6	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
9. N Pine St / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	60.1	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
10. Douglas Munro Blvd / Ranger Sta Rd	С	Α	7.4	А	7.6	А	7.6	А	7.6	А	7.8	А	7.9	А	7.9	А	8.3	А	8.4
11. Douglas Munro Blvd / W 1 <sup>st</sup> St	С	E	46.7	F	60.7	F	58.0	F	83.2	F	> 100								
12. Pine St / W 1 <sup>st</sup> St	С	E	49.6	F	57.6	F	72.3	E	48.5	F	58.9	F	56.3	F	54.3	F	72.3	F	65.8
13. N Stafford Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
15. N Oakes Ave / W 2 <sup>nd</sup> St (SR 903)	<u>C</u>	F	91.6	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
19. Oakes Ave / I-90 EB Off-Ramp	<u>C</u>	В	14.4	C	15.2	C	15.0	С	18.1	C	19.8	С	20.2	E	35.3	E	43.6	E	44.0
20. Oakes Ave / I-90 EB On-Ramp	<u>C</u>	Α	0.0	A	0.0	А	0.0	А	0.0	Α	0.0	Α	0.0	А	0.0	А	0.0	А	0.0
21. SR 903 / E Pennsylvania Ave	<u>C</u>	С	17.2	C	19.1	C	19.2	С	22.5	<u>D</u>	<u>26.1</u>	<u>D</u>	<u>30.7</u>	<u>D</u>	<u>28.3</u>	E	35.3	E	45.1
22. SR 903 / Pacific Ave	<u>C</u>	В	12.0	В	12.4	В	12.3	В	13.3	В	13.9	В	14.5	C	16.6	С	17.5	С	18.6
23. Rock Rose Rd / Morrel Rd / SR 903	<u>C</u>	В	10.6	В	10.8	В	10.7	В	11.1	В	11.4	В	11.5	В	12.1	В	12.5	В	12.8
24. SR 903 / SR 903 Ramp	<u>C</u>	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100
25. White Road I/C / I-90 WB Ramps	<u>C</u>	С	15.7	С	16.1	С	16.0	С	23.9	<u>D</u>	<u>25.3</u>	<u>D</u>	<u>25.9</u>	F	52.5	F	58.9	F	60.0
26. White Road I/C / I-90 EB Ramps	<u>C</u>	Α	9.4	Α	9.4	А	9.4	В	10.1	В	10.2	В	10.3	В	11.1	В	11.3	В	11.3
27. SR 970 / SR 970 Ramp	<u>C</u>	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100	F	> 100

LOS = Level of Service. Delay = average control delay expressed in seconds per vehicle. Bold indicates does not meet LOS standard. Bold, underlined and italicized indicates changes non-compliant LOS intersections from the DSEIS.
 LOS at two-way stop-controlled intersections is reported for the stop-controlled movement with the highest delay.

#### Weekday Summer PM Peak Hour

As shown in **Table 6**, the following study intersections are anticipated to operate at noncompliant LOS during the weekday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 5 or Alternative 6:

- #8 Ranger Station Rd / Miller Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2025 (identified as non-compliant in 2025 with Alternative 5 or Alternative 6 in DSEIS)
- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS E by 2025
- #12 N Pine Street / W 1<sup>st</sup> Street LOS D by 2025
- #13 N Stafford Ave / W 2<sup>nd</sup> Street (SR 903) LOS E by 2025

The following study intersections are anticipated to operate at non-compliant LOS during the weekday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 5 or Alternative 6:

- #2 Bullfrog Road / I-90 WB Ramps LOS D with Alternative 5 or LOS E with Alternative 6 by 2037 (*identified as non-compliant with Alternative 6 only in DSEIS*)
- #3 Bullfrog Road / Tumble Creek LOS E with Alternative 5 and LOS F with Alternative 6 by 2037
- #7 Denny Ave / W 2<sup>nd</sup> Street (SR 903) LOS E by 2031
- #9 N Pine Street / W 2<sup>nd</sup> Street (SR 903) LOS D by 2025 (*identified as non-compliant in 2031 in DSEIS*)
- #15 N Oakes Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2025 (identified as noncompliant in 2031 'Baseline' in DSEIS)
- #21 Pennsylvania Ave / N 1<sup>st</sup> Street (SR 903) in Roslyn LOS D by 2031 (identified as non-compliant in 2037 in DSEIS)

The following study intersection is anticipated to operate at non-compliant LOS during the weekday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 6 only:

• #1 - Bullfrog Road / I-90 EB Ramps – LOS D by 2031 (identified as non-compliant in 2037 with Alternative 6 in DSEIS)

The following study intersection is anticipated to operate at non-compliant LOS during the weekday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 5 only:

• #17 – Pennsylvania Ave / W 2<sup>nd</sup> Street – LOS D by 2037 (with Alternative 5 only)

#### Friday Summer PM Peak Hour

As shown in **Table 7**, the following study intersections are anticipated to operate at noncompliant LOS during the Friday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 5 or Alternative 6:

- #2 Bullfrog Rd / I-90 WB Ramps LOS E by 2031
- #8 Ranger Station Rd / Miller / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #9 N Pine Street / W 2<sup>nd</sup> Street (SR 903) LOS D by 2025 (*identified as non-compliant in 2025 with Alternative 5 or Alternative 6 in DSEIS*)
- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS F by 2025
- #12 N Pine Street / W 1<sup>st</sup> Street by 2025 LOS E by 2025
- #13 N Stafford Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025

The following study intersections are expected to operate at non-compliant LOS during the Friday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 5 or Alternative 6:

- #1 Bullfrog Rd / I-90 EB Ramps LOS D with Alternative 5 or LOS E with Alternative 6 by 2025 (*identified as non-compliant with Alternative 6 only in DSEIS*)
- #3 Bullfrog Rd / Tumble Creek Dr LOS E with Alternative 5 and LOS F with Alternative 6 by 2037
- #7 Denny Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2025 (identified as non-compliant in 2031 in DSEIS)
- #15 N Oakes Ave / W 2<sup>nd</sup> Street (SR 903) LOS E by 2025
- #17 Pennsylvania Ave / 2<sup>nd</sup> Street LOS D by 2037
- #21 Pennsylvania Ave / N 1<sup>st</sup> Street (SR 903) in Roslyn LOS D by 2031 (*identified as non-compliant in 2037 in DSEIS*)

The following study intersection is anticipated to operate at non-compliant LOS during the Friday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 5 only:

 #16 - N Oakes Ave / W 1<sup>st</sup> Street (SR 903) – LOS D in 2037 (not identified as noncompliant in DSEIS)

#### <u>Sunday Summer PM Peak Hour</u>

As shown in **Table 8**, the following study intersections are anticipated to operate at noncompliant LOS during the Sunday summer PM peak hour in 2025, 2031, or 2037 with future 'Baseline' conditions, and continue to operate at non-compliant LOS with SEIS Alternative 5 or Alternative 6:

- #8 Ranger Station Rd / Miller / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #9 N Pine Street / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025

- #11 Douglas Munro Blvd / W 1<sup>st</sup> Street LOS E by 2025
- #12 N Pine Street / W 1<sup>st</sup> Street by 2025 LOS E by 2025
- #13 N Stafford Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #15 N Oakes Ave / W 2<sup>nd</sup> Street (SR 903) LOS F by 2025
- #16 N Oakes Ave / W 1<sup>st</sup> Street (SR 903) LOS D by 2037 (identified as noncompliant in 2037 with Alternative 5 or Alternative 6 in DSEIS)
- #19 Oakes Ave / I-90 EB Off-Ramp LOS E by 2037
- #24 SR 903 / SR 903 Ramp LOS F by 2025
- #27 SR 907 / SR 907 Ramp LOS F by 2025

The following study intersections are expected to operate at non-compliant LOS during the Sunday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 5 or Alternative 6:

- #1 Bullfrog Rd / I-90 EB Ramps LOS D by 2037 (not identified as non-compliant in DSEIS)
- #3 Bullfrog Rd / Tumble Creek Dr LOS E with Alternative 5 or LOS F with Alternative 6 by 2031
- #6 Bullfrog Rd / W 2<sup>nd</sup> Street (SR 903) LOS D with Alternative 5 or LOS E with Alternative 6 by 2031 (*identified as non-compliant with Alternative 6 only in DSEIS*)
- #7 Denny Ave / W 2<sup>nd</sup> Street (SR 903) LOS D by 2025 (identified as non-compliant in 2031 in DSEIS)
- #21 Pennsylvania Ave / N 1<sup>st</sup> Street (SR 903) in Roslyn LOS D by 2031 (identified as non-compliant in 2037 in DSEIS)
- #25 White Road I/C / I-90 WB Ramps LOS D by 2031 (identified as non-compliant in 2037 'Baseline' in DSEIS)

The following study intersections are anticipated to operate at non-compliant LOS during the Sunday summer PM peak hour as a result of the additional traffic generated by SEIS Alternative 6 only:

- #2 Bullfrog Rd / I-90 WB Ramps LOS D by 2037 (not identified as non-compliant in DSEIS)
- #4 Bullfrog Rd / Suncadia Trail LOS E by 2031

#### **Future Year Site Access LOS with SEIS Alternative 6**

Future years 2025, 2031, and 2037 with SEIS Alternative 6 LOS analysis results at the site access intersections are summarized in **Table 9** for the weekday PM peak hour, Friday PM peak hour, and Sunday PM peak hour, all for the summer peak period. The LOS analysis for the site access locations assumes that all site access locations would be two-way stop-controlled with the major street (Bullfrog Road or SR 903) free-flow. Mitigation has been identified in Section 4 if the site access intersection is expected to operate at non-compliant LOS.

**Table 9** has been updated to reflect LOS C as the WSDOT LOS standard for the SR 903/New Connector Road site access intersection. Accordingly, site access intersections forecast to operate at non-compliant LOS (LOS D, E, or F for the SR 903/New Connector Road site access and LOS E or F for the proposed Bullfrog Road site accesses) are shown in bold text in the table. The LOS results are discussed in detail following the table.

It should be noted that although **Table 9** in this *Addendum* has been updated to reflect the LOS C standard for the proposed site access under WSDOT jurisdiction and identify noncompliant intersections, the LOS and delay summarized in the table remain the same as documented in **Table 23** of the 47° North Draft SEIS Transportation Analysis.

		Fu	ture Conc	litions W (Summ	'ith SEIS <i>A</i> er Peak)	Alternativ	/e 6
		Year	2025	Year	2031	Year	2037
	LOS						
Site Access Intersection <sup>1</sup>	Standard	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>	LOS <sup>1</sup>	Delay <sup>1</sup>
WEEKDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	С	16.6	С	24.0	D	28.6
29. Bullfrog Road / New Connector Road	D	В	13.5	С	16.2	С	23.2
30. SR 903 / New Connector Road	<u>C</u>	F	55.9	F	> 100	F	> 100
FRIDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	D	25.2	F	53.7	F	65.1
29. Bullfrog Road / New Connector Road	D	С	16.2	С	24.8	D	34.7
30. SR 903 / New Connector Road	<u>C</u>	F	82.6	F	> 100	F	> 100
SUNDAY PM PEAK HOUR CONDITIONS							
28. Bullfrog Road / RV Resort Access	D	E	48.9	F	> 100	F	> 100
29. Bullfrog Road / New Connector Road	D	D	29.4	F	> 100	F	> 100
30. SR 903 / New Connector Road	<u>C</u>	F	89.7	F	> 100	F	> 100

 Table 9

 SEIS ALTERNATIVE 6 SITE ACCESS LOS SUMMARY 1

1. LOS analysis at site access intersections assumes two-way stop control with major roadway (Bullfrog Road and SR 903) being free flow. Underlined and italicized indicates changes to LOS standards from the DSEIS.

<u>Weekday Summer PM Peak Hour.</u> As shown in **Table 9**, during the weekday summer PM peak hour with SEIS Alternative 6, the site access intersection of SR 903/New Connector Road (#30) is anticipated to operate at non-compliant LOS (LOS F) by 2025.

<u>Friday Summer PM Peak Hour.</u> As shown in **Table 9**, during the Friday summer PM peak hour with SEIS Alternative 6, the site access intersection of Bullfrog Road/RV Resort Access (#28) is anticipated to operate at non-compliant LOS (LOS F) by 2031 and SR 903/New Connector Road (#30) is anticipated to operate at LOS F by 2025.

<u>Sunday Summer PM Peak Hour</u>. As shown in **Table 9**, during the Sunday summer PM peak hour with SEIS Alternative 6, the site access intersections of Bullfrog Road/RV Resort Access (#28) and SR 903/New Connector Road (#30) are anticipated to operate at non-compliant LOS (LOS E and LOS F respectively) by 2025. Additionally, the site access at Bullfrog Road/New Connector Road (#29) is anticipated to operate at non-compliant LOS (LOS F) by 2031.

#### **Mitigation Measures**

#### Introduction

This section identifies potential mitigation measures at the study intersections and site access intersections necessary to mitigate the adverse transportation impacts of SEIS Alternative 6. This section of the *Transportation Analysis Addendum* has restructured the Mitigation Measures section of the DSEIS in response to public and agency comments, and addresses the following elements.

- Mitigation for 'Baseline' Conditions
- Mitigation for SEIS Alternative 6
- Costs of Mitigation Measures
- Comparison of Mitigation in FSEIS and DSEIS
- Revised Trip Generation for 47° North RV Resort
- Application of Pro-Rata Share Mitigation
- Pro-Rata Share Methods
- Site Access Mitigation
- Other Mitigation

**Table 10** identifies potential mitigation measures and cost methods for funding. The Table includes the 11 study intersections that are anticipated to operate at a non-compliant LOS under future weekday summer PM peak hour conditions in 2025, 2031, or 2037 as a result of 'Baseline' conditions or SEIS Alternative 6 project traffic, and also identifies potential improvements to mitigate the non-compliant LOS. **Table 10** identifies two different pro-rata shares methods to fund the identified mitigations. Method A (Developer Responsibility) and Method B (Shared City/Developer Responsibility) are both presented.

It should also be noted that there are other potential alternative pro-rata share methodologies that could be applied; for example, removing existing traffic volumes from the "Background Share" which would allocate the pro-rata share responsibility only to future traffic volume growth (removing existing traffic) and would result in a larger proportional responsibility to 47° North and the commercial development. The final pro-rata share methodology and calculations for the 47° North development and possible commercial development are anticipated to be defined in a new or updated Development Agreement.

While **Table 10** identifies potential improvements (i.e. compact roundabout or signal) to mitigate future non-compliant LOS, and potential pro-rata share estimates for the cost of improvements, the specific form of mitigation, the pro-rata share cost of the mitigation, and the timing of the improvements will be evaluated, discussed and adopted based on discussions between the project Applicant, the City of Cle Elum, Kittitas County WSDOT, and the City of Roslyn. The selected mitigation improvement, adopted pro-rata share methodology, and timing of the mitigation will be incorporated into a new or updated Development Agreement between the project Applicant and the City of Cle Elum, and also

expected to be addressed in subsequent updates to the appropriate transportation plans and capital improvement programs.

To assist the Applicant, Cities of Cle Elum and Roslyn, Kittitas County and WSDOT in confirming mitigation improvements, Intersection Control Evaluation (ICE) documents will be prepared for study intersections within WSDOT's jurisdiction and considered during review of a project application. Criteria addressed in the ICE analyses will include LOS operations, safety, right-of-way acquisition, engineering criteria and feasibility, and context for sustainable design. The City may also require similar ICE analyses at the two additional (non-WSDOT) intersections (#11 and #12) that are anticipated to operate at non-compliant LOS.

#### **Costs of Mitigation Measures**

**Table 10** identifies potential improvements necessary to mitigate 11 study intersections forecast to operate at non-compliant LOS in future years 2025, 2031, or 2037 without or with SEIS Alternative 6 during the weekday summer PM peak hour. Preliminary rough order of magnitude (ROM) cost estimate ranges for the potential improvements are provided below:

- Compact (single-lane) Roundabout = \$300,000 \$800,000
- Full (single-lane) Roundabout = \$1,000,000 \$3,000,000
- Traffic Signal = \$500,000 \$1,000,000
- Turn Lane Widening = \$50,000 \$200,000
- Turn Restrictions \$25,000 \$100,000

Table 10

			WITH 100% OCCUPANCY OF 47° NORTH RV RESORT <sup>2</sup>				WITH 50% OCCUPANCY OF 47° NORTH RV RESORT <sup>2</sup>							
	Estimated		METHOD A Estimated Dro. Pata Sharo <sup>3</sup>		METHOD B Estimated Pro-Pata Share <sup>3</sup>			METHOD A Estimated Pro-Pata Share <sup>3</sup>			METHOD B			
	Year		SEIS Alternative 6 Share		SEIS Alternative 6 Share		SEIS Alternative 6 Share		SEIS Alternative 6 Share					
	Improvement Required	Potential Improvement to	Back- ground	47°	Commercial	Back- ground		Commercial	Back- ground	47°	Commercial	Back- ground	47°	Commercial
Off-Site Study Intersection	(Forecast LOS)	Mitigate LOS Deficiency <sup>1</sup>	Share <sup>4</sup>	North	Parcel	Share <sup>4</sup>	47° North	Parcel	Share <sup>4</sup>	North	Parcel	Share <sup>4</sup>	North	Parcel
IMPROVEMENTS NEEDED FOR 'BASELINE'/BACKGROUND CONDITIONS														
#8 – Ranger Sta Rd / Miller Ave / W 2 <sup>nd</sup> St (SR 903) <sup>7</sup>	2025 (LOS D)	Compact RAB or Signalization	76.6%	20.4%	3.0%	76.6%	20.4%	3.0%	78.1%	18.4%	3.5%	78.1%	18.4%	3.5%
#11 – Douglas Munro Blvd / W 1 <sup>st</sup> Street	2025 (LOS E)	RAB or Signalization	96.7%	2.9%	0.4%	96.7%	2.9%	0.4%	97.1%	2.4%	0.5%	97.1%	2.4%	0.5%
#12 – N Pine St / W 1 <sup>st</sup> Street	2025 (LOS D)	Traffic Signal or Left-Turn Restrictions	97.4%	2.3%	0.3%	97.4%	2.3%	0.3%	97.4%	2.2%	0.4%	97.4%	2.2%	0.4%
#13 – N Stafford Ave / W 2 <sup>nd</sup> Street (SR 903) <sup>7</sup>	2025 (LOS E)	Compact RAB or Signalization	83.2%	16.8%	2.5%	83.2%	16.8%	2.5%	82.2%	15.0%	2.8%	82.2%	15.0%	2.8%
IMPROVEMENTS NEEDED FOR CONDITIONS WITH SEIS ALTERNATIVE 6 <sup>5</sup>														
By Year 2025:														
#9 – N Pine Street / W 2 <sup>nd</sup> Street (SR 903) <sup>7</sup>	2025 (LOS D)	Compact RAB or Signalization or Turn Restrictions	n/a	87%	13%	77.1%	19.9%	3.0%	n/a	84%	16%	78.6%	18.0%	3.4%
#15 – N Oakes Ave / W 2 <sup>nd</sup> Street (SR 903) <sup>7</sup>	2025 (LOS D)	Compact RAB or Signalization	n/a	87%	13%	85.6%	14.4%	2.1%	n/a	84%	16%	85.0%	12.6%	2.4%
By Year 2031:														
#1 – Bullfrog Road / I-90 EB Ramps <sup>7</sup>	2031 (LOS D)	Compact RAB or Signalization	n/a	64%	36%	77.4%	14.5%	8.1%	n/a	61%	39%	80.7%	11.8%	7.5%
#7 – Denny Ave / W 2 <sup>nd</sup> Street (SR 903) <sup>7</sup>	2031 (LOS E)	Refuge/merge lane on SR 903 or Left- Turn Restrictions	n/a	64%	36%	68.1%	20.4%	11.5%	n/a	61%	39%	69.1%	18.8%	12.1%
#21 – Pennsylvania Ave / 1 <sup>st</sup> Street (SR 903) <sup>7</sup>	2031 (LOS D)	All-Way Stop	n/a	64%	36%	90.1%	6.3%	3.6%	n/a	61%	39%	90.4%	5.9%	3.7%
By Year 2037: <sup>6</sup>														
#2 – Bullfrog Road / I-90 WB Ramps <sup>7</sup>	2037 (LOS E)	Compact RAB or Signalization	n/a	0%	100%	81.8%	9.1%	9.1%	n/a	0%	100%	84.2%	7.3%	8.5%
#3 – Bullfrog Road / Tumble Creek Dr	2037 (LOS F)	Refuge/merge lane on Bullfrog Rd	n/a	0%	100%	81.1%	9.5%	9.4%	n/a	0%	100%	83.3%	7.7%	9.0%

1) Improvement needed to mitigate non-compliant LOS during weekday PM peak hour; with improvement the intersection LOS would meet standard. RAB = Roundabout.

2) Average occupancy of 47° North RV resort during summer weekday PM peak hour estimated to be 50% based on data provided by Applicant. Estimated pro-rata shares are presented for both 100% and 50% RV resort occupancy.

3) Estimated pro-rata share for 47° North and commercial parcel are preliminary estimates and will be adjusted based on a future Monitoring Program. The pro-rata share for Method A would be the full responsibility of the 47° North Master Site Plan and the separate commercial parcel for any improvements needed with SEIS Alternative 6. The pro-rata share for Method A would be the full responsibility of the 47° North Master Site Plan and the separate commercial parcel for any improvements needed with SEIS Alternative 6. The pro-rata share for Method B would be shared between the background traffic and SEIS Alternative 6 project traffic (47° North and commercial parcel).

4) Share of future traffic volumes associated with background traffic growth not specifically from SEIS Alternative 6.

5) Mitigation not triggered by 'Baseline' conditions, but triggered by traffic generated by SEIS Alternative 6 (47° North and/or commercial parcel).

6) 47° North is anticipated to be built out by 2031. Therefore pro-rata share of mitigation triggered by SEIS Alt 6 in 2037 is 100% to the commercial parcel for pro-rata Method A.

7) Separate Intersection Control Evaluation (ICE) studies at WSDOT intersections will be conducted to evaluate and recommend specific mitigation during review of a project application.

#### ERNATIVE 6

#### Mitigation Measures for 'Baseline' Conditions

As shown in **Table 10**, four study intersections are anticipated to operate at a non-compliant LOS under future weekday summer PM peak hour 'Baseline' conditions (without SEIS Alternative 6). However, no improvements are currently identified at these intersections in either the City of Cle Elum *Six-Year Transportation Improvement Program (TIP)*, the City of Cle Elum *Transportation Element, or the WSDOT Statewide Transportation Improvement Program (STIP)*.

Potential improvements to mitigate non-compliant LOS at the four study intersections under future weekday summer PM peak hour 'Baseline' conditions are identified in **Table 10** and include a compact (single-lane) roundabout, signalization, and turn restrictions.

For the four intersections where improvements would be needed based on forecast 'Baseline' conditions (without SEIS Alternative 6), the 47° North project would contribute a pro-rata share towards intersection improvements since additional traffic would be added by the project. Additional discussion of pro-rata share methodology is included below.

## Mitigation Measures for SEIS Alternative 6 – Proposed 47° North Master Site Plan Amendment

As shown in **Table 10**, in addition to the four study intersections anticipated to operate at a non-compliant LOS under future weekday summer PM peak hour 'Baseline' conditions, seven additional study intersections are anticipated to operate at a non-compliant LOS as a result of SEIS Alternative 6 in either 2025, 2031, or 2037.

Potential improvements to mitigate non-compliant LOS at the seven study intersections under future weekday summer PM peak hour conditions with SEIS Alternative 6 are identified in **Table 10** and include a compact (single-lane) roundabout, signalization, roadway widening to add refuge/merge lanes, and turn restrictions.

For the seven intersections where improvements would be needed based on forecast conditions with SEIS Alternative 6, the 47° North project would contribute a pro-rata share towards intersection improvements.

#### **Comparison of Mitigation Measures identified in FSEIS vs DSEIS**

It should be noted that **Table 25** of the *DSEIS Transportation Analysis* identified the same 11 study intersections included in **Table 10** that are forecast to operate at non-compliant LOS in future years 2025, 2031, or 2037 without or with SEIS Alternative 6 during the weekday summer PM peak hour as included in **Table 10**. The only difference between **Table 25** in the *DSEIS* and **Table 10** in this *FSEIS Addendum* are in the timing of non-compliance and therefore mitigation at five study intersections, as follows:

• <u>#1 – Bullfrog Road / I-90 EB Ramps</u> is anticipated to operate at a non-compliant LOS under SEIS Alternative 6 conditions in 2031 instead of 2037.

- <u>#8 Ranger Sta Rd / Miller Ave / W 2<sup>nd</sup> St (SR 903)</u> is anticipated to operate at a non-compliant LOS under 'Baseline' conditions in 2025 instead of SEIS Alternative 6 conditions in 2025.
- <u>#9 N Pine Street / W 2<sup>nd</sup> Street (SR 903)</u> is anticipated to operate at a noncompliant LOS under SEIS Alternative 6 conditions in 2025 instead of 2031.
- <u>#15 N Oakes Ave / W 2<sup>nd</sup> Street (SR 903)</u> is anticipated to operate at a noncompliant LOS under SEIS Alternative 6 conditions in 2025 instead of 2031 'Baseline'.
- <u>#21 Pennsylvania Ave / 1<sup>st</sup> Street (SR 903)</u> is anticipated to operate at a noncompliant LOS under SEIS Alternative 6 conditions in 2031 instead of 2037.

#### **Revised Trip Generation for SEIS Alternative 6 based on 47° North RV Resort Occupancy**

The weekday PM peak hour trip generation estimates during the summer peak period for SEIS Alternative 6 documented in the 47° North Draft SEIS Transportation Analysis were based on methodology documented in the Institute of Transportation Engineers (ITE) *Trip Generation* Manual (10<sup>th</sup> edition). The trip generation estimates used in the Draft SEIS for the proposed 47° North RV Resort conservatively assumed 100% occupancy during the weekday PM peak hour of the summer peak season. Based on weekday occupancy data provided by the 47° North applicant at two existing and similar RV Resort properties in the US, 50% occupancy of the RV Resort is anticipated for SEIS Alternative 6 during the weekday PM peak hour of the summer peak period. The detailed revised trip generation calculations for SEIS Alternative 6 assuming 50% occupancy of the 47° North RV Resort are provided in **Appendix B**.

**Table 11** provides a comparison of the SEIS Alternative 6 weekday PM peak hour trip generation with 100% occupancy of the 47° North RV Resort (as documented in the 47° North Draft SEIS Transportation Analysis), and the revised weekday PM peak hour trip generation based on 50% occupancy of the RV Resort for future years 2025, 2031, and 2037.

Table 11						
SEIS ALTERNATIVE 6 – WEEKDAY PM PEAK HOUR TRIP GENERATION						
COMPARISON WITH 100% vs. 50% RV RESORT OCCUPANCY						

	Weekday PM Peak Hour Net New Total SEIS Alternative 6 Trip Generatio					
Year	Land Use / Size	(A) With 100% Occupancy of 47° North RV Resort <sup>2</sup>	(B) With 50% Occupancy of 47° North RV Resort <sup>3</sup>	Delta (B) minus (A)		
2025	264 Single Family DU 180 Multi-Family DU 627 RV Resort sites 15,000 SF Commercial <sup>4</sup>	580	496	-84 (-14%)		
2031	527 Single Family DU 180 Multi-Family DU 627 RV Resort sites 75,000 SF Commercial <sup>4</sup>	1,012	927	-85 (-8%)		
2037	527 Single Family DU 180 Multi-Family DU 627 RV Resort sites 150,000 SF Commercial <sup>4</sup>	1,225	1,142	-83 (-7%)		

SF = Square Feet, DU = Dwelling Unit

1. Trip generation estimates for SEIS Alternative 6 include only the RV, residential, and possible commercial uses and do not include the amenity/adventure center use, the community recreation center use, or affordable housing use.

2. As documented in the 47° North Draft SEIS Transportation Analysis (TENW, September 2020).

3. RV occupancy of 50% for summer weekday PM peak hour documented by Applicant at two similar RV Resort communities in US.

4. Land use associated with the possible development of the 25-acre commercial property.

As shown in **Table 11**, with the 47° North RV Resort at 50% occupancy during the weekday PM peak hour of the summer peak period, the total SEIS Alternative 6 project trip generation would be reduced by approximately 84 trips; this is equivalent to a 14% decrease in total weekday PM peak hour trip generation in 2025 and a 7-8% decrease in 2031 and 2037.

It should be noted that the mitigation identified at study intersections (shown in **Table 10**) is based on the future year 2025, 2031, and 2037 weekday PM peak hour LOS analysis summarized in this *Addendum* with SEIS Alternative 6 (see **Tables 6 and 9**). The LOS analysis in **Tables 6 and 9** was not updated to reflect the reduced trip generation for SEIS Alternative 6 based on the expected 50% occupancy of the 47° North RV Resort during the summer weekday PM peak hour. Thus, the LOS analysis and identification of study intersections requiring mitigation as a result of non-compliant LOS in future year 2025, 2031, or 2037 should be considered conservative since it is based on the DSEIS traffic analysis that assumed 100% occupancy of the RV Resort.

#### **Application of Proportionate Share Mitigation**

While pro-rata share calculations are not required to be identified in SEPA documents, they are presented here to promote further discussion and to reflect the relative contribution of different projects considered in the SEIS (47° North and possible commercial parcel), build out years, and methodologies to determine proportionate share of impacts. Potential methodologies for determining pro-rata share are discussed in further detail in the next section.

The pro-rata shares identified in **Table 10** at the 11 study intersections anticipated to operate at non-compliant LOS are considered preliminary. The final pro-rata share methodology and calculations for the 47° North development and possible commercial development are anticipated to be defined in a new or updated Development Agreement.

#### **Methodologies for Determining Pro-Rata Share of Mitigation**

For all transportation mitigation measures identified at the 11 study intersections anticipated to operate at a non-compliant LOS in the future without or with the project, preliminary prorata share contributions are estimated in **Table 10** for the 47° North project trips relative to the other components of the total future forecast weekday summer PM peak hour traffic volumes, including commercial use project trips and/or background traffic growth. **Table 10** in this *Addendum* has been revised from **Table 25** of the DSEIS *Transportation Analysis* to include two different methods to estimate proportionate (pro-rata) shares (Method A and Method B) of the mitigation measures; both methods are identified for consideration and are discussed in greater detail below.

It should be noted that **Table 10** of this *Addendum* has also been revised from **Table 25** in the DSEIS to identify preliminary pro-rata share contributions for the two pro-rata methods based on occupancy of the RV Resort; both 100% occupancy of the 47° North RV resort during the summer weekday PM peak hour (consistent with the DSEIS) and also 50% occupancy of the 47° North RV resort during the summer weekday PM peak hour (based on new data provided by the 47° North applicant at two existing and similar RV resort properties in the US). The result of including the anticipated 50% occupancy of the 47° North RV resort in the pro-rata share calculations is that the proportional share identified for the 47° North development is less than or similar to what was identified in the DSEIS.

The next two sub-sections describe pro-rata share separately for intersections requiring mitigation as a result of 'Baseline' conditions versus intersections requiring mitigation with SEIS Alternative 6.

#### <u>Determining Pro-Rata Share for Intersections Requiring Mitigation as a Result</u> of 'Baseline' Conditions

For the four intersections where improvements would be needed to meet adopted LOS standards based on forecast 'Baseline' conditions (i.e., without SEIS Alternative 6), the 47° North (residential and RV uses) and the possible commercial uses would contribute a prorata share towards intersection improvements since additional traffic would be added by the project. The preliminary pro-rata share calculation identified in **Table 10** for intersections anticipated to operate at a non-compliant LOS under future weekday PM peak hour 'Baseline' conditions is calculated by dividing the total weekday PM peak hour project traffic associated with SEIS Alternative 6 by the total forecast future with-project weekday PM peak hour traffic volumes ('Baseline' plus SEIS Alternative 6 project traffic). This pro-rata share methodology places the appropriate proportional responsibility for needed improvements on background traffic, since intersections are anticipated to be non-compliant due to background traffic (without the project). The detailed pro-rata share calculations are included in **Appendix C**.

#### <u>Determining Pro-Rata Share for Intersections Requiring Mitigation with SEIS</u> <u>Alternative 6</u>

For intersections where improvements would be needed to meet adopted LOS standards based on the additional traffic generated by SEIS Alternative 6, a preliminary estimate of the pro-rata share for 47° North (residential and RV uses) and the possible commercial uses is included in **Table 10**. The preliminary pro-rata share calculations in **Table 10** are based on forecast total future traffic volumes with SEIS Alternative 6 during the year in which mitigation is necessary to maintain acceptable LOS (i.e. 2025, 2031, or 2037).

Two different methods are identified that could be used to calculate pro-rata shares for mitigation anticipated to be needed as a result of 47° North SEIS Alternative 6, and both methods are described below. Method A is consistent with the pro-rata share methodology disclosed in the Draft SEIS; in general, this method results in a higher proportional responsibility to the 47° North development. Method B is an alternative pro-rata share methodology that more evenly shares responsibility as a result of background traffic growth, and is described as more of a shared responsibility between the 47° North development and the Agency (i.e. Cities of Cle Elum or Rosyln, WSDOT, Kittitas County). The detailed pro-rata share calculations for both Methods shown in **Table 10** are included in **Appendix C**.

It should also be noted that there are other potential alternative pro-rata share methodologies that could be applied; for example, removing existing traffic volumes from the "Background Share" which would allocate the pro-rata share responsibility only to future traffic volume growth (removing existing traffic) and would result in a larger proportional responsibility to 47° North and the commercial development. The final pro-rata share methodology and calculations for the 47° North development and possible commercial development are anticipated to be defined in a new or updated Development Agreement.

#### Method A (Developer Responsibility)

For intersections where improvements would only be needed by 2025 or 2031 due to the additional traffic generated by SEIS Alternative 6, the pro-rata share for Method A would be the full responsibility of the 47° North Master Site Plan and the separate commercial parcel. The pro-rata for this Method is calculated by applying the estimated percentage of 47° North trip generation and the commercial use trip generation (as summarized in **Table 19** of the 47° *North Draft SEIS Transportation Analysis*). For intersections where improvements would be needed by 2037, there would be no pro-rata share for 47° North portion since it is anticipated to be built out before 2031; therefore 100% of the pro-rata share was identified for the commercial parcel.

#### Method B (Shared Agency/Developer Responsibility)

In response to comments received during the public comment process for the 47° North DRAFT SEIS, an alternative method (Method B) for estimating the proportionate (pro-rata) share of 47° North project trips at all off-site study intersections was identified. The calculations for this alternative Method are provided in **Table 10**.

The Method B pro-rata share calculations in **Table 10** for study intersections anticipated to require mitigation due to the additional traffic generated by 47° North SEIS Alternative 6 in either 2025, 2031, or 2037 are calculated by dividing the weekday PM peak hour project traffic associated with SEIS Alternative 6 by the total forecast future weekday PM peak hour traffic volumes (i.e. including both background traffic and SEIS Alternative 6). This identifies the share of the 47° North and commercial parcel as a portion of the mitigation responsibility and shares the remaining portion with background growth that may also benefit from increased capacity at the intersection. This method assumes that the governmental agency(s) responsible for the intersection would contribute funds proportionate with their shares of the future forecast traffic at the intersection.

#### **Site Access Mitigation Measures**

The 47° North development will construct new on-site roadways and intersections at its two access points with Bullfrog Road and single access onto SR 903 (public roads). The facilities will be constructed to City of Cle Elum standards, or standards included in a new or updated Development Agreement. The 47° North development will also ensure that design of the new on-site roadways meets minimum requirements for emergency vehicle access and school bus access.

Based on the results of the weekday PM peak hour LOS analysis documented in **Table 9**, the traffic control at the new 47° North site access points on Bullfrog Road and SR 903 is proposed as follows:

 #28 – Bullfrog Road / RV Resort Access is anticipated to operate at an acceptable LOS during the weekday summer PM peak hour in 2025, 2031, and 2037 with SEIS Alternative 6 as a side street stop-controlled intersection with the RV Resort Access being stop-controlled.

- <u>#29 Bullfrog Road / New Connector Road</u> is anticipated to operate at an acceptable LOS during the weekday summer PM peak hour in 2025, 2031, and 2037 with SEIS Alternative 6 as a side street stop-controlled intersection with the New Connector Road being stop-controlled.
- #30 SR 903 / New Connector Road is anticipated to operate at LOS F during the weekday summer PM peak hour in 2025, 2031, and 2037 with SEIS Alternative 6 as a side street stop-controlled intersection. Potential mitigation is a compact (single-lane) roundabout or signalization with widening on SR 903 to accommodate a westbound left-turn lane. In order to confirm the appropriate mitigation at the SR 903/New Connector Road intersection, an Intersection Control Evaluation (ICE) document will be prepared and considered as part of a project application and incorporated into a new or updated Development Agreement.

#### **Other Mitigation Measures**

#### Traffic Monitoring Program

The 47° North development is expected to prepare and implement a traffic monitoring program as a condition of approval and/or as an element of a new or updated Development Agreement. It is expected that the traffic monitoring program would be similar in format and function to the previously established program documented in the 2002 Bullfrog Flats Development Agreement (Condition 92). The monitoring program would be coordinated with the City and other agencies (i.e. Kittitas County, WSDOT, City of Roslyn). The traffic monitoring program is anticipated to have the following objectives:

- A. Document traffic volumes at key locations (roadways and/or intersections) in the local transportation network that would be impacted by traffic generated by the 47° North development.
- B. Separate traffic volumes at key locations by background traffic, 47° North development traffic, and traffic associated with possible development of the commercial parcel.
- C. Help establish the timing, location, and nature of required transportation improvements for pro-rata share calculations.

The traffic Monitoring Program for the 47° North RV resort and residential development is anticipated to be implemented during buildout of the project, which is expected to occur in 2028. Monitoring of 47° North could be conducted twice, in 2024 (prior to anticipated completion of the RV resort) and in 2027 (prior to anticipated completion of the single family housing). The specific details of the Monitoring Program, including the number of phases and duration of monitoring, appropriate timing of phases of monitoring, time periods to be

counted, key locations to be counted, and reporting requirements will be coordinated with the City and other agencies, and included as part of the new or updated 47° North Development Agreement. The traffic Monitoring Program for the possible commercial development cannot be determined at this time, as this development is considered speculative and has only been included in the SEIS for analysis purposes. Once plans for the commercial development are submitted to the City, a Monitoring Program for that development could be established.

#### Construction Management Plan

The 47° North development should prepare a Construction Management Plan prior to beginning construction to minimize construction traffic impacts. Truck routes and haul route agreements for construction-related traffic would be established in coordination with the City of Cle Elum, Kittitas County, WSDOT, and the City of Roslyn, as necessary. Additionally, provisions should be made in the new or updated Development Agreement between the project Applicant and City of Cle Elum for restoration of road surfaces damaged by construction traffic, if any.

#### Trail System and Sidewalks

The 47° North development would provide a 6-mile network of trails and sidewalks throughout the site, including: hike/bike, equestrian, and golf cart paths. These trails would generally be located around the periphery of the proposed development, and would connect to on-site development, as well as to existing off-site trails in Suncadia to the north, the Coal Mines Trail to the northeast, and the Horse Park to the south. Sidewalks would also be provided along one side of the on-site road connecting SR-903 and Bullfrog Road for non-motorized circulation. The design of pedestrian improvements would be identified in the project application, in conditions of approval, and in an updated Development Agreement.

#### **Significant Unavoidable Adverse Impacts**

Proposed development under SEIS Alternatives 5 and 6 would increase traffic volumes and congestion on area roadways (e.g., in the City, County, and on state facilities such as SR 903, SR 970, and I-90); this is an unavoidable effect of urban development. The LOS analysis indicates that several of the studied intersections would exceed LOS standards during the PM summer peak hours in the future analysis years with the additional traffic generated by the SEIS Alternatives; some of these intersections would also exceed the LOS standards without the projects due to continued growth in background traffic. The mitigation measures listed above would offset or reduce the significant adverse impacts under SEIS Alternative 6 during the weekday summer PM peak hour. These measures have been refined in the Final SEIS to present two options for the project's possible proportional share of required improvements. The measures will ultimately be included in a new or updated Development Agreement between the Applicant and the City.
# **APPENDIX A**

# **Raw Traffic Counts**

Weekday (Thursday) Data Sheets



Location: 1 BULLFROG RD & I90 WB OFFRAMP PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net

**Peak Hour** 





Pedestrians/Bicycles in Crosswalk



### **Traffic Counts - All Vehicles**

Interval		I90 WB Eastt	ONRAMF bound	D		I90 WB ( West	OFFRAM bound	Ρ		BULLFF North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	0	0	0	5	1	9	0	0	28	0	0	0	21	23	87	346
3:15 PM	0	0	0	0	0	2	1	12	0	1	33	0	0	0	9	19	77	330
3:30 PM	0	0	0	0	0	2	0	15	0	2	38	0	0	0	18	24	99	323
3:45 PM	0	0	0	0	0	1	0	5	0	0	33	0	0	0	13	31	83	321
4:00 PM	0	0	0	0	0	2	1	6	0	0	26	0	0	0	14	22	71	324
4:15 PM	0	0	0	0	0	3	0	10	0	1	29	0	0	0	13	14	70	332
4:30 PM	0	0	0	0	0	4	0	12	0	1	47	0	0	0	18	15	97	325
4:45 PM	0	0	0	0	0	0	1	13	0	1	29	0	0	0	17	25	86	306
5:00 PM	0	0	0	0	0	2	0	6	0	1	31	0	0	0	18	21	79	285
5:15 PM	0	0	0	0	0	3	0	3	0	0	29	0	0	0	16	12	63	
5:30 PM	0	0	0	0	0	3	0	4	0	0	39	0	0	0	19	13	78	
5:45 PM	0	0	0	0	0	5	0	5	0	0	30	0	0	0	14	11	65	
Count Total	0	0	0	0	0	32	4	100	0	7	392	0	0	0	190	230	955	
Peak Hour	0	0	0	0	0	10	2	41	0	3	132	0	0	0	61	97	346	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1	0	3	4	3:00 PM	0	0	0	0	0
3:15 PM	0	1	2	0	3	3:15 PM	0	0	0	0	0
3:30 PM	0	3	0	0	3	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	2	2	3:45 PM	0	0	0	0	0
4:00 PM	0	1	1	0	2	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	2	2	4:45 PM	0	0	0	0	0
5:00 PM	0	2	0	1	3	5:00 PM	0	0	0	0	0

5:15 PM	0	0	0	1	1	5:15 PM	0	0	0	0	0
5:30 PM	0	0	1	1	2	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	0	8	4	10	22	Count Total	0	0	0	0	0
Peak Hour	0	5	2	5	12	Peak Hour	0	0	0	0	0



Location: 2 BULLFROG RD & I90 EB ONRAMP PM Date: Thursday, August 15, 2019 Peak Hour: 04:15 PM - 05:15 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**





# Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		I90 EB C Eastt	OFFRAMI bound	D		I90 EB West	ONRAMF bound	D		BULLFI North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	27	0	2	0	0	0	0	0	0	0	4	0	22	5	0	60	228
3:15 PM	0	33	1	1	1	0	0	0	0	0	2	0	0	12	0	0	50	217
3:30 PM	0	35	1	2	0	0	0	0	0	0	4	5	0	18	1	0	66	217
3:45 PM	0	30	0	1	0	0	0	0	0	0	3	3	0	13	2	0	52	238
4:00 PM	0	25	0	3	0	0	0	0	0	0	1	4	0	14	2	0	49	238
4:15 PM	0	28	0	1	0	0	0	0	0	0	2	3	0	16	0	0	50	244
4:30 PM	0	40	1	5	0	0	0	0	0	0	8	11	0	21	1	0	87	242
4:45 PM	0	29	0	4	0	0	0	0	0	0	1	1	0	16	1	0	52	219
5:00 PM	0	32	1	0	0	0	0	0	0	0	1	1	0	18	2	0	55	218
5:15 PM	0	26	1	0	0	0	0	0	0	0	2	0	0	17	2	0	48	
5:30 PM	0	39	1	0	0	0	0	0	0	0	1	1	0	20	2	0	64	
5:45 PM	0	30	1	1	0	0	0	0	0	0	0	1	0	15	3	0	51	
Count Total	0	374	7	20	1	0	0	0	0	0	25	34	0	202	21	0	684	
Peak Hour	0	129	2	10	0	0	0	0	0	0	12	16	0	71	4	0	244	_

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	1	0	2	4	3:00 PM	0	0	0	0	0
3:15 PM	1	0	1	0	2	3:15 PM	0	0	0	0	0
3:30 PM	2	0	0	0	2	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	1	1	3:45 PM	0	0	0	0	0
4:00 PM	1	0	0	0	1	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	4	0	0	0	4	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	2	2	4:45 PM	0	0	0	0	0
5:00 PM	1	0	0	1	2	5:00 PM	0	0	0	0	0

5:15 PM	0	0	0	1	1	5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	10	1	1	8	20	Count Total	0	0	0	0	0
Peak Hour	5	0	0	3	8	Peak Hour	0	0	0	0	0



Location: 3 BULLFROG RD & TUMBLE CREEK DR PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval	Т	UMBLE Eastl	CREEK [ bound	DR		West	bound			BULLFF North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	9	0	3					0	5	34	0	0	0	37	10	98	382
3:15 PM	0	6	0	4					0	6	39	0	0	0	24	2	81	359
3:30 PM	0	7	0	5					0	7	45	0	0	0	38	7	109	362
3:45 PM	0	11	0	2					0	1	35	0	0	0	41	4	94	346
4:00 PM	0	8	0	10					0	3	28	0	0	0	24	2	75	342
4:15 PM	0	9	0	4					0	5	33	0	0	0	30	3	84	347
4:30 PM	0	4	0	5					0	1	55	0	0	0	25	3	93	341
4:45 PM	0	3	0	4					0	4	41	0	0	0	35	3	90	327
5:00 PM	0	8	0	4					0	0	32	0	0	0	35	1	80	302
5:15 PM	0	10	0	3					0	1	33	0	0	0	27	4	78	
5:30 PM	0	6	0	4					1	3	39	0	0	0	24	2	79	
5:45 PM	0	2	0	4					0	0	34	0	0	0	23	2	65	
Count Total	0	83	0	52					1	36	448	0	0	0	363	43	1,026	_
Peak Hour	0	33	0	14					0	19	153	0	0	0	140	23	382	_

Interval		Hea	avy Vehic	les		Interval	Peo	destrians/E	Bicycles o	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	0		2	3	3:00 PM	0	0		0	0
3:15 PM	2	3		0	5	3:15 PM	0	0		0	0
3:30 PM	0	3		1	4	3:30 PM	0	0		0	0
3:45 PM	4	0		1	5	3:45 PM	0	0		0	0
4:00 PM	0	2		0	2	4:00 PM	0	0		0	0
4:15 PM	0	0		1	1	4:15 PM	0	0		0	0
4:30 PM	0	0		0	0	4:30 PM	0	0		0	0
4:45 PM	0	0		2	2	4:45 PM	0	0		0	0
5:00 PM	1	1		0	2	5:00 PM	0	0		0	0

5:15 PM	0	0	1	1	5:15 PM	0	0	0	0
5:30 PM	0	1	1	2	5:30 PM	0	0	0	0
5:45 PM	0	0	0	0	5:45 PM	0	0	0	0
Count Total	8	10	9	27	Count Total	0	0	0	0
Peak Hour	7	6	4	17	Peak Hour	0	0	0	0



Location: 4 BULLFROG RD & SUNCADIA TRAIL PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net Peak Hour





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

3.9%

0.94

All

Interval		SUNCAI Eastt	DIA TRAI bound	L		SUNCA West	DIA TRA bound	L		BULLFF North	ROG RD			BULLFF South	ROG RD bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	24	0	30	0	0	0	0	0	17	30	0	0	0	18	21	140	542
3:15 PM	0	34	0	15	0	0	0	0	0	10	30	0	0	0	15	12	116	516
3:30 PM	0	39	0	25	0	0	0	0	0	14	36	0	0	0	16	12	142	506
3:45 PM	0	29	0	19	0	0	0	0	0	16	34	0	0	0	26	20	144	490
4:00 PM	0	30	0	22	0	0	0	0	0	17	22	0	1	0	10	12	114	471
4:15 PM	0	19	0	7	0	0	0	0	0	13	25	0	1	0	22	19	106	477
4:30 PM	0	13	0	11	0	0	0	0	0	22	37	0	0	0	17	26	126	489
4:45 PM	0	26	0	12	0	0	0	0	0	21	25	0	1	0	21	19	125	479
5:00 PM	0	26	0	23	0	0	0	0	0	16	25	0	1	0	15	14	120	445
5:15 PM	0	22	0	18	0	0	0	0	0	11	33	0	1	0	15	18	118	
5:30 PM	0	25	0	13	0	0	0	0	0	16	30	0	0	0	14	18	116	
5:45 PM	0	20	0	12	0	0	0	0	0	14	20	0	0	0	10	15	91	
Count Total	0	307	0	207	0	0	0	0	0	187	347	0	5	0	199	206	1,458	
Peak Hour	0	126	0	89	0	0	0	0	0	57	130	0	0	0	75	65	542	_

Interval		Hea	avy Vehicle	s		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	2	2	0	1	5	3:00 PM	0	0	0	0	0
3:15 PM	3	3	0	1	7	3:15 PM	0	0	0	0	0
3:30 PM	2	1	0	1	4	3:30 PM	0	0	0	0	0
3:45 PM	3	2	0	0	5	3:45 PM	0	0	0	0	0
4:00 PM	1	3	0	0	4	4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	1	2	4:15 PM	0	0	0	0	0
4:30 PM	1	0	0	0	1	4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1	4:45 PM	0	0	0	0	0
5:00 PM	0	1	0	0	1	5:00 PM	0	0	0	0	0

5:15 PM	1	0	0	1	2	5:15 PM	0	0	0	0	0
5:30 PM	1	0	0	0	1	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	15	13	0	5	33	Count Total	0	0	0	0	0
Peak Hour	10	8	0	3	21	Peak Hour	0	0	0	0	0



Location: 5 BULLFROG RD & FIREHOUSE RD PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

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#### **Peak Hour**



4.3% 0.84 NB SB 2.0% 0.82 0.92 All 3.7%



# Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		FIREHC Eastt	OUSE RD	)		FIREH West	OUSE RE	)		BULLFI North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	5	0	2	0	0	0	0	0	1	52	0	0	1	38	3	102	429
3:15 PM	0	5	0	0	0	0	0	0	0	2	61	0	0	0	26	3	97	419
3:30 PM	0	6	0	0	0	0	0	0	0	0	76	0	0	0	30	2	114	422
3:45 PM	0	7	0	2	0	0	0	0	0	1	61	0	0	0	42	3	116	410
4:00 PM	0	4	0	1	0	0	0	0	0	0	59	0	0	0	24	4	92	400
4:15 PM	0	4	0	1	0	0	0	1	0	1	44	0	0	0	44	5	100	400
4:30 PM	0	10	0	4	0	0	0	0	0	0	47	0	0	0	37	4	102	393
4:45 PM	0	8	0	2	0	0	0	0	0	0	56	0	0	0	38	2	106	381
5:00 PM	0	5	0	0	0	0	0	0	0	0	55	0	0	0	32	0	92	346
5:15 PM	0	5	0	0	0	0	0	0	0	1	55	0	0	0	30	2	93	
5:30 PM	0	1	0	1	0	0	0	0	0	0	55	0	0	0	33	0	90	
5:45 PM	0	4	0	3	0	0	0	0	0	0	41	0	0	0	22	1	71	
Count Total	0	64	0	16	0	0	0	1	0	6	662	0	0	1	396	29	1,175	
Peak Hour	0	23	0	4	0	0	0	0	0	4	250	0	0	1	136	11	429	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	I Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	1	0	1	3	3:00 PM	0	0	0	0	0
3:15 PM	0	3	0	2	5	3:15 PM	0	0	0	0	0
3:30 PM	0	3	0	0	3	3:30 PM	1	0	0	0	1
3:45 PM	1	4	0	0	5	3:45 PM	0	0	0	0	0
4:00 PM	0	3	0	1	4	4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	1	2	4:15 PM	0	0	0	0	0
4:30 PM	2	1	0	0	3	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	1	1	4:45 PM	0	0	0	0	0
5:00 PM	0	1	0	0	1	5:00 PM	0	0	0	0	0

5:15 PM	0	0	0	2	2	5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0
Count Total	5	17	0	8	30	Count Total	1	0	0	0	1
Peak Hour	2	11	0	3	16	Peak Hour	1	0	0	0	1



Location: 6 BULLFROG RD & SR 903 PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour



	HV%	PHF
EB	0.0%	0.00
WB	2.8%	0.86
NB	4.3%	0.91
SB	2.3%	0.95
All	3.1%	0.95



Pedestrians/Bicycles in Crosswalk



### **Traffic Counts - All Vehicles**

Interval		SR Eastl	8 903 Dound			SF West	R 903 bound			BULLFI North	ROG RD			SR South	903 Ibound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	0	0	0	22	0	46	0	0	30	26	0	42	20	0	186	802
3:15 PM	0	0	0	0	0	11	0	60	0	0	28	36	0	52	14	0	201	780
3:30 PM	0	0	0	0	1	12	0	54	0	0	27	43	1	43	24	0	205	734
3:45 PM	0	0	0	0	0	22	0	62	1	0	27	36	0	40	22	0	210	733
4:00 PM	0	0	0	0	0	13	0	39	0	0	20	35	0	46	11	0	164	711
4:15 PM	0	0	0	0	0	22	0	27	1	0	16	27	1	40	21	0	155	738
4:30 PM	0	0	0	0	0	13	0	56	0	0	35	27	1	48	24	0	204	769
4:45 PM	0	0	0	0	0	12	0	49	1	0	28	32	0	44	22	0	188	749
5:00 PM	0	0	0	0	0	13	0	56	0	0	25	32	0	44	21	0	191	701
5:15 PM	0	0	0	0	0	9	0	58	0	0	32	34	0	31	22	0	186	
5:30 PM	0	0	0	0	0	15	0	41	0	0	39	18	0	55	16	0	184	
5:45 PM	0	0	0	0	0	11	0	40	0	0	23	19	0	31	16	0	140	
Count Total	0	0	0	0	1	175	0	588	3	0	330	365	3	516	233	0	2,214	
Peak Hour	0	0	0	0	1	67	0	222	1	0	112	141	1	177	80	0	802	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1	1	0	2	3:00 PM	0	1	0	0	1
3:15 PM	0	3	3	1	7	3:15 PM	0	0	0	0	0
3:30 PM	0	3	4	3	10	3:30 PM	0	0	0	0	0
3:45 PM	0	4	0	2	6	3:45 PM	0	0	0	0	0
4:00 PM	0	4	3	0	7	4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	1	2	4:15 PM	0	0	0	0	0
4:30 PM	0	3	1	2	6	4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	1	1	4:45 PM	0	0	0	0	0
5:00 PM	0	0	1	3	4	5:00 PM	0	0	0	0	0

5:15 PM	0	0	0	1	1	5:15 PM	0	0	0	0	0
5:30 PM	0	1	1	0	2	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1	5:45 PM	0	0	0	0	0
Count Total	0	19	15	15	49	Count Total	0	2	0	0	2
Peak Hour	0	11	8	6	25	Peak Hour	0	1	0	0	1



Location: 7 DENNY AVE & W 2ND ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour





Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	5.8%	0.92
WB	1.9%	0.91
NB		
SB	0.0%	0.86
All	3.9%	0.93

#### **Traffic Counts - All Vehicles**

Interval		W 21 Eastb	ND ST bound			W 2 West	ND ST bound			North	nbound			DENN South	Y AVE			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	1	81	0	0	0	67	2					0	1	0	0	152	695
3:15 PM	0	6	87	0	0	0	72	5					0	6	0	1	177	695
3:30 PM	0	1	98	0	0	0	72	7					0	6	0	2	186	663
3:45 PM	0	1	87	0	0	0	83	2					0	4	0	3	180	637
4:00 PM	0	6	78	0	0	0	54	5					0	8	0	1	152	622
4:15 PM	0	3	76	0	0	0	58	3					0	4	0	1	145	624
4:30 PM	0	3	70	0	0	0	65	7					0	11	0	4	160	631
4:45 PM	0	4	84	0	0	0	65	6					0	4	0	2	165	619
5:00 PM	0	0	75	0	0	0	67	7					0	4	0	1	154	580
5:15 PM	0	2	69	0	0	0	66	7					0	4	0	4	152	
5:30 PM	0	0	79	0	0	0	61	5					0	3	0	0	148	
5:45 PM	0	1	54	0	0	0	55	8					0	6	0	2	126	
Count Total	0	28	938	0	0	0	785	64					0	61	0	21	1,897	
Peak Hour	0	9	353	0	0	0	294	16					0	17	0	6	695	

Interval		He	avy Vehicle	S		Interval	Pe	destrians	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	4		0	0	4	3:00 PM	1		0	0	1
3:15 PM	5		3	0	8	3:15 PM	1		0	0	1
3:30 PM	7		2	0	9	3:30 PM	0		0	0	0
3:45 PM	5		1	0	6	3:45 PM	1		0	0	1
4:00 PM	3		3	0	6	4:00 PM	0		0	0	0
4:15 PM	1		2	0	3	4:15 PM	0		0	0	0
4:30 PM	5		0	0	5	4:30 PM	0		0	0	0
4:45 PM	1		0	0	1	4:45 PM	0		0	0	0
5:00 PM	3		1	0	4	5:00 PM	0		0	0	0

5:15 PM	0	0	0	0	5:15 PM	1	0	0	1
5:30 PM	2	1	0	3	5:30 PM	0	0	0	0
5:45 PM	1	0	0	1	5:45 PM	0	0	0	0
Count Total	37	13	0	50	Count Total	4	0	0	4
Peak Hour	21	6	0	27	Peak Hour	3	0	0	3



Location: 8 RANGER STATION RD & W 2ND ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

3.5%

0.94

All

Interval		W 2I Eastt	ND ST bound			W 2 West	ND ST bound		RA	NGER S. North	TATION	RD		MILLE South	R AVE			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	1	64	22	0	8	51	0	0	18	0	9	0	1	0	0	174	741
3:15 PM	0	1	76	14	0	3	61	1	0	19	0	7	0	0	0	0	182	731
3:30 PM	0	0	80	22	0	9	59	2	0	18	0	7	0	0	0	0	197	701
3:45 PM	0	0	75	13	0	6	67	1	0	18	0	8	0	0	0	0	188	676
4:00 PM	0	0	77	16	0	4	38	0	0	19	0	10	0	0	0	0	164	657
4:15 PM	0	0	63	18	0	3	53	0	0	11	0	3	0	0	1	0	152	653
4:30 PM	0	0	66	17	0	3	57	1	0	17	0	11	0	0	0	0	172	664
4:45 PM	0	0	78	8	0	7	52	0	0	20	0	4	0	0	0	0	169	654
5:00 PM	0	0	59	13	0	3	62	0	0	15	0	8	0	0	0	0	160	620
5:15 PM	0	1	73	9	0	2	56	0	0	15	0	6	0	0	0	1	163	
5:30 PM	0	0	60	21	0	3	53	1	0	15	0	9	0	0	0	0	162	
5:45 PM	0	0	46	15	0	5	46	0	0	17	0	6	0	0	0	0	135	
Count Total	0	3	817	188	0	56	655	6	0	202	0	88	0	1	1	1	2,018	
Peak Hour	0	2	295	71	0	26	238	4	0	73	0	31	0	1	0	0	741	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	I Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	5	0	1	0	6	3:00 PM	0	0	0	0	0
3:15 PM	4	0	3	0	7	3:15 PM	0	0	0	0	0
3:30 PM	5	0	2	0	7	3:30 PM	0	0	0	0	0
3:45 PM	5	0	1	0	6	3:45 PM	1	0	0	0	1
4:00 PM	4	1	2	0	7	4:00 PM	0	3	0	0	3
4:15 PM	1	0	1	0	2	4:15 PM	0	2	0	0	2
4:30 PM	4	0	1	0	5	4:30 PM	0	1	0	0	1
4:45 PM	2	0	0	0	2	4:45 PM	0	0	0	0	0
5:00 PM	3	0	1	0	4	5:00 PM	0	0	0	0	0

5:15 PM	0	0	0	0	0	5:15 PM	0	2	0	0	2
5:30 PM	2	0	1	0	3	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	35	1	13	0	49	Count Total	1	8	0	0	9
Peak Hour	19	0	7	0	26	Peak Hour	1	0	0	0	1



Location: 9 N PINE ST & W 2ND ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour







Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 2I Eastt	ND ST bound			W 2 West	ND ST bound			N PIN North	NE ST Ibound			N PIN South	NE ST nbound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	71	1	1	0	56	2	0	1	0	0	0	0	0	1	133	613
3:15 PM	0	1	82	2	0	0	61	0	0	3	0	1	0	0	0	1	151	611
3:30 PM	0	0	83	5	1	0	68	1	0	2	0	3	0	1	0	0	164	588
3:45 PM	0	0	79	5	0	1	66	0	0	9	0	5	0	0	0	0	165	566
4:00 PM	0	0	82	4	0	1	41	0	0	2	0	1	0	0	0	0	131	548
4:15 PM	0	1	64	1	0	1	48	0	0	9	1	3	0	0	0	0	128	556
4:30 PM	0	0	70	7	0	2	55	0	0	5	0	2	0	0	1	0	142	574
4:45 PM	0	1	75	7	0	2	53	0	0	4	0	2	0	2	0	1	147	562
5:00 PM	0	1	64	1	0	4	56	2	0	8	1	1	0	0	0	1	139	527
5:15 PM	0	0	76	5	0	0	56	1	0	3	0	3	0	2	0	0	146	
5:30 PM	0	1	64	4	0	2	49	1	0	7	0	2	0	0	0	0	130	
5:45 PM	0	0	50	5	0	1	48	0	0	4	1	2	0	1	0	0	112	
Count Total	0	5	860	47	2	14	657	7	0	57	3	25	0	6	1	4	1,688	
Peak Hour	0	1	315	13	2	1	251	3	0	15	0	9	0	1	0	2	613	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	3	0	1	0	4	3:00 PM	0	0	0	0	0
3:15 PM	4	0	3	0	7	3:15 PM	0	2	0	0	2
3:30 PM	4	2	1	0	7	3:30 PM	0	0	0	0	0
3:45 PM	6	2	0	0	8	3:45 PM	0	2	0	0	2
4:00 PM	4	0	2	0	6	4:00 PM	0	1	0	0	1
4:15 PM	1	0	1	0	2	4:15 PM	0	0	0	0	0
4:30 PM	5	0	0	0	5	4:30 PM	0	1	0	0	1
4:45 PM	1	0	0	0	1	4:45 PM	0	0	0	0	0
5:00 PM	1	0	1	0	2	5:00 PM	0	0	0	0	0

5:15 PM	0	0	1	0	1	5:15 PM	0	2	5	0	7
5:30 PM	1	0	1	0	2	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	30	4	11	0	45	Count Total	0	8	5	0	13
Peak Hour	17	4	5	0	26	Peak Hour	0	4	0	0	4



Location: 10 DOUGLAS MUNRO BLVD & RANGER STATION RD PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

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#### **Peak Hour**







Pedestrians/Bicycles in Crosswalk



### **Traffic Counts - All Vehicles**

Interval	DOU	JGLAS N Eastt	MUNRO E bound	BLVD	RA	ANGER ( West	STATION bound	RD	DOL	JGLAS N North	IUNRO B Ibound	LVD		Sout	nbound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	4	0	0	28	3	0	0	0	0	23					58	214
3:15 PM	0	0	7	5	0	19	1	0	0	2	0	17					51	208
3:30 PM	0	0	3	4	0	23	6	0	0	1	0	25					62	196
3:45 PM	0	0	5	1	0	16	1	0	0	1	0	19					43	178
4:00 PM	0	0	4	4	0	18	1	0	0	0	0	25					52	184
4:15 PM	0	0	4	2	0	21	2	0	0	3	0	7					39	167
4:30 PM	0	0	4	2	0	18	1	0	0	1	0	18					44	166
4:45 PM	0	0	5	1	0	17	0	0	0	0	0	26					49	167
5:00 PM	0	0	5	0	0	15	2	0	0	1	0	12					35	162
5:15 PM	0	0	3	4	0	11	1	0	0	2	0	17					38	
5:30 PM	0	0	3	1	0	21	2	0	0	0	0	18					45	
5:45 PM	0	0	5	0	0	18	2	0	0	0	0	19					44	
Count Total	0	0	52	24	0	225	22	0	0	11	0	226					560	
Peak Hour	0	0	19	10	0	86	11	0	0	4	0	84					214	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	n Crossw	alk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	0		0	3:00 PM	0	0	0		0
3:15 PM	0	1	0		1	3:15 PM	0	0	0		0
3:30 PM	0	2	1		3	3:30 PM	0	0	0		0
3:45 PM	0	0	0		0	3:45 PM	0	1	0		1
4:00 PM	0	1	0		1	4:00 PM	0	0	0		0
4:15 PM	0	0	0		0	4:15 PM	0	1	0		1
4:30 PM	0	0	0		0	4:30 PM	0	0	0		0
4:45 PM	0	2	0		2	4:45 PM	0	0	0		0
5:00 PM	0	0	2		2	5:00 PM	0	0	0		0

5:15 PM	0	0	0	0	5:15 PM	0	0	0	0
5:30 PM	0	0	0	0	5:30 PM	0	0	0	0
5:45 PM	0	0	0	0	5:45 PM	0	0	0	0
Count Total	0	6	3	9 0	Count Total	0	2	0	2
Peak Hour	0	3	1	4 F	Peak Hour	0	1	0	1



Location: 11 DOUGLAS MUNRO BLVD & W 1ST ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:15 PM - 04:15 PM

(303) 216-2439 www.alltrafficdata.net Peak Hour



#### Heavy Vehicles 1 2 I Î ~ 0 13 0 20 23 23 З 0 ŋ Î 1 0 1 5 6

Pedestrians/Bicycles in Crosswalk

# **Traffic Counts - All Vehicles**

Interval		W 1 Eastb	ST ST oound			W 1 West	ST ST bound		DOL	JGLAS N North	IUNRO B	LVD	DOU	GLAS M South	UNRO B	LVD		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	7	46	23	0	10	43	21	0	16	9	18	0	15	18	2	228	999
3:15 PM	0	20	56	40	0	13	49	23	0	17	4	27	0	16	9	8	282	1,022
3:30 PM	0	11	54	30	0	12	35	15	0	15	9	30	0	20	16	3	250	953
3:45 PM	0	10	41	25	0	11	45	18	0	17	10	33	0	16	11	2	239	952
4:00 PM	0	17	51	31	0	11	43	18	0	20	14	16	0	16	11	3	251	925
4:15 PM	0	5	47	16	0	7	38	16	0	16	8	32	0	9	17	2	213	893
4:30 PM	0	21	70	29	0	12	39	13	0	13	6	22	0	8	13	3	249	890
4:45 PM	0	10	55	20	0	10	32	13	0	13	14	17	0	17	10	1	212	845
5:00 PM	0	12	47	21	0	6	50	13	0	13	9	24	0	13	10	1	219	834
5:15 PM	0	15	34	24	0	11	32	9	0	16	12	22	0	21	11	3	210	
5:30 PM	0	12	38	17	0	6	32	17	0	10	8	29	0	17	15	3	204	
5:45 PM	0	8	49	30	0	9	29	12	0	7	10	20	0	13	13	1	201	
Count Total	0	148	588	306	0	118	467	188	0	173	113	290	0	181	154	32	2,758	
Peak Hour	0	58	202	126	0	47	172	74	0	69	37	106	0	68	47	16	1,022	

Interval		Hea	avy Vehicle	s		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	8	1	7	0	16	3:00 PM	0	1	0	0	1
3:15 PM	12	1	6	1	20	3:15 PM	0	1	0	0	1
3:30 PM	5	4	1	0	10	3:30 PM	0	0	1	1	2
3:45 PM	3	0	4	0	7	3:45 PM	1	2	0	0	3
4:00 PM	3	1	2	0	6	4:00 PM	0	0	0	0	0
4:15 PM	4	0	2	0	6	4:15 PM	0	0	0	0	0
4:30 PM	7	1	3	0	11	4:30 PM	0	0	0	0	0
4:45 PM	2	1	2	0	5	4:45 PM	0	2	0	0	2
5:00 PM	6	0	3	0	9	5:00 PM	0	0	0	2	2

5:15 PM	2	0	1	2	5	5:15 PM	0	0	0	0	0
5:30 PM	3	0	2	0	5	5:30 PM	0	0	0	0	0
5:45 PM	4	0	2	0	6	5:45 PM	0	0	0	0	0
Count Total	59	9	35	3	106	Count Total	1	6	1	3	11
Peak Hour	23	6	13	1	43	Peak Hour	1	3	1	1	6



Location: 12 PINE ST & W 1ST ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour



	HV%	PHF
EB	5.5%	0.90
WB	5.0%	0.94
NB	4.6%	0.78
SB	5.9%	0.71
All	5.2%	0.90



Pedestrians/Bicycles in Crosswalk



Traffic (	Counts -	- All	Vehicles
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Interval		W 1 East	ST ST bound			W 1 West	ST ST bound			PIN North	E ST Ibound			PINI South	E ST 1bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	89	3	0	20	94	0	0	6	0	20	0	1	0	0	233	1,001
3:15 PM	0	2	108	0	0	15	89	1	0	0	2	20	0	1	0	3	241	990
3:30 PM	0	1	119	2	0	27	87	2	0	3	0	32	1	0	0	5	279	964
3:45 PM	0	9	103	2	0	16	84	2	0	5	2	19	0	0	1	5	248	933
4:00 PM	0	3	89	1	0	17	77	0	0	5	0	26	0	1	1	2	222	915
4:15 PM	0	10	87	2	0	17	68	1	0	3	4	20	0	0	1	2	215	939
4:30 PM	0	3	111	3	0	14	80	2	0	2	1	20	0	3	1	8	248	932
4:45 PM	0	4	101	0	0	19	68	0	0	3	2	21	0	3	2	7	230	882
5:00 PM	0	8	103	1	0	17	78	0	0	2	3	30	0	0	0	4	246	869
5:15 PM	0	3	84	2	0	12	79	1	0	1	3	20	0	1	1	1	208	
5:30 PM	0	5	90	1	0	12	59	4	0	2	0	19	0	0	4	2	198	
5:45 PM	0	4	96	1	0	12	66	0	0	3	3	24	0	3	1	4	217	
Count Total	0	52	1,180	18	0	198	929	13	0	35	20	271	1	13	12	43	2,785	
Peak Hour	0	12	419	7	0	78	354	5	0	14	4	91	1	2	1	13	1,001	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	5	0	9	1	15	3:00 PM	3	1	0	5	9
3:15 PM	11	1	7	0	19	3:15 PM	0	1	0	0	1
3:30 PM	5	3	3	0	11	3:30 PM	0	0	0	0	0
3:45 PM	3	1	3	0	7	3:45 PM	0	0	0	0	0
4:00 PM	3	1	2	1	7	4:00 PM	0	0	0	0	0
4:15 PM	5	0	3	0	8	4:15 PM	0	0	0	0	0
4:30 PM	6	0	3	0	9	4:30 PM	0	0	0	0	0
4:45 PM	3	1	3	0	7	4:45 PM	0	0	0	0	0
5:00 PM	5	0	3	0	8	5:00 PM	0	1	0	0	1

5:15 PM	2	0	1	0	3	5:15 PM	0	0	0	0	0
5:30 PM	3	0	3	0	6	5:30 PM	1	1	0	0	2
5:45 PM	2	0	2	0	4	5:45 PM	0	1	0	0	1
Count Total	53	7	42	2	104	Count Total	4	5	0	5	14
Peak Hour	24	5	22	1	52	Peak Hour	3	2	0	5	10



Location: 13 N STAFFORD AVE & W 2ND ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:15 PM - 04:15 PM

(303) 216-2439 www.alltrafficdata.net

**Peak Hour** 



EB	6.2%	0.97
WB	1.9%	0.86
NB	2.2%	0.86
SB	0.0%	0.78
All	4.0%	0.93



Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 2I Eastt	ND ST bound			W 2 West	ND ST bound		1	N STAFF North	ORD AV	E	N	I STAFF South	ORD AVE	Ξ		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	3	47	21	0	7	39	0	0	14	2	2	0	1	6	3	145	651
3:15 PM	0	3	67	10	0	3	38	2	0	19	1	5	0	2	2	3	155	667
3:30 PM	0	6	63	19	0	4	52	3	0	18	5	3	0	0	2	4	179	643
3:45 PM	0	6	66	13	0	8	51	2	0	15	0	5	0	2	3	1	172	610
4:00 PM	0	4	67	17	0	5	37	4	0	10	2	6	0	2	6	1	161	597
4:15 PM	0	3	46	14	0	5	39	2	0	10	3	4	0	2	1	2	131	589
4:30 PM	0	2	45	24	0	7	34	0	0	15	2	3	0	0	4	10	146	621
4:45 PM	0	4	58	18	0	9	40	1	0	12	5	7	0	0	1	4	159	611
5:00 PM	0	3	47	17	0	5	48	2	0	11	2	7	0	3	3	5	153	569
5:15 PM	0	2	61	22	0	6	48	2	0	11	1	6	0	1	3	0	163	
5:30 PM	0	1	53	15	0	3	40	1	0	12	4	4	0	0	2	1	136	
5:45 PM	0	0	35	11	0	5	36	3	0	12	3	6	0	0	3	3	117	
Count Total	0	37	655	201	0	67	502	22	0	159	30	58	0	13	36	37	1,817	
Peak Hour	0	19	263	59	0	20	178	11	0	62	8	19	0	6	13	9	667	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	3	0	0	0	3	3:00 PM	0	0	0	0	0
3:15 PM	4	1	2	0	7	3:15 PM	1	0	0	0	1
3:30 PM	6	0	1	0	7	3:30 PM	0	0	0	0	0
3:45 PM	7	1	0	0	8	3:45 PM	0	1	0	0	1
4:00 PM	4	0	1	0	5	4:00 PM	1	0	0	0	1
4:15 PM	1	0	1	0	2	4:15 PM	0	0	0	0	0
4:30 PM	4	1	1	0	6	4:30 PM	0	0	0	0	0
4:45 PM	3	0	1	0	4	4:45 PM	0	1	0	0	1
5:00 PM	1	1	1	0	3	5:00 PM	0	1	0	0	1

5:15 PM	0	0	1	0	1	5:15 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1	5:30 PM	3	0	0	0	3
5:45 PM	0	1	0	0	1	5:45 PM	0	0	0	2	2
Count Total	33	5	10	0	48	Count Total	5	3	0	2	10
Peak Hour	21	2	4	0	27	Peak Hour	2	1	0	0	3



Location: 14 S CLE ELUM WAY & W 1ST ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net

Peak Hour



EB	5.9%	0.83
WB	5.0%	0.88
NB	3.4%	0.90
SB	4.0%	0.73
All	5.1%	0.87



Pedestrians/Bicycles in Crosswalk



# **Traffic Counts - All Vehicles**

Interval		W 1 East	ST ST bound			W 1 West	ST ST bound		S	S CLE EL North	LUM WA	ſ	N	I STAFF South	ORD AVE	Ξ		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	6	90	15	0	19	86	2	0	18	9	16	0	4	14	16	295	1,204
3:15 PM	0	1	106	17	0	15	75	9	0	16	15	13	0	4	5	6	282	1,186
3:30 PM	0	8	124	21	0	20	96	3	0	20	15	14	0	3	13	8	345	1,166
3:45 PM	0	3	93	23	0	17	76	3	0	14	14	13	0	8	10	8	282	1,128
4:00 PM	0	6	89	25	0	14	70	6	0	18	8	17	0	2	13	9	277	1,136
4:15 PM	0	6	83	24	0	15	68	5	0	14	7	19	0	5	11	5	262	1,156
4:30 PM	0	3	101	26	0	15	76	4	0	14	11	23	0	10	16	8	307	1,148
4:45 PM	0	8	97	22	0	16	63	1	0	16	16	21	0	6	16	8	290	1,100
5:00 PM	0	5	101	27	0	12	85	6	0	12	8	18	0	8	13	2	297	1,061
5:15 PM	0	8	80	17	0	13	58	4	0	20	7	12	0	8	20	7	254	
5:30 PM	0	9	81	23	0	15	63	5	0	14	7	21	0	6	14	1	259	
5:45 PM	0	5	90	22	0	13	60	6	0	11	12	12	0	1	13	6	251	
Count Total	0	68	1,135	262	0	184	876	54	0	187	129	199	0	65	158	84	3,401	
Peak Hour	0	18	413	76	0	71	333	17	0	68	53	56	0	19	42	38	1,204	

Interval		Hea	avy Vehicle	s		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	6	2	8	2	18	3:00 PM	0	0	0	0	0
3:15 PM	12	3	6	0	21	3:15 PM	0	0	0	0	0
3:30 PM	9	0	4	2	15	3:30 PM	0	1	0	0	1
3:45 PM	3	1	3	0	7	3:45 PM	1	0	0	1	2
4:00 PM	6	1	4	0	11	4:00 PM	0	0	0	0	0
4:15 PM	4	1	1	1	7	4:15 PM	3	2	1	3	9
4:30 PM	6	4	4	0	14	4:30 PM	0	1	3	5	9
4:45 PM	3	0	4	0	7	4:45 PM	0	1	0	0	1
5:00 PM	6	0	4	0	10	5:00 PM	0	0	0	0	0

5:15 PM	3	0	0	1	4	5:15 PM	1	0	0	0	1
5:30 PM	3	1	2	1	7	5:30 PM	0	1	0	0	1
5:45 PM	2	0	3	0	5	5:45 PM	0	2	0	0	2
Count Total	63	13	43	7	126	Count Total	5	8	4	9	26
Peak Hour	30	6	21	4	61	Peak Hour	1	1	0	1	3



Location: 15 N OAKES AVE & W 2ND ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:15 PM - 04:15 PM

**Peak Hour** 





#### Heavy Vehicles 1 0 I Î C 5 18 ባ Î ٦ ſ 0 0 0 5 1

Pedestrians/Bicycles in Crosswalk



Interval		W 2 Fast	ND ST			W 2 West	ND ST			N OAK	ES AVE			N OAKI	ES AVE			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	2	34	15	0	5	33	0	0	13	2	4	0	0	1	1	110	501
3:15 PM	0	1	53	17	0	2	20	1	0	16	1	5	0	1	4	1	122	512
3:30 PM	0	0	42	23	0	2	45	1	0	14	3	1	0	0	0	0	131	496
3:45 PM	0	2	51	17	0	2	38	0	0	16	3	4	0	3	0	2	138	466
4:00 PM	0	6	48	18	0	0	33	0	0	9	1	0	0	0	2	4	121	440
4:15 PM	0	2	35	12	0	3	30	1	0	17	0	4	0	1	1	0	106	436
4:30 PM	0	6	29	14	0	2	29	0	0	12	1	1	0	1	4	2	101	452
4:45 PM	0	1	47	11	0	4	30	0	0	15	3	1	0	0	0	0	112	451
5:00 PM	0	2	38	13	0	2	32	2	0	21	4	3	0	0	0	0	117	443
5:15 PM	0	4	50	10	0	1	26	2	0	21	2	0	0	1	2	3	122	
5:30 PM	0	1	45	11	0	0	25	0	0	16	0	1	0	0	0	1	100	
5:45 PM	0	1	34	9	0	2	32	0	0	16	1	3	0	1	4	1	104	
Count Total	0	28	506	170	0	25	373	7	0	186	21	27	0	8	18	15	1,384	
Peak Hour	0	9	194	75	0	6	136	2	0	55	8	10	0	4	6	7	512	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	0	1	1	3	3:00 PM	0	0	1	0	1
3:15 PM	4	0	3	0	7	3:15 PM	0	0	4	0	4
3:30 PM	5	1	1	0	7	3:30 PM	1	2	0	0	3
3:45 PM	6	0	0	1	7	3:45 PM	0	0	1	0	1
4:00 PM	3	0	1	0	4	4:00 PM	0	1	0	0	1
4:15 PM	0	2	0	0	2	4:15 PM	0	0	0	0	0
4:30 PM	4	1	0	0	5	4:30 PM	0	0	0	0	0
4:45 PM	2	0	0	0	2	4:45 PM	0	0	0	0	0
5:00 PM	1	0	1	0	2	5:00 PM	0	1	1	0	2

5:15 PM	0	0	1	0	1	5:15 PM	0	0	0	1	1
5:30 PM	0	1	0	0	1	5:30 PM	1	0	0	1	2
5:45 PM	1	0	0	0	1	5:45 PM	1	0	0	0	1
Count Total	27	5	8	2	42	Count Total	3	4	7	2	16
Peak Hour	18	1	5	1	25	Peak Hour	1	3	5	0	9



Location: 16 N OAKES ST & W 1ST ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour





#### Heavy Vehicles 4 1 I 0 *.*... 0 20 0 21 33 24 11 0 ባ Î ٦ ſ 0 9 I Î 17 12

Pedestrians/Bicycles in Crosswalk



<b>Traffic Counts - All Vehic</b>	cles
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Interval		W 1 East	ST ST bound			W 1 West	ST ST bound			N OAK North	ES ST			N OAK South	ES ST			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	1	2	78	30	1	8	81	9	0	22	10	5	0	7	10	5	269	1,112
3:15 PM	0	4	88	32	1	9	81	6	0	21	10	10	1	6	12	1	282	1,062
3:30 PM	0	2	101	28	0	8	87	3	0	23	11	8	0	11	12	2	296	1,000
3:45 PM	0	1	88	31	0	8	70	8	0	18	12	11	0	4	12	2	265	959
4:00 PM	0	1	65	23	0	7	70	4	0	20	5	3	0	8	10	3	219	946
4:15 PM	0	1	75	23	0	3	59	8	0	19	12	4	0	5	9	2	220	1,019
4:30 PM	0	2	95	22	0	6	79	6	0	13	5	6	0	5	11	5	255	1,022
4:45 PM	0	4	100	22	0	7	67	7	0	10	10	8	0	3	10	4	252	993
5:00 PM	0	3	89	34	0	8	86	8	0	19	17	13	0	4	8	3	292	976
5:15 PM	0	1	73	22	0	4	65	10	0	17	11	5	0	2	8	5	223	
5:30 PM	0	1	87	27	0	2	56	6	0	18	11	6	0	6	5	1	226	
5:45 PM	0	5	87	16	0	15	63	3	0	16	13	3	0	8	4	2	235	
Count Total	1	27	1,026	310	2	85	864	78	0	216	127	82	1	69	111	35	3,034	
Peak Hour	1	9	355	121	2	33	319	26	0	84	43	34	1	28	46	10	1,112	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	10	3	4	1	18	3:00 PM	0	0	0	0	0
3:15 PM	12	3	6	1	22	3:15 PM	0	0	0	1	1
3:30 PM	7	3	2	1	13	3:30 PM	0	4	0	1	5
3:45 PM	4	3	1	1	9	3:45 PM	2	1	1	2	6
4:00 PM	5	1	3	1	10	4:00 PM	0	1	0	1	2
4:15 PM	4	2	2	0	8	4:15 PM	1	5	4	2	12
4:30 PM	5	2	0	2	9	4:30 PM	0	4	1	5	10
4:45 PM	2	1	1	2	6	4:45 PM	0	0	0	1	1
5:00 PM	1	1	4	0	6	5:00 PM	2	1	1	0	4

5:15 PM	2	0	0	0	2	5:15 PM	0	13	3	2	18
5:30 PM	3	1	2	0	6	5:30 PM	0	0	0	3	3
5:45 PM	2	1	3	0	6	5:45 PM	1	4	0	2	7
Count Total	57	21	28	9	115	Count Total	6	33	10	20	69
Peak Hour	33	12	13	4	62	Peak Hour	2	5	1	4	12



Location: 17 N PENNSYLVANIA AVE & W 2ND ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:15 PM - 04:15 PM

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**Peak Hour** 





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 2 Easti	ND ST bound			W 2 West	ND ST bound		N F	ENNSYI North	LVANIA A	AVE	N P	ENNSYL South	_VANIA A	VE		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	1	2	23	13	0	3	23	1	0	11	2	3	0	1	0	3	86	388
3:15 PM	0	3	44	11	0	3	15	0	0	7	1	8	0	0	4	1	97	394
3:30 PM	0	0	35	7	0	2	33	0	0	14	2	5	0	0	2	0	100	379
3:45 PM	0	1	39	15	0	3	20	1	0	17	2	5	0	1	1	0	105	354
4:00 PM	0	1	37	11	0	2	23	1	0	8	1	4	0	2	1	1	92	339
4:15 PM	0	2	27	10	0	1	22	0	0	10	4	5	0	1	0	0	82	334
4:30 PM	0	1	23	4	0	2	21	1	0	10	4	8	0	0	1	0	75	342
4:45 PM	0	2	39	7	1	2	27	2	0	6	2	2	0	0	0	0	90	351
5:00 PM	0	3	29	8	0	4	21	1	0	15	1	4	0	0	1	0	87	344
5:15 PM	0	2	36	11	0	2	20	0	0	11	1	4	0	2	1	0	90	
5:30 PM	0	0	40	6	1	2	15	1	0	8	4	5	0	1	1	0	84	
5:45 PM	0	2	28	7	0	2	23	1	0	9	5	4	0	1	0	1	83	
Count Total	1	19	400	110	2	28	263	9	0	126	29	57	0	9	12	6	1,071	
Peak Hour	0	5	155	44	0	10	91	2	0	46	6	22	0	3	8	2	394	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	1	1	2	3:00 PM	0	2	5	0	7
3:15 PM	4	1	2	0	7	3:15 PM	0	0	0	0	0
3:30 PM	4	1	0	0	5	3:30 PM	0	1	2	1	4
3:45 PM	6	0	0	0	6	3:45 PM	1	1	3	0	5
4:00 PM	3	1	1	0	5	4:00 PM	0	0	0	0	0
4:15 PM	1	0	0	0	1	4:15 PM	1	0	2	0	3
4:30 PM	1	0	0	0	1	4:30 PM	0	2	6	0	8
4:45 PM	1	0	0	0	1	4:45 PM	0	1	1	0	2
5:00 PM	2	1	0	0	3	5:00 PM	0	1	2	0	3

5:15 PM	1	0	1	0	2	5:15 PM	1	4	4	4	13
5:30 PM	1	0	0	0	1	5:30 PM	0	2	6	1	9
5:45 PM	1	0	0	0	1	5:45 PM	1	3	10	2	16
Count Total	25	4	5	1	35	Count Total	4	17	41	8	70
Peak Hour	17	3	3	0	23	Peak Hour	1	2	5	1	9



Location: 18 N PENNSYLVANIA AVE & E 1ST ST PM Date: Thursday, August 15, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net Peak Hour





Pedestrians/Bicycles in Crosswalk



### **Traffic Counts - All Vehicles**

Interval		W 1 East	ST ST bound			E 19 West	ST ST bound		N F	ENNSYI North	_VANIA /	AVE	ΝΡ	ENNSYL South	VANIA A	AVE		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	6	78	1	0	7	89	7	0	1	0	5	0	10	1	11	216	910
3:15 PM	0	5	90	6	0	6	82	9	0	4	1	5	0	7	4	9	228	879
3:30 PM	0	5	108	5	0	0	83	17	0	1	3	2	0	8	3	10	245	830
3:45 PM	0	7	91	5	0	0	70	11	0	7	3	7	0	9	3	8	221	808
4:00 PM	0	3	75	2	0	4	73	9	0	0	2	2	0	7	2	6	185	807
4:15 PM	0	7	81	5	0	2	60	11	0	1	1	1	0	3	1	6	179	833
4:30 PM	0	7	97	5	0	3	85	12	0	1	2	3	0	5	1	2	223	839
4:45 PM	0	7	106	3	0	2	74	8	0	1	1	4	0	6	2	6	220	793
5:00 PM	0	4	83	4	0	3	82	10	0	3	2	6	0	4	3	7	211	764
5:15 PM	0	4	75	0	0	2	76	10	0	0	3	4	0	6	1	4	185	
5:30 PM	0	8	80	3	0	0	50	7	0	4	2	5	0	7	2	9	177	
5:45 PM	0	8	81	0	0	1	71	11	0	1	2	1	0	6	4	5	191	
Count Total	0	71	1,045	39	0	30	895	122	0	24	22	45	0	78	27	83	2,481	
Peak Hour	0	23	367	17	0	13	324	44	0	13	7	19	0	34	11	38	910	

Interval Start Time	Heavy Vehicles					Interval	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	3	0	7	0	10	3:00 PM	1	3	0	0	4
3:15 PM	8	2	4	1	15	3:15 PM	4	5	1	1	11
3:30 PM	6	0	3	1	10	3:30 PM	4	0	1	3	8
3:45 PM	4	0	1	1	6	3:45 PM	3	1	0	1	5
4:00 PM	5	0	3	2	10	4:00 PM	3	4	0	1	8
4:15 PM	2	0	2	2	6	4:15 PM	1	3	0	2	6
4:30 PM	6	0	1	0	7	4:30 PM	1	0	0	4	5
4:45 PM	2	0	0	0	2	4:45 PM	2	0	0	0	2
5:00 PM	2	0	5	0	7	5:00 PM	3	1	0	1	5
5:15 PM	1	0	0	0	1	5:15 PM	0	5	0	0	5
-------------	----	---	----	---	----	-------------	----	----	---	----	----
5:30 PM	3	2	1	0	6	5:30 PM	0	0	0	2	2
5:45 PM	2	0	3	0	5	5:45 PM	2	0	0	3	5
Count Total	44	4	30	7	85	Count Total	24	22	2	18	66
Peak Hour	21	2	15	3	41	Peak Hour	12	9	2	5	28



Location: 19 OAKES AVE & 190 WB OFFRAMP PM Date: Thursday, August 15, 2019 Peak Hour: 03:15 PM - 04:15 PM

(303) 216-2439 www.alltrafficdata.net

**Peak Hour** 





#### Heavy Vehicles 13 17 I Î 17 0 0 ~ 0 Î 1 0 0 N 0 I 1 17 2

Pedestrians/Bicycles in Crosswalk



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later al		E a a ti				190 WB	OFFRAM	Р		OAKE	S AVE			OAKE	S AVE			Delline
Interval Start Time	LI Turn	East	Thru	Diaht		VVest	Theu	Diaht		Nortr	Thru	Diaht	LLTurn	South	Thru	Diaht	Tatal	Hour
	0-Tum	Leit	Iniu	Right	0-Tum	Leit	Thru	Right	0-Tum	Leit	Thru	Right	U-Tum	Leit	Thru	Right	Iotai	Tioui
3:00 PM					0	1	0	27	0	0	6	0	0	0	41	0	75	312
3:15 PM					0	0	0	33	0	0	2	0	0	0	46	0	81	318
3:30 PM					0	1	0	26	0	0	1	0	0	0	48	0	76	300
3:45 PM					0	0	0	29	0	0	3	0	0	0	48	0	80	275
4:00 PM					0	0	0	25	0	0	4	0	0	0	52	0	81	265
4:15 PM					0	0	0	27	0	0	2	0	0	0	34	0	63	267
4:30 PM					0	0	0	21	0	0	2	0	0	0	28	0	51	282
4:45 PM					0	0	0	27	0	0	2	0	0	0	41	0	70	311
5:00 PM					0	0	0	28	0	0	4	0	0	0	51	0	83	300
5:15 PM					0	0	0	34	0	0	1	0	0	0	43	0	78	
5:30 PM					0	1	0	40	0	0	3	0	0	0	36	0	80	
5:45 PM					0	0	0	30	0	0	1	0	0	0	28	0	59	
Count Total					0	3	0	347	0	0	31	0	0	0	496	0	877	
Peak Hour					0	1	0	113	0	0	10	0	0	0	194	0	318	

	Hea	avy Vehicle	S		Interval	P	edestrians/l	Bicycles on	Crosswa	lk
EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
	2	2	6	10	3:00 PM		0	0	0	0
	0	6	6	12	3:15 PM		0	0	0	0
	0	3	4	7	3:30 PM		0	0	0	0
	2	1	5	8	3:45 PM		0	0	0	0
	0	1	2	3	4:00 PM		0	0	0	0
	0	3	2	5	4:15 PM		0	0	0	0
	0	0	2	2	4:30 PM		0	0	0	0
	0	2	2	4	4:45 PM		0	0	0	0
	0	1	3	4	5:00 PM		0	0	0	0
	EB	EB NB 2 0 2 0 2 0 0 0 0 0 0 0 0 0 0	Heavy Vehicle           EB         NB         WB           2         2         2           0         0         3           2         1         0         1           0         3         0         0           0         2         2         1           0         1         0         3           0         0         0         0           0         2         0         1	Heavy Vehicles           EB         NB         WB         SB           2         2         6           0         6         6           0         3         4           2         1         5           0         1         2           0         3         2           0         3         2           0         3         2           0         3         2           0         2         2           0         2         2           0         1         3           0         1         3	Heavy Vehicles           EB         NB         WB         SB         Total           2         2         6         10           0         6         6         12           0         3         4         7           2         1         5         8           0         1         2         3           0         3         2         5           0         0         2         2           0         2         2         4           0         1         3         4	Heavy Vehicles         Interval           EB         NB         WB         SB         Total         Start Time           2         2         6         10         3:00 PM           0         6         6         12         3:15 PM           0         3         4         7         3:30 PM           2         1         5         8         3:45 PM           0         1         2         3         4:00 PM           0         3         2         5         4:15 PM           0         0         2         2         4:30 PM           0         2         2         4:50 PM           0         1         3         4         5:00 PM	Heavy Vehicles         Interval Start Time         P           EB         NB         WB         SB         Total         Start Time         EB           2         2         6         10         3:00 PM         3:15 PM         10         3:15 PM           0         3         4         7         3:30 PM         3:45 PM         10         1         2         3         4:00 PM         1         <	Heavy Vehicles         Interval         Pedestrians/E           EB         NB         WB         SB         Total         Start Time         EB         NB           2         2         6         10         3:00 PM         0	Heavy Vehicles         Interval         Pedestrians/Bicycles on           EB         NB         WB         SB         Total         Start Time         EB         NB         WB         WB           2         2         6         10         3:00 PM         0	Heavy Vehicles         Interval Start Time         Pedestrians/Bicycles on Crosswal           EB         NB         WB         SB         Total         Start Time         EB         NB         WB         SB           2         2         6         10         3:00 PM         0

5:15 PM	0	0	0	0	5:15 PM	0	0	0	0
5:30 PM	0	3	1	4	5:30 PM	0	0	0	0
5:45 PM	0	4	2	6	5:45 PM	0	0	0	0
Count Total	4	26	35	65	Count Total	0	0	0	0
Peak Hour	2	11	17	30	Peak Hour	0	0	0	0



Location: 20 OAKES AVE & I90 EB ONRAMP PM Date: Thursday, August 15, 2019 Peak Hour: 03:15 PM - 04:15 PM

(303) 216-2439 www.alltrafficdata.net

**Peak Hour** 







Pedestrians/Bicycles in Crosswalk



	Traffic	Counts -	All	Vehicles
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Interval		Fast	hound			I90 EB West	ONRAMF	C		OAKE North	S AVE			OAKE South	S AVE			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM					0	0	0	0	0	0	7	2	0	35	7	0	51	201
3:15 PM					0	0	0	0	0	0	2	0	0	44	2	0	48	203
3:30 PM					0	0	0	0	0	0	2	0	0	43	6	0	51	194
3:45 PM					0	0	0	0	0	0	2	0	0	47	2	0	51	175
4:00 PM					0	0	0	0	0	0	4	0	0	47	2	0	53	167
4:15 PM					0	0	0	0	0	0	2	1	0	32	4	0	39	168
4:30 PM					0	0	0	0	0	0	2	1	0	25	4	0	32	172
4:45 PM					0	0	0	0	0	0	2	0	0	39	2	0	43	180
5:00 PM					0	0	0	0	0	0	3	0	0	47	4	0	54	170
5:15 PM					0	0	0	0	0	0	1	0	0	42	0	0	43	
5:30 PM					0	0	0	0	0	0	3	0	0	33	4	0	40	
5:45 PM					0	0	0	0	0	0	2	2	0	29	0	0	33	
Count Total					0	0	0	0	0	0	32	6	0	463	37	0	538	
Peak Hour					0	0	0	0	0	0	10	0	0	181	12	0	203	

Interval		He	avy Vehicle	s		Interval	F	Pedestrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM		2	0	7	9	3:00 PM		0	0	0	0
3:15 PM		0	0	5	5	3:15 PM		0	0	0	0
3:30 PM		1	0	5	6	3:30 PM		0	0	0	0
3:45 PM		1	0	5	6	3:45 PM		0	0	0	0
4:00 PM		0	0	2	2	4:00 PM		0	0	0	0
4:15 PM		0	0	2	2	4:15 PM		0	0	0	0
4:30 PM		0	0	2	2	4:30 PM		0	0	0	0
4:45 PM		0	0	2	2	4:45 PM		0	0	0	0
5:00 PM		0	0	4	4	5:00 PM		0	0	0	0

5:15 PM	0	0	0	0	5:15 PM	0	0	0	0
5:30 PM	0	0	1	1	5:30 PM	0	0	0	0
5:45 PM	0	0	2	2	5:45 PM	0	0	0	0
Count Total	4	0	37	41	Count Total	0	0	0	0
Peak Hour	2	0	17	19	Peak Hour	0	0	0	0



Location: 1 N 1ST ST & E PENNSYLVANIA AVE PM Date: Thursday, December 5, 2019 Peak Hour: 03:45 PM - 04:45 PM

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#### **Peak Hour**





Pedestrians/Bicycles in Crosswalk



3.3%

1.6%

0.69

0.81

SB

All

Interval	EF	ENNSY Eastt	LVANIA .	AVE	E	PENNSY West	LVANIA	AVE		N 1S North	T ST bound			N 1S South	T ST Ibound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	4	0	14	0	2	1	2	0	12	40	3	0	0	25	1	104	395
3:15 PM	0	2	1	1	0	0	1	0	0	13	38	4	0	1	30	1	92	425
3:30 PM	0	2	0	6	0	1	1	0	0	6	45	1	0	0	31	2	95	419
3:45 PM	0	5	0	6	0	3	1	3	0	11	41	0	0	3	30	1	104	436
4:00 PM	0	6	1	13	0	0	0	1	0	15	43	0	0	0	51	4	134	422
4:15 PM	0	1	0	9	0	1	1	1	0	5	39	4	0	0	24	1	86	402
4:30 PM	0	2	1	5	0	1	1	0	0	11	50	3	0	0	37	1	112	411
4:45 PM	0	2	1	9	0	0	0	1	1	13	40	2	0	0	17	4	90	388
5:00 PM	0	2	0	7	0	1	0	0	1	16	51	4	0	0	28	4	114	376
5:15 PM	0	4	0	8	0	1	1	0	0	18	41	1	0	0	19	2	95	
5:30 PM	0	1	1	6	0	0	0	1	0	14	34	2	0	1	27	2	89	
5:45 PM	0	4	1	3	0	1	0	0	0	6	38	1	0	1	19	4	78	
Count Total	0	35	6	87	0	11	7	9	2	140	500	25	0	6	338	27	1,193	
Peak Hour	0	14	2	33	0	5	3	5	0	42	173	7	0	3	142	7	436	

Interval		Неа	avy Vehicle	es		Interval	Peo	lestrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1	0	1	2	3:00 PM	2	2	2	6	12
3:15 PM	0	3	0	1	4	3:15 PM	2	2	0	11	15
3:30 PM	0	0	0	0	0	3:30 PM	9	4	2	7	22
3:45 PM	0	1	0	1	2	3:45 PM	0	3	5	4	12
4:00 PM	0	1	0	4	5	4:00 PM	3	4	5	6	18
4:15 PM	0	0	0	0	0	4:15 PM	1	4	1	1	7
4:30 PM	0	0	0	0	0	4:30 PM	7	1	2	2	12
4:45 PM	0	0	0	0	0	4:45 PM	0	1	0	1	2
5:00 PM	1	2	0	0	3	5:00 PM	0	5	1	2	8

5:15 PM	0	0	0	2	2	5:15 PM	2	2	0	1	5
5:30 PM	1	1	0	0	2	5:30 PM	1	5	0	0	6
5:45 PM	0	0	0	0	0	5:45 PM	3	3	2	6	14
Count Total	2	9	0	9	20	Count Total	30	36	20	47	133
Peak Hour	0	2	0	5	7	Peak Hour	11	12	13	13	49



Location: 2 2ND ST & E PACIFIC AVE PM Date: Thursday, December 5, 2019 Peak Hour: 03:45 PM - 04:45 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**



EB	0.0%	0.00
WB	25.0%	0.50
NB	1.8%	0.69
SB	2.2%	0.79
All	2.5%	0.86



Pedestrians/Bicycles in Crosswalk



Interval		E PACI East	IFIC AVE			E PAC West	IFIC AVE			2NI North	D ST nbound			2NE South	) ST Ibound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	0	1	0	1	0	0	0	1	23	0	0	0	17	0	43	182
3:15 PM	0	0	0	3	0	1	0	0	0	1	11	3	0	1	13	0	33	184
3:30 PM	0	0	0	1	0	1	0	1	0	0	27	1	0	0	18	0	49	194
3:45 PM	0	0	0	0	0	1	0	1	1	2	25	1	0	0	26	0	57	204
4:00 PM	0	0	0	0	0	0	0	0	0	0	17	0	0	0	26	2	45	188
4:15 PM	0	0	0	0	0	0	0	1	0	2	22	1	0	0	17	0	43	193
4:30 PM	0	0	0	0	0	1	0	0	0	3	37	0	0	0	17	1	59	193
4:45 PM	0	0	0	3	0	1	0	0	0	5	19	1	0	0	12	0	41	171
5:00 PM	0	0	0	1	0	0	0	0	0	1	30	0	0	0	18	0	50	171
5:15 PM	0	0	0	0	0	2	0	0	0	2	25	0	0	0	14	0	43	
5:30 PM	0	1	0	2	0	0	0	0	0	3	16	0	0	0	15	0	37	
5:45 PM	0	0	0	1	0	1	0	0	0	4	26	1	0	0	7	1	41	
Count Total	0	1	0	12	0	9	0	3	1	24	278	8	0	1	200	4	541	
Peak Hour	0	0	0	0	0	2	0	2	1	7	101	2	0	0	86	3	204	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	3:00 PM	0	0	1	0	1
3:15 PM	0	3	0	0	3	3:15 PM	2	6	0	0	8
3:30 PM	0	0	0	1	1	3:30 PM	0	0	0	0	0
3:45 PM	0	1	1	1	3	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	1	1	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
5:00 PM	0	1	0	1	2	5:00 PM	2	4	0	0	6

5:15 PM	0	0	1	1	2	5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
Count Total	0	6	2	5	13	Count Total	4	10	1	0	15
Peak Hour	0	2	1	2	5	Peak Hour	0	0	0	0	0



Location: 3 MORREL RD & WA 903 PM Date: Thursday, December 5, 2019 Peak Hour: 03:45 PM - 04:45 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**





Pedestrians/Bicycles in Crosswalk



0.0%

2.0%

0.50

0.86

SB

All

Interval		WA Eastt	003 Nound			WA West	A 903 bound			MORF North	REL RD			ROCK R South	OSE DR			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	2	8	0	0	0	16	3	0	1	1	3	0	1	0	1	36	140
3:15 PM	0	1	7	0	0	3	9	0	0	0	0	0	0	3	1	1	25	140
3:30 PM	0	1	8	0	0	2	12	2	0	1	0	4	0	4	0	1	35	148
3:45 PM	1	0	18	0	0	1	14	1	0	0	0	6	0	1	1	1	44	151
4:00 PM	0	0	12	0	0	2	9	1	0	1	0	6	0	4	0	1	36	143
4:15 PM	0	1	8	1	1	5	10	1	0	0	2	3	0	1	0	0	33	134
4:30 PM	0	1	10	1	0	3	18	2	0	0	0	2	0	1	0	0	38	139
4:45 PM	0	0	13	0	0	3	14	1	0	0	0	4	0	1	0	0	36	123
5:00 PM	0	0	7	0	0	2	8	6	0	0	0	2	0	2	0	0	27	114
5:15 PM	0	1	11	0	0	2	17	3	1	0	0	3	0	0	0	0	38	
5:30 PM	0	0	7	0	0	0	9	3	0	0	0	1	0	2	0	0	22	
5:45 PM	0	1	4	0	0	1	15	0	0	0	1	1	0	4	0	0	27	
Count Total	1	8	113	2	1	24	151	23	1	3	4	35	0	24	2	5	397	
Peak Hour	1	2	48	2	1	11	51	5	0	1	2	17	0	7	1	2	151	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	1	0	1	3:00 PM	0	0	0	0	0
3:15 PM	0	0	1	1	2	3:15 PM	0	0	0	0	0
3:30 PM	1	1	0	0	2	3:30 PM	0	0	0	0	0
3:45 PM	1	0	0	0	1	3:45 PM	0	0	0	0	0
4:00 PM	0	0	1	0	1	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1	5:00 PM	0	0	0	0	0

Count Total	4	1	4	1	10	Count Total	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:15 PM	1	0	0	0	1	5:15 PM	0	0	0	0	0

# APPENDIX A (continued)

# **Raw Traffic Counts**

Friday Data Sheets



Location: 1 BULLFROG RD & I90 WB OFFRAMP PM Date: Friday, August 16, 2019 Peak Hour: 03:00 PM - 04:00 PM

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#### **Peak Hour**





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

5.1%

0.87

All

Interval	I90 WB ONRAMP Interval Eastbound					I90 WB OFFRAMP Westbound Riaht U-Turn Left Thru Riaht U				BULLFROG RD Northbound				BULLFROG RD Southbound				Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	0	0	0	0	6	0	18	0	2	52	0	0	0	5	25	108	440
2:15 PM	0	0	0	0	0	6	0	7	0	0	51	0	0	0	12	25	101	449
2:30 PM	0	0	0	0	0	4	0	17	0	3	57	0	0	0	16	29	126	480
2:45 PM	0	0	0	0	0	4	0	11	0	0	50	0	0	0	16	24	105	507
3:00 PM	0	0	0	0	0	5	0	13	0	1	70	0	0	0	10	18	117	532
3:15 PM	0	0	0	0	0	4	2	8	0	0	78	0	0	0	17	23	132	
3:30 PM	0	0	0	0	0	5	1	11	0	0	92	0	0	0	16	28	153	
3:45 PM	0	0	0	0	0	6	1	11	0	0	67	0	0	0	21	24	130	
Count Total	0	0	0	0	0	40	4	96	0	6	517	0	0	0	113	196	972	
Peak Hour	0	0	0	0	0	20	4	43	0	1	307	0	0	0	64	93	532	_

Interval Start Time		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
2:00 PM	0	2	0	0	2	2:00 PM	0	0	0	0	0		
2:15 PM	0	1	3	3	7	2:15 PM	0	0	0	0	0		
2:30 PM	0	1	3	2	6	2:30 PM	0	0	0	0	0		
2:45 PM	0	0	2	2	4	2:45 PM	0	0	0	0	0		
3:00 PM	0	2	5	4	11	3:00 PM	0	0	0	0	0		
3:15 PM	0	1	0	1	2	3:15 PM	0	0	0	0	0		
3:30 PM	0	0	1	3	4	3:30 PM	0	0	0	0	0		
3:45 PM	0	1	5	4	10	3:45 PM	0	0	0	0	0		
Count Total	0	8	19	19	46	Count Total	0	0	0	0	0		
Peak Hour	0	4	11	12	27	Peak Hour	0	0	0	0	0		



Location: 2 BULLFROG RD & 190 EB ONRAMP PM Date: Friday, August 16, 2019 Peak Hour: 03:00 PM - 04:00 PM

#### Peak Hour





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

6.4%

0.79

All

Interval		I90 EB ( Eastl	OFFRAM	Р		I90 EB West	ONRAMI bound	C		BULLF North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	50	1	1	0	0	0	0	0	0	5	3	0	13	1	0	74	309
2:15 PM	0	50	1	1	0	0	0	0	0	0	1	1	0	13	4	0	71	327
2:30 PM	0	56	1	2	0	0	0	0	0	0	3	2	0	19	2	0	85	357
2:45 PM	0	52	1	0	0	0	0	0	0	0	0	6	0	20	0	0	79	405
3:00 PM	0	70	1	3	0	0	0	0	0	0	1	2	0	12	3	0	92	420
3:15 PM	0	74	2	1	0	0	0	0	0	0	2	2	0	18	2	0	101	
3:30 PM	0	92	0	4	0	0	0	0	0	0	1	13	0	22	1	0	133	
3:45 PM	0	64	0	0	0	0	0	0	0	0	2	1	0	26	1	0	94	
Count Total	0	508	7	12	0	0	0	0	0	0	15	30	0	143	14	0	729	
Peak Hour	0	300	3	8	0	0	0	0	0	0	6	18	0	78	7	0	420	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	1	3	0	1	5	2:00 PM	0	0	0	0	0
2:15 PM	1	0	0	4	5	2:15 PM	0	0	0	0	0
2:30 PM	2	1	0	5	8	2:30 PM	0	0	0	0	0
2:45 PM	0	1	0	2	3	2:45 PM	0	0	0	0	0
3:00 PM	1	1	0	7	9	3:00 PM	0	0	0	0	0
3:15 PM	1	1	0	2	4	3:15 PM	0	0	0	0	0
3:30 PM	2	2	0	4	8	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	6	6	3:45 PM	0	0	0	0	0
Count Total	8	9	0	31	48	Count Total	0	0	0	0	0
Peak Hour	4	4	0	19	27	Peak Hour	0	0	0	0	0



Location: 3 BULLFROG RD & TUMBLE CREEK DR PM Date: Friday, August 16, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

3.6%

0.87

All

Interval	Т	UMBLE East	CREEK I bound	DR		Wes	tbound			BULLFI North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	5	0	3					0	2	70	0	0	0	34	8	122	461
2:15 PM	0	11	0	1					0	3	51	0	0	0	35	4	105	457
2:30 PM	0	4	0	4					0	5	69	0	0	0	40	4	126	477
2:45 PM	0	7	0	2					0	1	56	0	1	0	35	6	108	504
3:00 PM	0	2	0	3					0	5	75	0	0	0	29	4	118	532
3:15 PM	0	5	0	4					0	4	78	0	0	0	32	2	125	
3:30 PM	0	7	0	8					1	1	102	0	0	0	33	1	153	
3:45 PM	0	8	0	3					0	3	76	0	0	0	40	6	136	
Count Total	0	49	0	28					1	24	577	0	1	0	278	35	993	
Peak Hour	0	22	0	18					1	13	331	0	0	0	134	13	532	_

Interval		Неа	avy Vehicl	les		Interval	Peo	destrians/E	Bicycles o	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	2	0		4	6	2:00 PM	0	0		0	0
2:15 PM	0	1		5	6	2:15 PM	0	0		0	0
2:30 PM	2	1		1	4	2:30 PM	0	0		0	0
2:45 PM	2	2		3	7	2:45 PM	0	0		0	0
3:00 PM	1	1		4	6	3:00 PM	0	0		0	0
3:15 PM	1	2		0	3	3:15 PM	0	0		0	0
3:30 PM	1	0		3	4	3:30 PM	0	0		0	0
3:45 PM	2	3		1	6	3:45 PM	0	0		0	0
Count Total	11	10		21	42	Count Total	0	0		0	0
Peak Hour	5	6		8	19	Peak Hour	0	0		0	0



Location: 4 BULLFROG RD & SUNCADIA TRAIL PM Date: Friday, August 16, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour



	110 /0	1 1 11
EB	4.2%	0.87
WB	0.0%	0.00
NB	1.4%	0.87
SB	3.5%	0.94
All	2.7%	0.92



Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		SUNCA East	DIA TRAI bound	L		SUNCA West	DIA TRA bound	IL		BULLFI North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	26	0	17	0	0	0	0	2	33	38	0	0	0	26	28	170	671
2:15 PM	0	27	0	18	0	0	0	0	1	32	36	0	0	0	20	35	169	669
2:30 PM	0	34	0	23	0	0	0	0	1	31	43	0	1	0	18	22	173	681
2:45 PM	0	24	0	24	0	0	0	0	0	21	38	0	1	0	19	32	159	713
3:00 PM	0	23	0	17	0	0	0	0	0	27	49	0	1	0	18	33	168	751
3:15 PM	0	32	0	14	0	0	0	0	0	24	63	0	0	0	20	28	181	
3:30 PM	0	37	0	18	0	0	0	0	1	41	62	0	2	0	15	29	205	
3:45 PM	0	33	0	18	0	0	0	0	0	31	62	0	0	0	26	27	197	
Count Total	0	236	0	149	0	0	0	0	5	240	391	0	5	0	162	234	1,422	
Peak Hour	0	125	0	67	0	0	0	0	1	123	236	0	3	0	79	117	751	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	3	2	0	4	9	2:00 PM	0	0	0	0	0
2:15 PM	7	1	0	2	10	2:15 PM	0	0	0	0	0
2:30 PM	3	2	0	3	8	2:30 PM	0	0	0	0	0
2:45 PM	4	5	0	0	9	2:45 PM	0	0	0	0	0
3:00 PM	2	0	0	3	5	3:00 PM	0	0	0	0	0
3:15 PM	1	1	0	1	3	3:15 PM	0	0	0	0	0
3:30 PM	4	0	0	1	5	3:30 PM	0	0	0	0	0
3:45 PM	1	4	0	2	7	3:45 PM	0	0	0	0	0
Count Total	25	15	0	16	56	Count Total	0	0	0	0	0
Peak Hour	8	5	0	7	20	Peak Hour	0	0	0	0	0



Location: 5 BULLFROG RD & FIREHOUSE RD PM Date: Friday, August 16, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour



EB	6.9%	0.81
WB	0.0%	0.00
NB	2.2%	0.90
SB	3.4%	0.91
All	2.8%	0.90



Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		FIREH East	OUSE RE bound	)		FIREH( West	OUSE RE	)		BULLFI North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	3	0	5	0	0	0	0	0	0	67	0	0	0	48	2	125	504
2:15 PM	0	3	0	4	0	0	0	0	0	2	61	0	0	0	50	4	124	515
2:30 PM	0	7	0	0	0	0	0	0	0	1	78	0	0	0	42	4	132	534
2:45 PM	0	4	0	3	0	0	0	0	0	3	55	0	0	0	52	6	123	570
3:00 PM	0	5	0	4	0	0	0	0	0	0	72	0	0	0	48	7	136	605
3:15 PM	0	3	0	2	0	0	0	0	0	3	92	0	0	0	43	0	143	
3:30 PM	0	6	0	3	0	0	0	0	0	2	100	0	0	0	46	11	168	
3:45 PM	0	4	0	2	0	0	0	0	0	0	98	1	0	0	49	4	158	
Count Total	0	35	0	23	0	0	0	0	0	11	623	1	0	0	378	38	1,109	
Peak Hour	0	18	0	11	0	0	0	0	0	5	362	1	0	0	186	22	605	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	icycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	2	3	0	3	8	2:00 PM	0	0	0	0	0
2:15 PM	0	7	0	3	10	2:15 PM	1	0	0	0	1
2:30 PM	1	2	0	4	7	2:30 PM	0	0	0	0	0
2:45 PM	1	5	0	2	8	2:45 PM	0	0	0	0	0
3:00 PM	2	2	0	2	6	3:00 PM	0	0	0	0	0
3:15 PM	0	2	0	1	3	3:15 PM	0	0	0	0	0
3:30 PM	0	1	0	2	3	3:30 PM	0	0	0	0	0
3:45 PM	0	3	0	2	5	3:45 PM	0	0	0	0	0
Count Total	6	25	0	19	50	Count Total	1	0	0	0	1
Peak Hour	2	8	0	7	17	Peak Hour	0	0	0	0	0



Location: 6 BULLFROG RD & SR 903 PM Date: Friday, August 16, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour







Pedestrians/Bicycles in Crosswalk



Interval		SF East	R 903 bound			SF West	R 903 tbound			BULLFI North	ROG RD			SR South	903 Ibound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	0	0	0	0	21	0	49	1	0	34	28	0	55	22	0	210	898
2:15 PM	0	0	0	0	0	26	0	54	0	0	33	31	0	47	27	0	218	941
2:30 PM	0	0	0	0	0	20	0	63	2	0	43	35	0	66	15	0	244	947
2:45 PM	0	0	0	0	0	31	0	54	0	0	24	33	0	57	27	0	226	984
3:00 PM	0	0	0	0	0	33	0	53	0	0	47	32	1	67	20	0	253	1,020
3:15 PM	0	0	0	0	0	24	0	55	3	0	49	37	0	44	12	0	224	
3:30 PM	0	0	0	0	0	26	0	79	3	0	63	38	1	50	21	0	281	
3:45 PM	0	0	0	0	0	22	0	65	0	0	54	42	0	51	28	0	262	
Count Total	0	0	0	0	0	203	0	472	9	0	347	276	2	437	172	0	1,918	
Peak Hour	0	0	0	0	0	105	0	252	6	0	213	149	2	212	81	0	1,020	_

Interval		Неа	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	0	3	0	5	8	2:00 PM	0	0	0	0	0
2:15 PM	0	5	7	1	13	2:15 PM	0	0	0	0	0
2:30 PM	0	3	4	3	10	2:30 PM	0	1	0	0	1
2:45 PM	0	3	3	1	7	2:45 PM	0	1	0	0	1
3:00 PM	0	4	3	9	16	3:00 PM	0	0	0	0	0
3:15 PM	0	3	1	2	6	3:15 PM	0	0	0	0	0
3:30 PM	0	1	4	1	6	3:30 PM	0	0	0	0	0
3:45 PM	0	4	2	1	7	3:45 PM	0	0	0	0	0
Count Total	0	26	24	23	73	Count Total	0	2	0	0	2
Peak Hour	0	12	10	13	35	Peak Hour	0	0	0	0	0



Location: 7 DENNY AVE & W 2ND ST PM Date: Friday, August 16, 2019 Peak Hour: 02:45 PM - 03:45 PM

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Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	4.3%	0.95
WB	3.1%	0.87
NB		
SB	0.0%	0.75
All	3.6%	0.92

## **Traffic Counts - All Vehicles**

Interval		W 2 East	ND ST bound			W 2 West	ND ST bound			North	nbound			DENN South	Y AVE bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	3	92	0	0	0	87	5					0	2	0	1	190	767
2:15 PM	0	1	83	0	0	0	86	6					0	2	0	1	179	780
2:30 PM	0	1	104	0	0	0	91	3					0	7	0	0	206	794
2:45 PM	0	1	96	0	0	0	85	2					0	5	0	3	192	807
3:00 PM	0	1	103	0	0	0	84	8					0	6	0	1	203	796
3:15 PM	0	2	89	0	0	0	92	6					0	4	0	0	193	
3:30 PM	0	1	102	0	0	0	105	6					0	4	0	1	219	
3:45 PM	0	1	85	0	0	0	84	4					0	6	0	1	181	
Count Total	0	11	754	0	0	0	714	40					0	36	0	8	1,563	
Peak Hour	0	5	390	0	0	0	366	22					0	19	0	5	807	_

Interval		He	avy Vehicle	S		Interval	Peo	destrians	/Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	5		3	0	8	2:00 PM	0		0	0	0
2:15 PM	4		6	0	10	2:15 PM	0		0	0	0
2:30 PM	4		5	0	9	2:30 PM	0		0	0	0
2:45 PM	3		4	0	7	2:45 PM	0		0	0	0
3:00 PM	10		1	0	11	3:00 PM	1		0	0	1
3:15 PM	3		3	0	6	3:15 PM	6		0	0	6
3:30 PM	1		4	0	5	3:30 PM	0		0	0	0
3:45 PM	1		1	0	2	3:45 PM	0		0	0	0
Count Total	31		27	0	58	Count Total	7		0	0	7
Peak Hour	17		12	0	29	Peak Hour	7		0	0	7



Location: 8 RANGER STATION RD & W 2ND ST PM Date: Friday, August 16, 2019 Peak Hour: 02:45 PM - 03:45 PM

Peak Hour





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 2 Eastl	ND ST bound			W 2 West	ND ST bound		RA	NGER S. North	TATION	RD		MILLE South	R AVE bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	0	73	19	0	8	65	2	0	24	0	6	0	1	0	1	199	853
2:15 PM	0	0	67	18	0	11	82	0	0	17	1	12	0	0	0	0	208	865
2:30 PM	0	0	89	13	0	6	73	0	0	24	0	11	0	0	0	0	216	871
2:45 PM	0	0	79	31	0	17	62	1	0	29	0	11	0	0	0	0	230	881
3:00 PM	0	0	82	19	0	6	68	1	0	23	0	12	0	0	0	0	211	851
3:15 PM	0	0	75	25	0	8	73	0	0	24	1	7	0	0	0	1	214	
3:30 PM	0	0	88	15	0	5	76	0	0	35	0	7	0	0	0	0	226	
3:45 PM	0	0	82	14	0	8	71	1	0	15	0	8	0	1	0	0	200	
Count Total	0	0	635	154	0	69	570	5	0	191	2	74	0	2	0	2	1,704	_
Peak Hour	0	0	324	90	0	36	279	2	0	111	1	37	0	0	0	1	881	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	4	0	5	0	9	2:00 PM	0	0	0	0	0
2:15 PM	6	1	5	0	12	2:15 PM	0	2	0	0	2
2:30 PM	3	3	3	0	9	2:30 PM	0	2	0	0	2
2:45 PM	4	0	4	0	8	2:45 PM	0	2	0	0	2
3:00 PM	11	0	1	0	12	3:00 PM	0	2	1	0	3
3:15 PM	2	0	3	0	5	3:15 PM	0	0	0	0	0
3:30 PM	1	1	1	0	3	3:30 PM	0	0	0	0	0
3:45 PM	2	0	2	0	4	3:45 PM	0	0	0	0	0
Count Total	33	5	24	0	62	Count Total	0	8	1	0	9
Peak Hour	18	1	9	0	28	Peak Hour	0	4	1	0	5



Location: 9 N PINE ST & W 2ND ST PM Date: Friday, August 16, 2019 Peak Hour: 02:15 PM - 03:15 PM

**Peak Hour** 





0.97



Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

5.2%

WB

NB SB

All

Interval		W 2 East	ND ST bound			W 2 West	ND ST bound			N PII North	NE ST Ibound			N PIN South	NE ST nbound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	1	0	78	0	0	0	79	0	0	0	0	0	0	0	0	0	158	679
2:15 PM	0	0	79	0	0	0	88	0	0	0	0	0	0	1	0	1	169	691
2:30 PM	0	1	99	0	0	0	78	1	0	0	0	0	0	0	0	0	179	685
2:45 PM	1	0	90	0	1	0	77	1	0	1	0	0	0	1	0	1	173	683
3:00 PM	0	0	96	0	0	0	70	1	0	0	0	0	0	0	0	3	170	686
3:15 PM	0	0	80	0	0	1	80	1	0	1	0	0	0	0	0	0	163	
3:30 PM	0	3	93	0	0	0	80	0	0	0	0	0	0	0	0	1	177	
3:45 PM	0	0	92	0	0	0	80	1	0	0	0	2	0	1	0	0	176	
Count Total	2	4	707	0	1	1	632	5	0	2	0	2	0	3	0	6	1,365	
Peak Hour	1	1	364	0	1	0	313	3	0	1	0	0	0	2	0	5	691	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles or	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	3	0	4	0	7	2:00 PM	0	1	0	0	1
2:15 PM	5	0	5	0	10	2:15 PM	0	1	1	1	3
2:30 PM	5	0	3	0	8	2:30 PM	0	1	0	0	1
2:45 PM	4	1	4	0	9	2:45 PM	0	1	1	0	2
3:00 PM	8	0	1	0	9	3:00 PM	0	2	0	0	2
3:15 PM	2	0	4	0	6	3:15 PM	0	1	0	0	1
3:30 PM	2	0	2	0	4	3:30 PM	0	0	0	0	0
3:45 PM	2	1	2	0	5	3:45 PM	0	0	0	0	0
Count Total	31	2	25	0	58	Count Total	0	7	2	1	10
Peak Hour	22	1	13	0	36	Peak Hour	0	5	2	1	8



All Traffic Data

#### **Peak Hour**

All Vehicles



**Heavy Vehicles** 



Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval	DOU	JGLAS I Eastl	MUNRO I bound	BLVD	R	ANGER S West	STATION bound	I RD	DOU	JGLAS N North	/IUNRO E nbound	BLVD		Sout	hbound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	0	5	6	0	26	1	0	0	6	0	24					68	274
2:15 PM	0	0	5	6	0	23	3	0	0	3	0	25					65	271
2:30 PM	0	0	5	3	0	17	2	0	0	2	0	24					53	275
2:45 PM	0	0	8	1	0	44	2	0	0	3	0	30					88	280
3:00 PM	0	0	8	7	0	22	1	0	0	4	0	23					65	239
3:15 PM	0	0	5	0	0	34	1	0	0	2	0	27					69	
3:30 PM	0	0	5	4	0	17	1	0	1	1	0	29					58	
3:45 PM	0	0	4	1	0	20	0	0	0	3	0	19					47	
Count Total	0	0	45	28	0	203	11	0	1	24	0	201					513	
Peak Hour	0	0	26	12	0	117	5	0	1	10	0	109					280	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	alk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	1	1	2		4	2:00 PM	1	0	0		1
2:15 PM	0	1	1		2	2:15 PM	0	0	0		0
2:30 PM	0	3	1		4	2:30 PM	0	0	0		0
2:45 PM	0	1	1		2	2:45 PM	1	0	0		1
3:00 PM	0	1	1		2	3:00 PM	0	0	0		0
3:15 PM	0	0	0		0	3:15 PM	0	0	0		0
3:30 PM	0	2	0		2	3:30 PM	0	0	0		0
3:45 PM	0	0	0		0	3:45 PM	0	0	0		0
Count Total	1	9	6		16	Count Total	2	0	0		2
Peak Hour	0	4	2		6	Peak Hour	1	0	0		1



Location: 11 DOUGLAS MUNRO BLVD & W 1ST ST PM Date: Friday, August 16, 2019 Peak Hour: 02:00 PM - 03:00 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**





## Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 1 East	ST ST bound			W 1 West	ST ST bound		DOU	JGLAS N North	IUNRO E Ibound	LVD	DOU	IGLAS N South	IUNRO B nbound	LVD		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	19	78	43	0	20	48	23	0	21	10	43	0	18	16	9	348	1,318
2:15 PM	0	12	55	37	0	9	57	23	0	15	12	40	0	21	12	4	297	1,270
2:30 PM	0	16	85	58	0	13	36	21	0	19	14	29	0	12	12	5	320	1,259
2:45 PM	0	25	66	56	0	12	44	25	0	19	15	36	0	26	25	4	353	1,224
3:00 PM	0	12	74	48	0	10	44	20	0	11	12	42	0	10	14	3	300	1,153
3:15 PM	0	8	60	44	0	11	32	30	0	11	11	32	0	16	28	3	286	
3:30 PM	0	15	57	29	0	14	45	29	0	26	11	27	0	17	11	4	285	
3:45 PM	0	16	55	57	0	16	41	12	0	10	11	33	0	13	15	3	282	
Count Total	0	123	530	372	0	105	347	183	0	132	96	282	0	133	133	35	2,471	
Peak Hour	0	72	284	194	0	54	185	92	0	74	51	148	0	77	65	22	1,318	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	8	1	4	3	16	2:00 PM	0	0	0	0	0
2:15 PM	4	3	8	1	16	2:15 PM	0	0	0	0	0
2:30 PM	8	2	1	1	12	2:30 PM	0	0	0	0	0
2:45 PM	4	0	5	1	10	2:45 PM	0	0	0	0	0
3:00 PM	6	0	3	1	10	3:00 PM	0	2	0	0	2
3:15 PM	1	0	4	0	5	3:15 PM	0	7	0	0	7
3:30 PM	11	0	4	1	16	3:30 PM	0	2	1	0	3
3:45 PM	9	1	1	2	13	3:45 PM	1	7	0	0	8
Count Total	51	7	30	10	98	Count Total	1	18	1	0	20
Peak Hour	24	6	18	6	54	Peak Hour	0	0	0	0	0



**Peak Hour** 





**Traffic Counts - All Vehicles** 

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**Heavy Vehicles** 

Location: 12 PINE ST & W 1ST ST PM

Date: Friday, August 16, 2019 Peak Hour: 02:45 PM - 03:45 PM

Pedestrians/Bicycles in Crosswalk



		_W 1	ST ST			W 1	ST ST			PIN	E ST			PIN	E ST			
Interval Chart Times		East	bound	5		West	tbound			North	bound	5		South	nbound	<b>B</b>		Rolling
Start Time	U-Turn	Left	l hru	Right	U-Turn	Left	l hru	Right	U-Turn	Left	l hru	Right	U-Turn	Left	l hru	Right	Total	Hour
2:00 PM	0	0	145	3	0	23	88	0	0	6	0	28	0	0	0	0	293	1,145
2:15 PM	0	0	131	2	0	17	102	0	0	6	0	31	0	0	0	0	289	1,146
2:30 PM	0	0	138	5	0	15	81	0	0	2	0	34	0	0	0	0	275	1,130
2:45 PM	0	0	138	7	0	14	88	0	0	10	0	30	0	0	0	1	288	1,155
3:00 PM	0	1	139	3	0	15	89	0	0	8	0	37	0	0	0	2	294	1,144
3:15 PM	0	2	110	6	0	20	87	0	0	8	0	37	0	0	2	1	273	
3:30 PM	1	0	136	2	0	18	102	0	0	3	0	38	0	0	0	0	300	
3:45 PM	0	2	119	1	0	19	94	0	0	7	0	33	0	1	0	1	277	
Count Total	1	5	1,056	29	0	141	731	0	0	50	0	268	0	1	2	5	2,289	
Peak Hour	1	3	523	18	0	67	366	0	0	29	0	142	0	0	2	4	1,155	
offic Count		v Voh		and D	odoctr	ione/		loc in	Croco	walk								-

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	8	1	4	0	13	2:00 PM	3	0	0	2	5
2:15 PM	3	2	10	0	15	2:15 PM	3	0	0	1	4
2:30 PM	9	2	0	0	11	2:30 PM	2	2	0	1	5
2:45 PM	1	4	3	0	8	2:45 PM	1	3	0	1	5
3:00 PM	5	0	3	2	10	3:00 PM	2	0	0	0	2
3:15 PM	3	0	4	2	9	3:15 PM	2	0	0	0	2
3:30 PM	10	4	5	0	19	3:30 PM	3	1	0	0	4
3:45 PM	11	1	1	0	13	3:45 PM	0	1	0	0	1
Count Total	50	14	30	4	98	Count Total	16	7	0	5	28
Peak Hour	19	8	15	4	46	Peak Hour	8	4	0	1	13



Location: 13 N STAFFORD AVE & W 2ND ST PM Date: Friday, August 16, 2019 Peak Hour: 02:30 PM - 03:30 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**



 EB
 5.2%
 0.93

 WB
 2.1%
 0.86

 NB
 4.7%
 0.86

 SB
 0.0%
 0.68

 All
 4.0%
 0.95



Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 2 East	ND ST bound			W 2 West	ND ST bound		1	N STAFF North	ORD AV	E	Ν	I STAFF South	ORD AVE	Ξ		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	3	58	20	0	5	59	0	0	15	4	3	0	2	1	9	179	753
2:15 PM	0	4	56	19	0	5	51	0	0	26	2	5	0	3	3	4	178	754
2:30 PM	0	5	77	17	0	7	52	2	0	24	5	8	0	0	1	1	199	759
2:45 PM	0	2	70	21	0	7	58	3	0	17	5	4	0	2	5	3	197	746
3:00 PM	0	2	60	27	0	5	48	1	0	25	2	3	0	1	4	2	180	741
3:15 PM	0	6	60	21	0	4	46	1	0	28	4	2	0	1	1	9	183	
3:30 PM	0	4	58	23	0	7	52	3	0	21	3	7	0	4	0	4	186	
3:45 PM	0	5	53	29	0	4	60	2	0	21	4	5	0	2	3	4	192	
Count Total	0	31	492	177	0	44	426	12	0	177	29	37	0	15	18	36	1,494	
Peak Hour	0	15	267	86	0	23	204	7	0	94	16	17	0	4	11	15	759	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles or	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	3	0	5	0	8	2:00 PM	0	0	0	0	0
2:15 PM	4	3	1	0	8	2:15 PM	0	3	1	2	6
2:30 PM	5	2	1	0	8	2:30 PM	0	0	0	0	0
2:45 PM	4	2	2	0	8	2:45 PM	0	1	0	1	2
3:00 PM	7	1	0	0	8	3:00 PM	1	1	1	0	3
3:15 PM	3	1	2	0	6	3:15 PM	0	0	0	0	0
3:30 PM	1	2	0	0	3	3:30 PM	1	1	0	1	3
3:45 PM	2	0	1	0	3	3:45 PM	5	0	0	0	5
Count Total	29	11	12	0	52	Count Total	7	6	2	4	19
Peak Hour	19	6	5	0	30	Peak Hour	1	2	1	1	5



Location: 14 S CLE ELUM WAY & W 1ST ST PM Date: Friday, August 16, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net

**Peak Hour** 





#### **Heavy Vehicles** 8 6 I 0 13 18 26 27 1 n 0 Ċ. I 1 15 13

Pedestrians/Bicycles in Crosswalk



# Traffic Counts - All Vehicles

Interval		W 1 East	ST ST bound			W 1 West	ST ST bound			S CLE EI North	UM WA	Y	N	I STAFF South	ORD AVE	Ξ		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	9	125	29	0	13	81	5	0	19	11	25	0	1	17	9	344	1,389
2:15 PM	0	13	143	15	0	14	95	7	0	14	9	15	0	4	17	10	356	1,411
2:30 PM	0	18	131	17	0	21	75	11	0	13	12	17	0	4	13	8	340	1,378
2:45 PM	0	10	149	20	0	13	75	2	0	15	12	18	0	10	15	10	349	1,401
3:00 PM	0	15	143	17	0	13	81	3	0	18	12	25	0	5	19	15	366	1,412
3:15 PM	0	17	110	21	0	19	79	5	0	12	16	18	0	6	12	8	323	
3:30 PM	0	11	126	29	0	11	89	8	0	27	10	23	0	2	20	7	363	
3:45 PM	0	10	127	27	0	19	84	9	0	17	11	17	0	10	20	9	360	
Count Total	0	103	1,054	175	0	123	659	50	0	135	93	158	0	42	133	76	2,801	_
Peak Hour	0	53	506	94	0	62	333	25	0	74	49	83	0	23	71	39	1,412	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles or	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	9	1	3	2	15	2:00 PM	0	1	0	0	1
2:15 PM	5	6	6	3	20	2:15 PM	0	0	0	0	0
2:30 PM	11	1	2	2	16	2:30 PM	0	0	0	0	0
2:45 PM	4	8	2	2	16	2:45 PM	0	0	0	0	0
3:00 PM	4	3	2	4	13	3:00 PM	0	4	0	0	4
3:15 PM	0	3	5	1	9	3:15 PM	0	0	0	0	0
3:30 PM	9	7	3	0	19	3:30 PM	2	2	0	0	4
3:45 PM	13	0	4	3	20	3:45 PM	5	1	0	0	6
Count Total	55	29	27	17	128	Count Total	7	8	0	0	15
Peak Hour	26	13	14	8	61	Peak Hour	7	7	0	0	14



Location: 15 N OAKES AVE & W 2ND ST PM Date: Friday, August 16, 2019 Peak Hour: 02:15 PM - 03:15 PM

Peak Hour



	HV%	PHF
EB	4.0%	0.86
WB	1.8%	0.84
NB	3.3%	0.64
SB	0.0%	0.48
All	3.1%	0.91



Pedestrians/Bicycles in Crosswalk



## **Traffic Counts - All Vehicles**

Interval		W 2 East	ND ST bound			W 2 West	ND ST bound			N OAK North	ES AVE			N OAK South	ES AVE bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	2	42	16	0	2	37	0	0	21	0	4	0	0	0	2	126	541
2:15 PM	0	0	36	21	0	0	33	2	0	18	3	3	0	1	1	2	120	551
2:30 PM	0	2	45	33	0	4	44	0	0	16	0	3	0	1	1	2	151	541
2:45 PM	0	2	51	21	0	0	33	0	0	31	4	1	0	0	0	1	144	537
3:00 PM	0	0	44	20	0	8	40	1	0	13	0	0	0	1	5	4	136	530
3:15 PM	0	4	36	18	0	0	29	0	0	17	0	0	0	0	5	1	110	
3:30 PM	0	3	42	25	0	1	41	1	0	17	5	7	0	1	1	3	147	
3:45 PM	0	5	44	10	0	1	48	1	0	21	3	1	0	0	2	1	137	
Count Total	0	18	340	164	0	16	305	5	0	154	15	19	0	4	15	16	1,071	
Peak Hour	0	4	176	95	0	12	150	3	0	78	7	7	0	3	7	9	551	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles or	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	3	3	2	0	8	2:00 PM	0	0	0	0	0
2:15 PM	3	0	1	0	4	2:15 PM	0	0	0	1	1
2:30 PM	3	0	2	0	5	2:30 PM	0	0	0	1	1
2:45 PM	2	2	0	0	4	2:45 PM	2	2	2	0	6
3:00 PM	3	1	0	0	4	3:00 PM	0	0	0	0	0
3:15 PM	2	2	0	0	4	3:15 PM	0	0	0	0	0
3:30 PM	2	1	1	0	4	3:30 PM	0	2	0	0	2
3:45 PM	0	0	1	0	1	3:45 PM	0	0	0	0	0
Count Total	18	9	7	0	34	Count Total	2	4	2	2	10
Peak Hour	11	3	3	0	17	Peak Hour	2	2	2	2	8



Location: 16 N OAKES AVE & W 2ND ST PM Date: Friday, August 16, 2019 Peak Hour: 02:15 PM - 03:15 PM

Peak Hour







Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 2 East	ND ST bound			W 2 West	ND ST bound			N OAK North	ES AVE			N OAK South	ES AVE			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	3	106	44	0	8	88	9	0	23	15	7	0	8	8	2	321	1,308
2:15 PM	0	6	124	38	0	11	79	13	0	26	5	4	0	9	12	2	329	1,331
2:30 PM	0	2	114	43	0	8	86	12	0	19	5	10	0	10	18	4	331	1,303
2:45 PM	0	2	115	44	0	10	75	14	0	20	18	2	0	16	8	3	327	1,305
3:00 PM	0	1	121	63	0	6	75	5	0	23	8	12	0	9	18	3	344	1,290
3:15 PM	0	2	107	30	0	8	87	9	0	19	9	6	0	5	13	6	301	
3:30 PM	0	5	112	35	0	13	91	15	0	15	5	8	0	13	17	4	333	
3:45 PM	0	5	114	30	0	10	95	7	0	16	14	8	0	6	7	0	312	
Count Total	0	26	913	327	0	74	676	84	0	161	79	57	0	76	101	24	2,598	_
Peak Hour	0	11	474	188	0	35	315	44	0	88	36	28	0	44	56	12	1,331	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
2:00 PM	6	5	2	2	15	2:00 PM	0	2	0	17	19
2:15 PM	4	1	5	3	13	2:15 PM	0	0	0	9	9
2:30 PM	5	1	2	3	11	2:30 PM	0	0	0	2	2
2:45 PM	7	4	3	2	16	2:45 PM	0	1	0	4	5
3:00 PM	3	2	0	2	7	3:00 PM	0	5	0	7	12
3:15 PM	3	4	3	2	12	3:15 PM	0	1	0	6	7
3:30 PM	13	1	4	2	20	3:30 PM	0	2	0	11	13
3:45 PM	11	1	3	0	15	3:45 PM	2	9	1	2	14
Count Total	52	19	22	16	109	Count Total	2	20	1	58	81
Peak Hour	19	8	10	10	47	Peak Hour	0	6	0	22	28



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Location: 17 N PENNSYLVANIA AVE & W 2ND ST PM Date: Friday, August 16, 2019 Peak Hour: 02:15 PM - 03:15 PM

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Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 2 East	ND ST bound			W 2 West	ND ST bound		N F	PENNSY North	LVANIA /	AVE	ΝP	ENNSYL South	VANIA A	VE		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	4	31	9	0	1	23	3	0	14	1	6	0	2	0	1	95	399
2:15 PM	0	3	29	12	1	4	19	0	0	11	2	7	0	0	2	3	93	405
2:30 PM	0	5	29	14	1	3	33	1	0	14	2	6	0	1	3	1	113	395
2:45 PM	0	1	38	14	0	3	24	0	0	8	6	2	0	0	1	1	98	381
3:00 PM	0	1	30	13	0	2	29	1	0	16	1	5	0	1	0	2	101	402
3:15 PM	0	0	26	12	0	7	17	1	1	7	2	4	0	1	3	2	83	
3:30 PM	0	1	36	14	0	2	32	0	0	9	0	4	0	0	1	0	99	
3:45 PM	0	1	33	15	0	6	34	0	0	17	1	7	0	2	3	0	119	
Count Total	0	16	252	103	2	28	211	6	1	96	15	41	0	7	13	10	801	
Peak Hour	0	10	126	53	2	12	105	2	0	49	11	20	0	2	6	7	405	_

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk							
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total			
2:00 PM	2	0	2	1	5	2:00 PM	0	1	11	2	14			
2:15 PM	1	0	1	0	2	2:15 PM	1	2	4	1	8			
2:30 PM	1	3	0	0	4	2:30 PM	0	2	20	1	23			
2:45 PM	0	1	0	0	1	2:45 PM	0	1	7	0	8			
3:00 PM	1	0	1	0	2	3:00 PM	3	2	10	5	20			
3:15 PM	0	0	0	0	0	3:15 PM	2	5	4	1	12			
3:30 PM	0	0	0	0	0	3:30 PM	0	0	3	0	3			
3:45 PM	0	1	2	0	3	3:45 PM	0	2	3	0	5			
Count Total	5	5	6	1	17	Count Total	6	15	62	10	93			
Peak Hour	3	4	2	0	9	Peak Hour	4	7	41	7	59			



Location: 18 N PENNSYLVANIA AVE & E 1ST ST PM Date: Friday, August 16, 2019 Peak Hour: 02:15 PM - 03:15 PM

#### Peak Hour





# Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 1ST ST Eastbound				E 1ST ST Westbound				N PENNSYLVANIA AVE Northbound				N PENNSYLVANIA AVE Southbound				Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	6	106	2	0	8	89	8	0	4	5	8	0	6	3	8	253	1,043
2:15 PM	0	10	121	6	0	2	84	14	0	1	1	3	0	9	3	12	266	1,050
2:30 PM	0	8	103	5	1	7	96	15	0	0	0	6	0	8	3	11	263	1,033
2:45 PM	0	2	126	5	0	6	77	9	0	2	2	6	0	9	4	13	261	1,037
3:00 PM	0	6	124	8	0	4	72	12	0	7	3	5	0	11	0	8	260	1,047
3:15 PM	0	3	105	9	0	3	86	12	0	0	1	3	0	11	2	14	249	
3:30 PM	0	5	104	7	0	3	100	11	0	6	2	3	0	10	2	14	267	
3:45 PM	0	6	110	3	0	3	96	17	0	2	1	9	0	10	5	9	271	
Count Total	0	46	899	45	1	36	700	98	0	22	15	43	0	74	22	89	2,090	
Peak Hour	0	26	474	24	1	19	329	50	0	10	6	20	0	37	10	44	1,050	_

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk							
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total			
2:00 PM	6	0	3	0	9	2:00 PM	0	1	2	5	8			
2:15 PM	4	1	3	0	8	2:15 PM	3	2	0	5	10			
2:30 PM	5	0	3	0	8	2:30 PM	1	0	1	0	2			
2:45 PM	8	0	3	0	11	2:45 PM	0	2	6	0	8			
3:00 PM	3	0	0	1	4	3:00 PM	0	7	2	2	11			
3:15 PM	3	0	3	1	7	3:15 PM	1	2	0	3	6			
3:30 PM	7	1	2	0	10	3:30 PM	3	4	1	14	22			
3:45 PM	9	1	4	1	15	3:45 PM	2	5	5	2	14			
Count Total	45	3	21	3	72	Count Total	10	23	17	31	81			
Peak Hour	20	1	9	1	31	Peak Hour	4	11	9	7	31			



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**Peak Hour** 





#### **Heavy Vehicles** 10 8 I Î 6 0 0 0 n Î ſ 0 0 0 0 I Î 10 0

Pedestrians/Bicycles in Crosswalk



<b>Traffic Counts - A</b>	ll Vehicles
---------------------------	-------------

Interval Eastbound						I90 WB West	OFFRAM bound	Р	OAKES AVE Northbound				OAKES AVE Southbound					Rollina
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM					0	0	0	26	0	0	7	0	0	0	54	0	87	324
2:15 PM					0	0	0	18	0	0	4	0	0	0	55	0	77	353
2:30 PM					0	0	0	22	0	0	5	0	0	0	52	0	79	357
2:45 PM					0	0	0	26	0	0	0	0	0	0	55	0	81	362
3:00 PM					0	0	0	28	0	0	7	0	0	0	81	0	116	364
3:15 PM					0	1	0	23	0	0	1	0	0	0	56	0	81	
3:30 PM					0	0	0	19	0	0	0	0	0	0	65	0	84	
3:45 PM					0	1	0	32	0	0	5	0	0	0	45	0	83	
Count Total					0	2	0	194	0	0	29	0	0	0	463	0	688	_
Peak Hour					0	2	0	102	0	0	13	0	0	0	247	0	364	_

Interval		He	avy Vehicl	es		Interval	Pedestrians/Bicycles on Crosswalk							
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total			
2:00 PM		0	1	3	4	2:00 PM		0	0	0	0			
2:15 PM		0	1	2	3	2:15 PM		0	0	0	0			
2:30 PM		0	0	3	3	2:30 PM		0	0	0	0			
2:45 PM		0	3	3	6	2:45 PM		0	0	0	0			
3:00 PM		0	6	2	8	3:00 PM		0	0	0	0			
3:15 PM		0	1	2	3	3:15 PM		0	0	0	0			
3:30 PM		0	0	4	4	3:30 PM		0	0	0	0			
3:45 PM		0	1	2	3	3:45 PM		0	0	0	0			
Count Total		0	13	21	34	Count Total		0	0	0	0			
Peak Hour		0	8	10	18	Peak Hour		0	0	0	0			



Location: 20 OAKES AVE & 190 EB ONRAMP PM Date: Friday, August 16, 2019 Peak Hour: 02:45 PM - 03:45 PM

Peak Hour







Pedestrians/Bicycles in Crosswalk



Traffic Counts - A	Il Vehicles
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Interval	Interval Eastbound				I90 EB ONRAMP Westbound				OAKES AVE Northbound				OAKES AVE Southbound					Rollina
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM					0	0	0	0	0	0	7	4	0	51	4	0	66	238
2:15 PM					0	0	0	0	0	0	4	0	0	51	4	0	59	261
2:30 PM					0	0	0	0	0	0	5	0	0	47	4	0	56	260
2:45 PM					0	0	0	0	0	0	0	0	0	56	1	0	57	270
3:00 PM					0	0	0	0	0	0	7	1	0	76	5	0	89	262
3:15 PM					0	0	0	0	0	0	1	0	0	49	8	0	58	
3:30 PM					0	0	0	0	0	0	0	1	0	57	8	0	66	
3:45 PM					0	0	0	0	0	0	5	0	0	37	7	0	49	
Count Total					0	0	0	0	0	0	29	6	0	424	41	0	500	_
Peak Hour					0	0	0	0	0	0	8	2	0	238	22	0	270	_

Interval		He	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk							
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total			
2:00 PM		0	0	3	3	2:00 PM		0	0	0	0			
2:15 PM		0	0	2	2	2:15 PM		0	0	0	0			
2:30 PM		0	0	2	2	2:30 PM		0	0	0	0			
2:45 PM		0	0	4	4	2:45 PM		0	0	0	0			
3:00 PM		0	0	2	2	3:00 PM		0	0	0	0			
3:15 PM		0	0	2	2	3:15 PM		0	0	0	0			
3:30 PM		0	0	4	4	3:30 PM		0	0	0	0			
3:45 PM		0	0	3	3	3:45 PM		0	0	0	0			
Count Total		0	0	22	22	Count Total		0	0	0	0			
Peak Hour		0	0	12	12	Peak Hour		0	0	0	0			



Location: 1 WA 903 & E PENNSYLVANIA AVE PM Date: Friday, December 6, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour



EB	0.0%	0.71
WB	0.0%	0.75
NB	1.6%	0.78
SB	3.0%	0.87
All	1.8%	0.96



Pedestrians/Bicycles in Crosswalk



Interval	EF	E PENNSYLVANIA AVE Eastbound				E PENNSYLVANIA AVE Westbound				WA 903 Northbound				WA 903 Southbound				Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	2	2	11	0	2	0	2	0	15	42	2	0	0	22	2	102	380
2:15 PM	0	3	2	8	0	3	1	1	0	6	32	2	0	0	22	1	81	379
2:30 PM	0	2	2	7	0	4	0	0	0	7	46	5	0	0	27	3	103	414
2:45 PM	0	1	2	5	1	0	1	0	0	12	42	2	0	0	24	4	94	423
3:00 PM	0	2	2	7	0	4	0	0	0	9	35	3	0	0	38	1	101	444
3:15 PM	0	7	4	8	0	0	2	1	0	5	50	3	0	0	31	5	116	
3:30 PM	0	1	2	9	0	0	1	1	0	8	49	3	0	2	34	2	112	
3:45 PM	0	3	0	9	0	1	0	2	0	10	67	1	0	1	20	1	115	
Count Total	0	21	16	64	1	14	5	7	0	72	363	21	0	3	218	19	824	_
Peak Hour	0	13	8	33	0	5	3	4	0	32	201	10	0	3	123	9	444	_

Interval		Hea	vy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
2:00 PM	0	2	0	4	6	2:00 PM	0	1	3	7	11		
2:15 PM	0	1	0	3	4	2:15 PM	2	5	1	8	16		
2:30 PM	0	2	0	1	3	2:30 PM	13	1	3	10	27		
2:45 PM	0	1	0	1	2	2:45 PM	4	5	3	3	15		
3:00 PM	0	1	0	2	3	3:00 PM	0	4	2	6	12		
3:15 PM	0	0	0	1	1	3:15 PM	2	6	5	12	25		
3:30 PM	0	0	0	0	0	3:30 PM	5	2	3	6	16		
3:45 PM	0	3	0	1	4	3:45 PM	6	3	3	6	18		
Count Total	0	10	0	13	23	Count Total	32	27	23	58	140		
Peak Hour	0	4	0	4	8	Peak Hour	13	15	13	30	71		



Location: 2 2ND ST & E PACIFIC AVE PM Date: Friday, December 6, 2019 Peak Hour: 03:00 PM - 04:00 PM

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#### **Peak Hour**





**Traffic Counts - Motorized Vehicles** 

#### **Heavy Vehicles** 3 2 I Î 0 ω 0 ٥ 0 Î 1 0 0 $\sim$ 1 5 3

Pedestrians/Bicycles in Crosswalk



Interval	E PACIFIC AVE Eastbound			E PACIFIC AVE Westbound				2ND ST Northbound				2ND ST Southbound					Rolling	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	1	0	3	0	0	0	0	0	1	27	1	0	0	18	1	52	181
2:15 PM	0	1	0	2	0	0	0	1	0	2	28	0	0	0	16	0	50	178
2:30 PM	0	1	0	2	0	2	0	0	0	0	16	1	0	1	12	1	36	180
2:45 PM	0	0	0	1	0	1	0	1	0	1	26	0	0	0	13	0	43	196
3:00 PM	0	0	0	2	0	0	0	1	1	4	21	1	0	0	19	0	49	220
3:15 PM	0	1	0	2	0	1	0	0	0	1	27	0	0	0	20	0	52	
3:30 PM	0	0	0	3	0	0	1	1	0	2	29	0	0	0	16	0	52	
3:45 PM	0	1	0	2	0	1	0	0	0	1	34	1	0	0	25	2	67	
Count Total	0	5	0	17	0	5	1	4	1	12	208	4	0	1	139	4	401	_
Peak Hour	0	2	0	9	0	2	1	2	1	8	111	2	0	0	80	2	220	_

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB Total		Start Time	EB	NB	WB	SB	Total		
2:00 PM	0	1	0	1	2	2:00 PM	0	1	1	0	2		
2:15 PM	0	2	0	1	3	2:15 PM	1	8	0	0	9		
2:30 PM	0	0	0	1	1	2:30 PM	0	0	0	0	0		
2:45 PM	1	1	0	0	2	2:45 PM	0	0	0	0	0		
3:00 PM	1	1	0	0	2	3:00 PM	0	0	0	0	0		
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0		
3:30 PM	1	0	0	1	2	3:30 PM	0	0	0	0	0		
3:45 PM	0	2	0	2	4	3:45 PM	0	0	0	0	0		
Count Total	3	7	0	6	16	Count Total	1	9	1	0	11		
Peak Hour	2	3	0	3	8	Peak Hour	0	0	0	0	0		



 Date:
 Friday, December 6, 2019

 Peak Hour:
 03:00 PM - 04:00 PM

Location: 3 MORREL RD & WA 903 PM

#### **Peak Hour**



EB	4.7%	0.77
WB	0.0%	0.73
NB	11.1%	0.90
SB	0.0%	0.75
All	2.4%	0.85

**Traffic Counts - Motorized Vehicles** 



#### Pedestrians/Bicycles in Crosswalk



Interval	WA 903 Eastbound				WA 903 Westbound				MORREL RD Northbound				ROCK ROSE DR Southbound					Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
2:00 PM	0	0	10	0	0	2	10	1	0	0	2	4	0	2	0	0	31	127
2:15 PM	0	0	9	0	0	6	17	6	0	0	0	3	0	0	1	2	44	132
2:30 PM	0	0	6	1	0	0	10	1	0	0	0	2	0	1	0	1	22	134
2:45 PM	0	0	8	1	0	2	11	4	0	0	0	3	0	1	0	0	30	148
3:00 PM	0	0	6	0	0	5	11	4	0	0	2	3	0	5	0	0	36	167
3:15 PM	0	2	11	1	0	2	12	8	0	0	2	3	0	4	0	1	46	
3:30 PM	0	3	6	0	0	1	13	2	0	0	1	4	0	3	0	3	36	
3:45 PM	0	1	13	0	0	4	22	4	0	0	0	3	0	2	0	0	49	
Count Total	0	6	69	3	0	22	106	30	0	0	7	25	0	18	1	7	294	_
Peak Hour	0	6	36	1	0	12	58	18	0	0	5	13	0	14	0	4	167	_

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
2:00 PM	0	1	0	0	1	2:00 PM	0	0	0	0	0		
2:15 PM	0	0	2	1	3	2:15 PM	0	0	0	1	1		
2:30 PM	1	0	0	1	2	2:30 PM	0	0	0	0	0		
2:45 PM	0	0	0	0	0	2:45 PM	0	0	0	0	0		
3:00 PM	0	1	0	0	1	3:00 PM	0	0	0	0	0		
3:15 PM	1	0	0	0	1	3:15 PM	0	0	0	0	0		
3:30 PM	0	1	0	0	1	3:30 PM	0	0	0	0	0		
3:45 PM	1	0	0	0	1	3:45 PM	0	0	0	0	0		
Count Total	3	3	2	2	10	Count Total	0	0	0	1	1		
Peak Hour	2	2	0	0	4	Peak Hour	0	0	0	0	0		

# APPENDIX A (continued)

# **Raw Traffic Counts**

Sunday Data Sheets


Location: 1 BULLFROG RD & I90 WB OFFRAMP PM Date: Sunday, August 18, 2019 Peak Hour: 03:30 PM - 04:30 PM

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**Peak Hour** 





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		I90 WB ONRAMP Eastbound				I90 WB OFFRAMP Westbound				BULLF North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	0	0	0	3	3	5	0	1	25	0	0	0	13	159	209	991
3:15 PM	0	0	0	0	0	0	4	10	0	0	33	0	0	0	22	166	235	1,044
3:30 PM	0	0	0	0	0	2	5	7	0	1	36	0	0	0	16	196	263	1,053
3:45 PM	0	0	0	0	0	3	3	13	0	0	26	0	0	0	17	222	284	1,009
4:00 PM	0	0	0	0	0	2	3	10	0	1	22	0	0	0	13	211	262	943
4:15 PM	0	0	0	0	0	2	0	5	0	0	22	0	0	0	7	208	244	
4:30 PM	0	0	0	0	0	4	1	6	0	3	17	0	0	0	8	180	219	
4:45 PM	0	0	0	0	0	3	3	12	0	0	22	0	0	0	7	171	218	
Count Total	0	0	0	0	0	19	22	68	0	6	203	0	0	0	103	1,513	1,934	
Peak Hour	0	0	0	0	0	9	11	35	0	2	106	0	0	0	53	837	1,053	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1	0	2	3	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	3	3	3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	3	3	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	3	3	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	2	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	2	2	4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	5	6	4:45 PM	0	0	0	0	0
Count Total	0	1	1	20	22	Count Total	0	0	0	0	0
Peak Hour	0	0	0	8	8	Peak Hour	0	0	0	0	0



Location: 2 BULLFROG RD & I90 EB ONRAMP PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net

**Peak Hour** 





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		I90 EB OFFRAMP Eastbound				I90 EB ONRAMP Westbound				BULLF North	ROG RD			BULLFF South	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	19	0	1	0	0	0	0	0	0	3	1	0	12	4	0	40	201
3:15 PM	0	32	0	0	0	0	0	0	0	0	1	1	0	22	0	0	56	200
3:30 PM	0	34	1	1	0	0	0	0	0	0	4	1	0	16	2	0	59	176
3:45 PM	0	26	0	0	0	0	0	0	0	0	0	0	0	18	2	0	46	150
4:00 PM	0	21	1	0	0	0	0	0	0	0	2	0	0	13	2	0	39	135
4:15 PM	0	20	0	1	0	0	0	0	0	0	2	0	0	9	0	0	32	
4:30 PM	0	18	0	0	0	0	0	0	0	0	3	0	0	9	3	0	33	
4:45 PM	0	20	0	0	0	0	0	0	0	0	1	0	0	10	0	0	31	
Count Total	0	190	2	3	0	0	0	0	0	0	16	3	0	109	13	0	336	_
Peak Hour	0	111	1	2	0	0	0	0	0	0	8	3	0	68	8	0	201	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	0	0	0	1	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
Count Total	1	0	0	0	1	Count Total	0	0	0	0	0
Peak Hour	1	0	0	0	1	Peak Hour	0	0	0	0	0



Location: 3 BULLFROG RD & TUMBLE CREEK DR PM Date: Sunday, August 18, 2019 Peak Hour: 03:30 PM - 04:30 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**





Pedestrians/Bicycles in Crosswalk



Traffic Counts - All Vehicles	
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Interval	Т	TUMBLE CREEK DR Eastbound				Westbound				BULLF North	ROG RD			BULLFI Sout	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	1	0	4					0	2	27	0	0	0	159	1	194	969
3:15 PM	0	2	0	3					0	2	34	0	0	0	195	2	238	1,026
3:30 PM	0	4	0	4					0	1	36	0	0	0	207	1	253	1,030
3:45 PM	0	6	0	1					0	1	39	0	0	0	235	2	284	980
4:00 PM	0	1	0	3					0	0	25	0	0	0	216	6	251	927
4:15 PM	0	1	0	4					0	2	23	0	0	0	207	5	242	
4:30 PM	0	3	0	1					0	2	17	0	0	0	175	5	203	
4:45 PM	0	9	0	1					1	1	33	0	0	0	179	7	231	
Count Total	0	27	0	21					1	11	234	0	0	0	1,573	29	1,896	_
Peak Hour	0	12	0	12					0	4	123	0	0	0	865	14	1,030	_

Interval		He	avy Vehicl	es		Interval	Pe	destrians/E	Bicycles o	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1		2	3	3:00 PM	0	0		0	0
3:15 PM	0	0		3	3	3:15 PM	0	0		0	0
3:30 PM	1	0		0	1	3:30 PM	0	0		0	0
3:45 PM	0	0		4	4	3:45 PM	0	0		0	0
4:00 PM	0	0		2	2	4:00 PM	0	0		0	0
4:15 PM	0	0		2	2	4:15 PM	0	0		0	0
4:30 PM	0	0		2	2	4:30 PM	0	0		0	0
4:45 PM	0	0		3	3	4:45 PM	0	0		0	0
Count Total	1	1		18	20	Count Total	0	0		0	0
Peak Hour	1	0		8	9	Peak Hour	0	0		0	0



Location: 4 BULLFROG RD & SUNCADIA TRAIL PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

(303) 216-2439 www.alltrafficdata.net Peak Hour



	110 /0	
EB	0.0%	0.81
WB	0.0%	0.00
NB	0.6%	0.77
SB	1.0%	0.92
All	0.8%	0.92



Pedestrians/Bicycles in Crosswalk



### **Traffic Counts - All Vehicles**

Interval	SUNCADIA TRAIL Eastbound				SUNCADIA TRAIL Westbound					BULLFI North	ROG RD			BULLF Sout	ROG RD			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	21	0	13	0	0	0	0	2	10	16	0	1	0	146	25	234	1,134
3:15 PM	0	26	0	25	0	0	0	0	0	12	25	0	0	0	170	22	280	1,188
3:30 PM	0	22	0	20	0	0	0	0	1	14	27	0	1	0	190	21	296	1,177
3:45 PM	0	10	0	29	0	0	0	0	1	20	29	0	0	0	215	20	324	1,106
4:00 PM	0	15	0	18	0	0	0	0	0	12	13	0	0	0	204	26	288	1,051
4:15 PM	0	10	0	16	0	0	0	0	2	5	20	0	0	0	200	16	269	
4:30 PM	0	22	0	20	0	0	0	0	0	12	9	0	0	0	143	19	225	
4:45 PM	0	17	0	24	0	0	0	0	2	15	24	0	2	0	163	22	269	
Count Total	0	143	0	165	0	0	0	0	8	100	163	0	4	0	1,431	171	2,185	
Peak Hour	0	73	0	92	0	0	0	0	2	58	94	0	1	0	779	89	1,188	_

Interval		Hea	avy Vehicle	es		Interval	Pe	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1	0	2	3	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	3	3	3:15 PM	0	0	0	0	0
3:30 PM	0	1	0	0	1	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	5	5	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	1	1	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	2	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	2	2	4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	4	5	4:45 PM	0	0	0	0	0
Count Total	0	3	0	19	22	Count Total	0	0	0	0	0
Peak Hour	0	1	0	9	10	Peak Hour	0	0	0	0	0



Location: 5 BULLFROG RD & FIREHOUSE RD PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**



EB	7.1%	0.50
WB	0.0%	0.00
NB	0.0%	0.83
SB	1.0%	0.94
All	1.0%	0.97

**Traffic Counts - All Vehicles** 

#### Heavy Vehicles 9 1 I G 0 0 1 n 1 0 0 0 0 1 9 0

#### Pedestrians/Bicycles in Crosswalk



**BULLFROG RD** 

Southbound

Thru

Right

Total

Left

U-Turn

Right

Rolling

Hour

	Interval		FIREH( Eastl	DUSE RD	)		FIREH0 West	OUSE RD bound	)		BULLFF North	ROG RD
_	Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru
	3:00 PM	0	6	0	1	0	0	0	0	0	1	36
	3:15 PM	0	3	0	4	0	0	0	0	0	0	50
	3:30 PM	0	1	0	1	0	0	0	0	0	0	51

3:00 PM	0	6	0	1	0	0	0	0	0	1	36	0	0	0	171	2	217	1,004
3:15 PM	0	3	0	4	0	0	0	0	0	0	50	0	0	0	188	5	250	1,050
3:30 PM	0	1	0	1	0	0	0	0	0	0	51	0	0	0	215	2	270	1,045
3:45 PM	0	1	0	1	0	0	0	0	0	0	39	0	0	0	226	0	267	985
4:00 PM	0	1	0	2	0	0	0	0	0	0	29	0	0	0	231	0	263	940
4:15 PM	0	3	0	2	0	0	0	0	0	1	29	0	0	0	206	4	245	
4:30 PM	0	4	0	1	0	0	1	0	0	0	31	0	0	1	169	3	210	
4:45 PM	0	3	0	0	0	0	0	0	0	0	40	0	0	0	177	2	222	
Count Total	0	22	0	12	0	0	1	0	0	2	305	0	0	1	1,583	18	1,944	
Peak Hour	0	6	0	8	0	0	0	0	0	0	169	0	0	0	860	7	1,050	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	1	0	3	5	3:00 PM	0	0	0	0	0
3:15 PM	1	0	0	2	3	3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	5	5	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	2	2	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	2	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	3	3	4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	3	4	4:45 PM	0	0	0	0	0
Count Total	2	2	0	20	24	Count Total	0	0	0	0	0
Peak Hour	1	0	0	9	10	Peak Hour	0	0	0	0	0



Location: 6 BULLFROG RD & SR 903 PM Date: Sunday, August 18, 2019 Peak Hour: 03:30 PM - 04:30 PM

Peak Hour



	HV%	PHF
EB	0.0%	0.00
WB	1.1%	0.92
NB	0.0%	0.78
SB	0.3%	0.82
All	0.7%	0.94



Pedestrians/Bicycles in Crosswalk



Traffic Counts - All Vehicles	
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Interval		SF East	R 903 bound			SF West	R 903 bound			BULLFI North	ROG RD			SR South	903 Ibound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	0	0	0	107	0	47	2	0	17	19	0	44	59	0	295	1,338
3:15 PM	0	0	0	0	0	152	0	38	2	0	30	18	0	50	45	0	335	1,360
3:30 PM	0	0	0	0	0	174	0	57	3	0	24	21	1	54	32	0	366	1,371
3:45 PM	0	0	0	0	0	169	0	36	3	0	23	16	1	47	47	0	342	1,284
4:00 PM	0	0	0	0	0	179	0	36	1	0	13	12	1	38	37	0	317	1,253
4:15 PM	0	0	0	0	0	145	0	53	0	0	21	13	0	56	58	0	346	
4:30 PM	0	0	0	0	0	126	0	19	0	0	17	20	1	53	43	0	279	
4:45 PM	0	0	0	0	0	142	0	43	1	0	18	24	0	44	39	0	311	
Count Total	0	0	0	0	0	1,194	0	329	12	0	163	143	4	386	360	0	2,591	
Peak Hour	0	0	0	0	0	667	0	182	7	0	81	62	3	195	174	0	1,371	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	2	3	3	8	3:00 PM	0	0	0	0	0
3:15 PM	0	1	5	0	6	3:15 PM	0	0	0	0	0
3:30 PM	0	0	1	0	1	3:30 PM	0	1	0	0	1
3:45 PM	0	0	4	1	5	3:45 PM	0	0	0	0	0
4:00 PM	0	0	2	0	2	4:00 PM	0	0	0	0	0
4:15 PM	0	0	2	0	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	4	1	5	4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1	4:45 PM	0	0	0	0	0
Count Total	0	3	22	5	30	Count Total	0	1	0	0	1
Peak Hour	0	0	9	1	10	Peak Hour	0	1	0	0	1



Location: 7 DENNY AVE & W 2ND ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

Peak Hour





Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	0.8%	0.96
WB	1.4%	0.95
NB		
SB	0.0%	0.75
All	1.2%	0.96

### **Traffic Counts - All Vehicles**

Interval		W 2 East	ND ST bound			W 2 West	ND ST bound			North	nbound			DENN South	Y AVE bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	69	0	0	0	158	2					0	4	0	2	235	1,118
3:15 PM	0	1	67	0	0	0	209	4					0	3	0	2	286	1,167
3:30 PM	0	1	68	0	0	0	230	4					0	1	0	1	305	1,152
3:45 PM	0	0	68	0	0	0	218	3					0	3	0	0	292	1,095
4:00 PM	0	2	59	0	0	0	212	6					0	3	0	2	284	1,057
4:15 PM	0	1	57	0	0	0	200	5					0	5	0	3	271	
4:30 PM	0	1	81	0	0	0	161	2					0	3	0	0	248	
4:45 PM	0	3	68	0	0	0	174	2					0	6	0	1	254	
Count Total	0	9	537	0	0	0	1,562	28					0	28	0	11	2,175	_
Peak Hour	0	4	262	0	0	0	869	17					0	10	0	5	1,167	_

Interval		He	avy Vehicle	s		Interval	Pe	destrians	/Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	3		4	0	7	3:00 PM	0		0	0	0
3:15 PM	1		3	0	4	3:15 PM	0		0	0	0
3:30 PM	0		2	0	2	3:30 PM	0		0	0	0
3:45 PM	1		4	0	5	3:45 PM	0		0	1	1
4:00 PM	0		3	0	3	4:00 PM	0		0	4	4
4:15 PM	0		2	0	2	4:15 PM	0		0	0	0
4:30 PM	0		5	0	5	4:30 PM	0		0	0	0
4:45 PM	0		0	0	0	4:45 PM	0		0	0	0
Count Total	5		23	0	28	Count Total	0		0	5	5
Peak Hour	2		12	0	14	Peak Hour	0		0	5	5



Location: 8 RANGER STATION RD & W 2ND ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:30 PM - 04:30 PM

Peak Hour





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

1.0%

All

0.96

Interval		W 2 East	ND ST bound			W 2 West	ND ST tbound		RA	NGER S. North	TATION	RD		MILLE South	R AVE			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	66	11	0	3	146	1	0	17	1	6	0	0	0	0	251	1,147
3:15 PM	0	0	53	8	0	3	192	0	0	22	0	4	0	1	0	0	283	1,184
3:30 PM	0	0	60	8	0	4	212	0	0	19	0	4	0	0	0	1	308	1,185
3:45 PM	0	0	61	12	0	3	208	1	0	11	0	9	0	0	0	0	305	1,141
4:00 PM	0	0	55	5	0	7	199	0	0	19	0	2	0	0	1	0	288	1,093
4:15 PM	0	0	48	13	0	5	191	0	0	21	0	5	0	1	0	0	284	
4:30 PM	0	0	77	12	0	0	147	3	0	15	1	8	0	0	0	1	264	
4:45 PM	0	0	66	4	0	3	157	0	0	23	0	4	0	0	0	0	257	
Count Total	0	0	486	73	0	28	1,452	5	0	147	2	42	0	2	1	2	2,240	
Peak Hour	0	0	224	38	0	19	810	1	0	70	0	20	0	1	1	1	1,185	_

Interval		Hea	avy Vehicle	es		Interval	Pe	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	0	3	0	4	3:00 PM	0	0	0	0	0
3:15 PM	2	2	2	0	6	3:15 PM	0	1	0	0	1
3:30 PM	0	1	2	0	3	3:30 PM	0	3	0	0	3
3:45 PM	1	1	2	0	4	3:45 PM	0	0	0	0	0
4:00 PM	0	1	2	0	3	4:00 PM	0	0	0	0	0
4:15 PM	0	0	2	0	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	6	0	6	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
Count Total	4	5	19	0	28	Count Total	0	4	0	0	4
Peak Hour	1	3	8	0	12	Peak Hour	0	3	0	0	3



Location: 9 N PINE ST & W 2ND ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

Peak Hour





**Traffic Counts - All Vehicles** 

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#### Heavy Vehicles 0 0 I Î 0 0 C 0 0 11 ٥ n Î ſ 0 0 0 0 1

Pedestrians/Bicycles in Crosswalk



		W 21	ND ST			W 2	ND ST			N PIN	VE ST			N PIN	IE ST			
Interval		East	bound			West	tbound			North	bound			South	bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	63	10	0	2	135	1	0	12	0	4	0	1	0	1	229	1,068
3:15 PM	0	1	54	4	0	2	183	1	0	14	0	3	0	0	0	0	262	1,103
3:30 PM	0	1	62	6	0	2	205	0	0	13	0	1	0	0	0	0	290	1,091
3:45 PM	0	0	62	8	0	1	199	0	0	14	0	3	0	0	0	0	287	1,042
4:00 PM	0	0	49	8	0	1	194	0	0	11	0	0	0	1	0	0	264	985
4:15 PM	0	0	44	10	0	2	179	0	0	14	0	0	0	0	0	1	250	
4:30 PM	0	0	75	11	0	1	140	0	0	11	0	3	0	0	0	0	241	
4:45 PM	0	1	61	8	0	1	149	0	0	9	0	1	0	0	0	0	230	
Count Total	0	3	470	65	0	12	1,384	2	0	98	0	15	0	2	0	2	2,053	
Peak Hour	0	2	227	26	0	6	781	1	0	52	0	7	0	1	0	0	1,103	
		-								-	_	-						-

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	2	1	4	0	7	3:00 PM	0	1	1	0	2
3:15 PM	2	0	3	0	5	3:15 PM	0	1	0	0	1
3:30 PM	1	0	2	0	3	3:30 PM	0	3	0	0	3
3:45 PM	2	1	3	0	6	3:45 PM	0	0	0	0	0
4:00 PM	0	0	2	0	2	4:00 PM	0	0	0	0	0
4:15 PM	0	1	1	0	2	4:15 PM	0	0	0	0	0
4:30 PM	0	0	6	0	6	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	1	0	0	1
Count Total	7	3	21	0	31	Count Total	0	6	1	0	7
Peak Hour	5	1	10	0	16	Peak Hour	0	4	0	0	4



Location: 10 DOUGLAS MUNRO BLVD & RANGER STATION RD PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

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#### **Peak Hour**

DOUGLAS MUNRO BLVD

12

41

0

25

16

DOUGLAS MUNRO BL

EB WB

NB

SB

All

### All Vehicles

174

S

0

68

HV%

4.9%

0.0%

3.9%

2.9%

1

0

76

69

PHF

0.79

0.84

0.73

0.93

0

٩ź

RANGER STATION RD





Pedestrians/Bicycles in Crosswalk

### **Traffic Counts - All Vehicles**

Interval	DOU	JGLAS I East	MUNRO I bound	BLVD	R/	ANGER : West	STATION bound	I RD	DOL	JGLAS N North	/UNRO E hbound	BLVD		Sout	hbound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	7	1	0	9	0	0	1	1	0	14					33	169
3:15 PM	0	0	8	3	0	14	1	0	0	2	0	19					47	174
3:30 PM	0	0	3	4	0	11	3	0	0	2	0	24					47	172
3:45 PM	0	0	9	4	0	16	1	0	0	2	0	10					42	169
4:00 PM	0	0	5	5	0	11	0	0	0	1	0	16					38	170
4:15 PM	0	0	1	1	0	18	3	0	0	0	0	22					45	
4:30 PM	0	0	5	2	0	14	1	0	0	1	0	21					44	
4:45 PM	0	0	10	2	0	10	1	0	0	1	0	19					43	
Count Total	0	0	48	22	0	103	10	0	1	10	0	145					339	
Peak Hour	0	0	25	16	0	52	5	0	0	7	0	69					174	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles or	Crossw	alk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	1		1	3:00 PM	0	1	0		1
3:15 PM	0	1	0		1	3:15 PM	0	0	0		0
3:30 PM	1	1	0		2	3:30 PM	0	0	0		0
3:45 PM	1	0	0		1	3:45 PM	0	0	0		0
4:00 PM	0	1	0		1	4:00 PM	0	0	0		0
4:15 PM	0	0	0		0	4:15 PM	0	0	0		0
4:30 PM	0	0	0		0	4:30 PM	0	0	0		0
4:45 PM	0	0	1		1	4:45 PM	0	0	0		0
Count Total	2	3	2		7	Count Total	0	1	0		1
Peak Hour	2	3	0		5	Peak Hour	0	0	0		0



Location: 11 DOUGLAS MUNRO BLVD & W 1ST ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

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#### **Peak Hour**





### Pedestrians/Bicycles in Crosswalk



Traffic Counts - All V	/ehicles
	W 1ST ST

		W 1	ST ST			W 1	ST ST		DOL	JGLAS N	IUNRO E	BLVD	DOL	IGLAS N	IUNRO B	LVD		
Interval		East	bound			West	bound			North	nbound			South	nbound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	6	32	34	0	9	92	25	0	18	7	33	0	9	7	2	274	1,061
3:15 PM	0	14	35	28	0	16	75	14	0	12	15	34	0	17	9	6	275	1,048
3:30 PM	0	15	50	26	0	16	58	26	0	17	12	22	0	11	10	6	269	1,005
3:45 PM	0	12	40	27	0	11	59	21	0	23	5	19	0	11	11	4	243	990
4:00 PM	0	14	27	32	0	11	61	20	0	18	17	25	0	18	14	4	261	975
4:15 PM	0	9	32	17	0	14	70	14	0	13	16	21	0	13	9	4	232	
4:30 PM	0	15	36	24	0	9	67	21	0	20	17	22	0	13	7	3	254	
4:45 PM	0	9	25	30	0	13	54	19	0	15	16	22	0	13	9	3	228	
Count Total	0	94	277	218	0	99	536	160	0	136	105	198	0	105	76	32	2,036	_
Peak Hour	0	47	157	115	0	52	284	86	0	70	39	108	0	48	37	18	1,061	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1	3	0	4	3:00 PM	0	0	0	0	0
3:15 PM	1	1	1	0	3	3:15 PM	0	0	0	0	0
3:30 PM	4	1	2	0	7	3:30 PM	0	0	0	0	0
3:45 PM	1	1	1	0	3	3:45 PM	1	0	0	0	1
4:00 PM	2	2	2	0	6	4:00 PM	0	0	0	0	0
4:15 PM	1	0	1	0	2	4:15 PM	0	0	0	0	0
4:30 PM	3	1	1	0	5	4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1	4:45 PM	0	4	0	0	4
Count Total	13	7	11	0	31	Count Total	1	4	0	0	5
Peak Hour	6	4	7	0	17	Peak Hour	1	0	0	0	1



Location: 12 PINE ST & W 1ST ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour



	HV%	PHF
EB	1.1%	0.90
WB	2.1%	0.88
NB	3.5%	0.89
SB	2.6%	0.70
All	1.9%	0.88

**Traffic Counts - All Vehicles** 



Pedestrians/Bicycles in Crosswalk



Interval		W 1 Eastl	ST ST bound			W 1 West	ST ST bound			PIN North	E ST Ibound			PINI South	E ST 1bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	11	93	1	0	20	141	3	0	4	1	19	0	0	1	13	307	1,080
3:15 PM	0	8	93	1	0	10	118	6	0	3	6	14	0	1	2	4	266	1,018
3:30 PM	0	11	83	0	1	15	112	1	0	3	3	13	0	0	0	8	250	993
3:45 PM	1	7	68	3	0	14	126	9	0	3	2	14	0	0	2	8	257	1,001
4:00 PM	0	8	76	1	0	9	112	1	0	3	3	18	0	3	1	10	245	987
4:15 PM	1	7	79	1	0	10	105	4	0	6	2	15	0	1	2	8	241	
4:30 PM	0	5	82	3	0	15	111	5	0	7	4	13	0	0	2	11	258	
4:45 PM	0	4	74	0	0	17	109	5	0	4	1	20	0	1	2	6	243	
Count Total	2	61	648	10	1	110	934	34	0	33	22	126	0	6	12	68	2,067	
Peak Hour	1	37	337	5	1	59	497	19	0	13	12	60	0	1	5	33	1,080	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	1	3	1	5	3:00 PM	0	2	0	0	2
3:15 PM	0	1	3	0	4	3:15 PM	0	0	0	2	2
3:30 PM	2	0	3	0	5	3:30 PM	0	0	0	0	0
3:45 PM	2	1	3	0	6	3:45 PM	0	0	0	0	0
4:00 PM	1	0	1	0	2	4:00 PM	0	0	0	0	0
4:15 PM	2	0	1	0	3	4:15 PM	1	0	0	0	1
4:30 PM	4	0	1	0	5	4:30 PM	0	1	0	0	1
4:45 PM	1	0	0	0	1	4:45 PM	0	0	0	0	0
Count Total	12	3	15	1	31	Count Total	1	3	0	2	6
Peak Hour	4	3	12	1	20	Peak Hour	0	2	0	2	4



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Location: 13 N STAFFORD AVE & W 2ND ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

Peak Hour





**Traffic Counts - All Vehicles** 

#### Heavy Vehicles 0 0 I Î 0 0 C ٥ 9 Î 1 0 0 0 1 1

Pedestrians/Bicycles in Crosswalk



lator ol		W 2	ND ST			W 2	ND ST		١	N STAFF	ORD AV	E	Ν	I STAFF	ORD AVE	=		Delling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	1	57	10	0	9	118	1	0	19	2	1	0	0	3	4	225	1,050
3:15 PM	0	1	42	14	0	13	158	1	0	32	0	1	0	0	2	1	265	1,087
3:30 PM	0	1	50	11	0	6	163	0	0	41	4	2	0	1	1	4	284	1,066
3:45 PM	0	2	39	22	0	4	162	1	0	36	2	3	0	0	2	3	276	1,003
4:00 PM	0	2	36	12	0	4	165	2	0	33	0	5	0	0	2	1	262	963
4:15 PM	0	2	31	12	0	5	156	0	0	23	1	8	0	1	3	2	244	
4:30 PM	0	2	54	15	0	4	110	2	0	26	1	2	0	0	5	0	221	
4:45 PM	0	5	44	15	0	6	127	2	0	25	1	2	0	2	4	3	236	
Count Total	0	16	353	111	0	51	1,159	9	0	235	11	24	0	4	22	18	2,013	
Peak Hour	0	6	167	59	0	27	648	4	0	142	6	11	0	1	7	9	1,087	

Interval		Hea	avy Vehicle	S		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	0	3	0	4	3:00 PM	0	1	1	2	4
3:15 PM	2	1	1	0	4	3:15 PM	1	0	2	2	5
3:30 PM	1	0	2	0	3	3:30 PM	0	3	0	0	3
3:45 PM	2	0	3	0	5	3:45 PM	0	0	0	4	4
4:00 PM	1	0	2	0	3	4:00 PM	3	0	0	2	5
4:15 PM	0	0	1	0	1	4:15 PM	0	0	0	3	3
4:30 PM	0	0	6	0	6	4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0	4:45 PM	0	1	0	0	1
Count Total	7	1	18	0	26	Count Total	4	6	3	13	26
Peak Hour	6	1	8	0	15	Peak Hour	4	3	2	8	17



Location: 14 S CLE ELUM WAY & W 1ST ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

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#### **Peak Hour**





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

1.0%

1.9%

0.83 0.96

SB

All

Interval		W 1 Eastl	ST ST bound			W 1 West	ST ST bound		2	S CLE EI North	_UM WA` bound	Ý	Ν	I STAFF South	ORD AVE	Ē		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	1	86	25	0	17	135	13	0	20	8	12	0	3	12	8	340	1,302
3:15 PM	0	2	86	20	0	7	119	27	0	14	8	16	0	6	17	7	329	1,255
3:30 PM	0	7	71	16	0	19	108	21	0	17	20	16	0	5	11	4	315	1,207
3:45 PM	0	5	73	13	0	14	118	27	0	19	8	15	0	5	14	7	318	1,201
4:00 PM	0	2	68	17	0	25	98	22	0	16	11	11	0	1	18	4	293	1,179
4:15 PM	0	5	77	18	0	8	97	17	0	18	11	12	0	3	11	4	281	
4:30 PM	0	4	63	22	0	20	114	14	0	12	10	22	0	6	17	5	309	
4:45 PM	0	1	69	28	0	16	115	17	0	10	9	6	0	1	14	10	296	
Count Total	0	27	593	159	0	126	904	158	0	126	85	110	0	30	114	49	2,481	_
Peak Hour	0	15	316	74	0	57	480	88	0	70	44	59	0	19	54	26	1,302	_

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
3:00 PM	2	0	6	0	8	3:00 PM	0	0	0	0	0		
3:15 PM	0	1	2	0	3	3:15 PM	0	1	0	0	1		
3:30 PM	4	1	2	0	7	3:30 PM	0	0	0	0	0		
3:45 PM	3	0	3	1	7	3:45 PM	0	0	2	0	2		
4:00 PM	1	0	1	0	2	4:00 PM	3	0	0	0	3		
4:15 PM	2	0	1	0	3	4:15 PM	0	0	1	0	1		
4:30 PM	3	0	2	0	5	4:30 PM	1	0	0	0	1		
4:45 PM	2	0	0	0	2	4:45 PM	0	0	0	0	0		
Count Total	17	2	17	1	37	Count Total	4	1	3	0	8		
Peak Hour	9	2	13	1	25	Peak Hour	0	1	2	0	3		



Location: 15 N OAKES AVE & W 2ND ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

**Peak Hour** 







Pedestrians/Bicycles in Crosswalk



Interval Start Time	W 2ND ST Eastbound			W 2ND ST Westbound			N OAKES AVE Northbound				N OAK South	ES AVE nbound			Rolling			
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	6	33	15	0	0	43	0	0	82	2	0	0	0	2	5	188	845
3:15 PM	0	0	27	12	0	1	60	0	0	107	1	3	0	1	3	1	216	866
3:30 PM	0	2	38	11	0	1	56	0	0	109	3	1	0	0	0	0	221	838
3:45 PM	0	2	28	19	0	2	44	1	0	114	1	1	0	2	4	2	220	798
4:00 PM	0	0	25	10	0	1	46	1	0	122	0	4	0	0	0	0	209	763
4:15 PM	0	1	23	10	0	0	32	1	0	113	2	3	0	0	2	1	188	
4:30 PM	0	2	36	19	0	0	32	1	0	84	1	3	0	1	1	1	181	
4:45 PM	0	2	25	16	0	2	36	1	0	90	8	2	0	1	0	2	185	
Count Total	0	15	235	112	0	7	349	5	0	821	18	17	0	5	12	12	1,608	
Peak Hour	0	4	118	52	0	5	206	2	0	452	5	9	0	3	7	3	866	_

Interval		Hea	avy Vehicle	s		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
3:00 PM	0	4	0	0	4	3:00 PM	0	0	0	0	0		
3:15 PM	1	1	0	0	2	3:15 PM	0	0	0	0	0		
3:30 PM	1	1	1	0	3	3:30 PM	0	0	0	0	0		
3:45 PM	2	3	0	1	6	3:45 PM	0	1	1	0	2		
4:00 PM	0	2	0	0	2	4:00 PM	0	0	0	0	0		
4:15 PM	0	1	0	0	1	4:15 PM	0	0	0	0	0		
4:30 PM	0	4	2	0	6	4:30 PM	0	0	2	0	2		
4:45 PM	0	1	0	0	1	4:45 PM	1	0	0	0	1		
Count Total	4	17	3	1	25	Count Total	1	1	3	0	5		
Peak Hour	4	7	1	1	13	Peak Hour	0	1	1	0	2		



Location: 16 N OAKES AVE & W 2ND ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

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**Peak Hour** 



EB	1.5%	0.85
WB	1.1%	0.96
NB	1.9%	0.88
SB	3.0%	0.61
All	1.5%	0.98

**Traffic Counts - All Vehicles** 

#### **Heavy Vehicles** I Î N ባ ъ ω

Pedestrians/Bicycles in Crosswalk



N OAKES AVE

Southbound

Thru

Right

Total

3,041

1,577

Left

Rolling

Hour

1,576

1,577

1,532

1,532

1,465

Interval		W 2ND ST Westbound				N OAKES AVE Northbound							
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn
3:00 PM	0	4	70	30	0	19	141	63	0	19	15	5	0
3:15 PM	0	6	78	32	0	8	123	52	0	36	49	3	0
3:30 PM	0	3	65	32	0	8	103	63	0	43	49	11	0
3:45 PM	0	0	69	20	0	7	104	56	0	47	64	6	0
4:00 PM	0	4	62	24	0	6	108	65	0	36	60	9	0
4:15 PM	0	3	67	25	0	8	89	50	0	34	63	6	0

4:30 PM 4:45 PM Count Total Peak Hour 

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
3:00 PM	2	1	10	0	13	3:00 PM	0	2	4	5	11		
3:15 PM	0	1	1	0	2	3:15 PM	2	4	2	0	8		
3:30 PM	3	2	2	1	8	3:30 PM	0	4	0	10	14		
3:45 PM	3	2	4	1	10	3:45 PM	4	2	3	2	11		
4:00 PM	0	3	1	0	4	4:00 PM	2	3	0	0	5		
4:15 PM	2	1	1	0	4	4:15 PM	0	1	0	0	1		
4:30 PM	3	6	0	0	9	4:30 PM	0	3	2	0	5		
4:45 PM	2	1	1	0	4	4:45 PM	0	7	6	0	13		
Count Total	15	17	20	2	54	Count Total	8	26	17	17	68		
Peak Hour	6	8	8	2	24	Peak Hour	8	13	5	12	38		



Location: 17 N PENNSYLVANIA AVE & W 2ND ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

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#### **Peak Hour**





### Pedestrians/Bicycles in Crosswalk



## Traffic Counts - All Vehicles

Interval		W 2ND ST Eastbound			W 2ND ST Westbound			N PENNSYLVANIA AVE Northbound			N P	ENNSYI South	VANIA A	AVE		Rolling		
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	28	5	0	4	29	1	0	9	3	2	0	1	4	1	87	375
3:15 PM	0	3	20	6	0	4	47	1	0	15	1	4	0	0	0	0	101	371
3:30 PM	0	1	26	14	0	2	40	0	0	15	0	1	0	0	1	1	101	336
3:45 PM	0	1	23	5	0	2	34	0	1	12	3	2	0	0	2	1	86	320
4:00 PM	0	3	19	7	0	4	30	0	0	16	1	1	0	0	1	1	83	301
4:15 PM	0	0	21	6	0	0	21	1	0	11	2	1	0	0	2	1	66	
4:30 PM	0	0	32	9	0	1	20	0	0	17	0	3	0	0	3	0	85	
4:45 PM	0	0	17	9	0	1	26	0	0	7	2	1	0	0	0	4	67	
Count Total	0	8	186	61	0	18	247	3	1	102	12	15	0	1	13	9	676	_
Peak Hour	0	5	97	30	0	12	150	2	1	51	7	9	0	1	7	3	375	_

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
3:00 PM	0	0	0	0	0	3:00 PM	0	1	4	0	5		
3:15 PM	1	0	0	0	1	3:15 PM	0	0	4	0	4		
3:30 PM	0	0	1	0	1	3:30 PM	0	0	2	1	3		
3:45 PM	1	0	0	0	1	3:45 PM	0	0	0	0	0		
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0		
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0		
4:30 PM	0	1	0	0	1	4:30 PM	0	0	1	0	1		
4:45 PM	0	0	0	0	0	4:45 PM	0	1	0	0	1		
Count Total	2	1	1	0	4	Count Total	0	2	11	1	14		
Peak Hour	2	0	1	0	3	Peak Hour	0	1	10	1	12		



Location: 18 N PENNSYLVANIA AVE & E 1ST ST PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		W 1ST ST Eastbound			E 1ST ST Westbound			N PENNSYLVANIA AVE Northbound			ΝΡ	ENNSYL South	_VANIA A	VE		Rolling		
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	4	69	5	0	2	209	9	0	0	2	3	0	2	1	6	312	1,163
3:15 PM	0	2	75	3	0	8	181	14	0	1	3	4	0	11	4	5	311	1,138
3:30 PM	0	2	69	7	0	3	167	10	0	2	3	2	0	9	3	4	281	1,070
3:45 PM	0	6	72	3	0	3	150	9	0	1	4	3	0	6	1	1	259	1,073
4:00 PM	0	6	68	4	0	5	168	14	0	4	2	2	0	7	2	5	287	1,037
4:15 PM	0	4	71	1	0	4	136	6	0	3	4	3	0	5	1	5	243	
4:30 PM	0	7	77	4	0	3	152	13	0	6	4	0	0	9	1	8	284	
4:45 PM	0	1	70	2	0	7	118	10	0	2	0	1	0	6	0	6	223	
Count Total	0	32	571	29	0	35	1,281	85	0	19	22	18	0	55	13	40	2,200	
Peak Hour	0	14	285	18	0	16	707	42	0	4	12	12	0	28	9	16	1,163	

Interval		Hea	avy Vehicle	es		Interval	Pedestrians/Bicycles on Crosswalk						
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total		
3:00 PM	3	0	10	0	13	3:00 PM	5	2	0	0	7		
3:15 PM	0	0	1	0	1	3:15 PM	0	2	3	0	5		
3:30 PM	2	0	0	0	2	3:30 PM	0	3	1	1	5		
3:45 PM	1	0	2	0	3	3:45 PM	0	1	0	3	4		
4:00 PM	0	0	2	0	2	4:00 PM	0	5	2	2	9		
4:15 PM	0	0	1	0	1	4:15 PM	0	3	0	0	3		
4:30 PM	1	0	2	0	3	4:30 PM	0	4	3	2	9		
4:45 PM	2	0	1	0	3	4:45 PM	0	2	0	0	2		
Count Total	9	0	19	0	28	Count Total	5	22	9	8	44		
Peak Hour	6	0	13	0	19	Peak Hour	5	8	4	4	21		



Location: 19 OAKES AVE & I90 WB OFFRAMP PM Date: Sunday, August 18, 2019 Peak Hour: 03:30 PM - 04:30 PM

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**Peak Hour** 





**Traffic Counts - All Vehicles** 

#### Heavy Vehicles 5 11 I Î 0 ъ 0 10 0 0 1 1 0 C 6 1

Pedestrians/Bicycles in Crosswalk



OAKES AVE

						190 WB	OFFRAM	Ρ
Interval		East	bound		West	bound		
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	
					_		_	

	Eastb	ound			West	bound			North	bound			South	bound			Rolling
U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
				0	1	0	27	0	0	2	0	0	0	40	0	70	519
				0	1	0	76	0	0	6	0	0	0	54	0	137	595
				0	1	0	106	0	0	11	0	0	0	52	0	170	600
				0	2	0	98	0	0	5	0	0	0	37	0	142	565
				0	0	0	113	0	0	2	0	0	0	31	0	146	568
				0	0	0	100	0	0	4	0	0	0	38	0	142	
				0	0	0	91	0	0	6	0	0	0	38	0	135	
				0	3	0	113	0	0	2	0	0	0	27	0	145	
				0	8	0	724	0	0	38	0	0	0	317	0	1,087	
				0	3	0	417	0	0	22	0	0	0	158	0	600	_
	U-Turn	Eastt U-Turn Left	Eastbound U-Turn Left Thru	Eastbound U-Turn Left Thru Right	Eastbound U-Turm Left Thru Right U-Turm   U-Turm Left Thru Right U-Turm   0 0 0 0 0   U-Turm I I I 0 0   U-Turm I I I 0 0 0   U-Turm I I I I 0 0 0   U-Turm I I I I I 0 <t< td=""><td>Eastbound West   U-Turn Left Thru Right U-Turn Left   I 0 1 0 1   I I 0 1 0 1   I I I 0 1 0 1   I I I I 0 1 0 1   I I I I I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</td><td>Eastbound Westbound   U-Turn Left Thru Right U-Turn Left Thru   0 1 0 0 1 0   0 1 0 0 1 0   0 1 0 0 1 0   0 1 0 0 0 0 0   0 1 1 0<td>Eastbound Westbound   U-Turn Left Thru Right U-Turn Left Thru Right   U-Turn Left Thru Right U-Turn Left Thru Right   U-Turn Left Thru Right 0 1 0 27   U-Turn Left Left 0 1 0 76   U-Turn Left Left Left 0 1 0 76   U-Turn Left Left Left 0 1 0 98   U Left Left Left 0 0 113   U Left Left Left 0 0 91   U U U U U 0 113   U Left Left Left U 0 113   U U U U U U 10 113   U</td><td><math display="block">\begin{tabular}{ c c c c c c } \hline \$Eastbound\$ &amp; \$Vestbound\$ &amp; \$Vestboun</math></td><td>Eastbound Westbound North   U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left U-Turn U-Turn Left U-Turn U-Turn U-Turn Left U-Turn U-Urur U-Urur</td><td><math display="block">\begin{tabular}{ c c c c c c c c c c c c c c c c c c c</math></td><td></td><td></td><td></td><td></td><td>Left Thru Right U-Turn Left Thru Right 0</td><td>Left Thru Right U-Turn Left U-Turn Left</td></td></t<>	Eastbound West   U-Turn Left Thru Right U-Turn Left   I 0 1 0 1   I I 0 1 0 1   I I I 0 1 0 1   I I I I 0 1 0 1   I I I I I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Eastbound Westbound   U-Turn Left Thru Right U-Turn Left Thru   0 1 0 0 1 0   0 1 0 0 1 0   0 1 0 0 1 0   0 1 0 0 0 0 0   0 1 1 0 <td>Eastbound Westbound   U-Turn Left Thru Right U-Turn Left Thru Right   U-Turn Left Thru Right U-Turn Left Thru Right   U-Turn Left Thru Right 0 1 0 27   U-Turn Left Left 0 1 0 76   U-Turn Left Left Left 0 1 0 76   U-Turn Left Left Left 0 1 0 98   U Left Left Left 0 0 113   U Left Left Left 0 0 91   U U U U U 0 113   U Left Left Left U 0 113   U U U U U U 10 113   U</td> <td><math display="block">\begin{tabular}{ c c c c c c } \hline \$Eastbound\$ &amp; \$Vestbound\$ &amp; \$Vestboun</math></td> <td>Eastbound Westbound North   U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left U-Turn U-Turn Left U-Turn U-Turn U-Turn Left U-Turn U-Urur U-Urur</td> <td><math display="block">\begin{tabular}{ c c c c c c c c c c c c c c c c c c c</math></td> <td></td> <td></td> <td></td> <td></td> <td>Left Thru Right U-Turn Left Thru Right 0</td> <td>Left Thru Right U-Turn Left U-Turn Left</td>	Eastbound Westbound   U-Turn Left Thru Right U-Turn Left Thru Right   U-Turn Left Thru Right U-Turn Left Thru Right   U-Turn Left Thru Right 0 1 0 27   U-Turn Left Left 0 1 0 76   U-Turn Left Left Left 0 1 0 76   U-Turn Left Left Left 0 1 0 98   U Left Left Left 0 0 113   U Left Left Left 0 0 91   U U U U U 0 113   U Left Left Left U 0 113   U U U U U U 10 113   U	$\begin{tabular}{ c c c c c c } \hline $Eastbound$ & $Vestbound$ & $Vestboun$	Eastbound Westbound North   U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left Thru Right U-Turn Left U-Turn U-Turn Left U-Turn U-Turn U-Turn Left U-Turn U-Urur U-Urur	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$					Left Thru Right U-Turn Left Thru Right 0	Left Thru Right U-Turn Left

OAKES AVE

Interval		He	avy Vehicle	es		Interval	Р	edestrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM		0	1	0	1	3:00 PM		0	0	0	0
3:15 PM		0	1	0	1	3:15 PM		0	1	0	1
3:30 PM		1	2	1	4	3:30 PM		0	0	0	0
3:45 PM		0	3	2	5	3:45 PM		0	0	0	0
4:00 PM		0	2	1	3	4:00 PM		0	1	0	1
4:15 PM		0	4	1	5	4:15 PM		0	0	0	0
4:30 PM		0	3	3	6	4:30 PM		0	0	0	0
4:45 PM		0	2	1	3	4:45 PM		0	0	0	0
Count Total		1	18	9	28	Count Total		0	2	0	2
Peak Hour		1	11	5	17	Peak Hour		0	1	0	1



Location: 20 OAKES AVE & I90 EB ONRAMP PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

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**Peak Hour** 

All Vehicles 188 24 OAKES AVE I Î 163 24 0 L l 0 w 211 S 163 ባ 1 ٦ OAKES AVE 190 EB ONRAMP 0 0 0 23 23 24 HV% PHF ΕB



Pedestrians/Bicycles in Crosswalk



Traffic	Counts	- All	Vehicles
I I UIIIC	oounto		VCINCICS

1.6%

1.4%

0.84

0.82

SB

All

Interval		East	bound			I90 EB West	ONRAMI bound	C		OAKE North	ES AVE			OAKE South	S AVE bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM					0	0	0	0	0	0	2	0	0	34	5	0	41	211
3:15 PM					0	0	0	0	0	0	6	0	0	48	8	0	62	203
3:30 PM					0	0	0	0	0	0	11	0	0	46	7	0	64	183
3:45 PM					0	0	0	0	0	0	4	0	1	35	4	0	44	166
4:00 PM					0	0	0	0	0	0	2	0	0	27	4	0	33	155
4:15 PM					0	0	0	0	0	0	4	1	0	34	3	0	42	
4:30 PM					0	0	0	0	0	0	8	0	1	36	2	0	47	
4:45 PM					0	0	0	0	0	0	3	0	1	24	5	0	33	
Count Total					0	0	0	0	0	0	40	1	3	284	38	0	366	
Peak Hour					0	0	0	0	0	0	23	0	1	163	24	0	211	_

Interval		Hea	avy Vehicle	s		Interval	Р	edestrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM		0	0	0	0	3:00 PM		0	0	0	0
3:15 PM		0	0	0	0	3:15 PM		0	0	0	0
3:30 PM		0	0	2	2	3:30 PM		0	0	0	0
3:45 PM		0	0	1	1	3:45 PM		0	0	0	0
4:00 PM		0	0	1	1	4:00 PM		0	1	0	1
4:15 PM		0	0	1	1	4:15 PM		0	0	0	0
4:30 PM		0	0	2	2	4:30 PM		0	0	0	0
4:45 PM		0	0	1	1	4:45 PM		0	0	0	0
Count Total		0	0	8	8	Count Total		0	1	0	1
Peak Hour		0	0	3	3	Peak Hour		0	0	0	0





Location: 21 SR 903 RAMP & SR 903 PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

Peak Hour





**Traffic Counts - All Vehicles** 

#### Heavy Vehicles 0 0 I Î 0 0 C 0 17 3 0 1 ٦ ſ 0 0 0 ⇒ 1 2 11

### Pedestrians/Bicycles in Crosswalk



		SF	903			SF	R 903			SR 903	8 RAMP			N D	WY			
Interval		Eastl	bound			West	bound			North	bound			South	bound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	3	47	12	0	0	130	0	0	107	2	0	0	0	2	5	308	1,102
3:15 PM	0	0	66	20	0	1	126	0	0	78	0	0	0	0	1	4	296	1,051
3:30 PM	0	1	53	17	0	0	118	1	0	64	1	2	0	0	1	1	259	968
3:45 PM	0	0	44	19	0	4	99	0	2	62	3	1	0	0	1	4	239	934
4:00 PM	0	0	48	22	0	0	133	0	0	50	0	1	0	2	0	1	257	887
4:15 PM	0	2	46	18	0	0	87	0	1	50	4	1	0	0	1	3	213	
4:30 PM	0	1	47	15	0	1	111	0	1	44	0	2	0	0	1	2	225	
4:45 PM	0	1	58	14	0	0	80	0	1	30	5	0	0	0	2	1	192	
Count Total	0	8	409	137	0	6	884	1	5	485	15	7	0	2	9	21	1,989	
Peak Hour	0	4	210	68	0	5	473	1	2	311	6	3	0	0	5	14	1,102	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	4	2	0	7	3:00 PM	0	0	0	0	0
3:15 PM	1	4	0	0	5	3:15 PM	0	0	0	0	0
3:30 PM	0	3	2	0	5	3:30 PM	0	0	0	0	0
3:45 PM	3	0	2	0	5	3:45 PM	0	0	0	0	0
4:00 PM	1	1	0	0	2	4:00 PM	0	0	0	0	0
4:15 PM	2	1	1	0	4	4:15 PM	0	0	0	1	1
4:30 PM	1	2	3	0	6	4:30 PM	0	0	0	0	0
4:45 PM	1	1	2	0	4	4:45 PM	0	0	0	0	0
Count Total	10	16	12	0	38	Count Total	0	0	0	1	1
Peak Hour	5	11	6	0	22	Peak Hour	0	0	0	0	0



Location: 22 WHITE RD INTERCHANGE & I90 WB RAMPS PM Date: Sunday, August 18, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**





Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		I90 WE East	3 RAMPS bound			I90 WE West	B RAMPS bound	i	WHI	TE RD IN North	ITERCHA	NGE	WHIT	E RD IN South	TERCHA bound	NGE		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	0	0	0	0	0	103	0	0	65	0	0	0	11	74	253	886
3:15 PM	0	0	0	0	0	0	0	71	0	0	58	0	0	0	23	71	223	855
3:30 PM	0	0	0	0	0	0	0	98	0	0	43	0	0	0	18	63	222	843
3:45 PM	0	0	0	0	0	0	0	66	0	0	46	0	0	0	21	55	188	808
4:00 PM	0	0	0	0	0	0	0	53	0	0	46	0	0	0	25	98	222	770
4:15 PM	0	0	0	0	0	0	0	50	0	0	60	0	0	0	22	79	211	
4:30 PM	0	0	0	0	0	0	0	44	0	0	44	0	0	0	14	85	187	
4:45 PM	0	0	0	0	0	0	0	30	0	0	40	0	0	0	14	66	150	
Count Total	0	0	0	0	0	0	0	515	0	0	402	0	0	0	148	591	1,656	
Peak Hour	0	0	0	0	0	0	0	338	0	0	212	0	0	0	73	263	886	_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	2	1	0	3	3:00 PM	0	0	0	0	0
3:15 PM	0	3	3	2	8	3:15 PM	0	0	0	0	0
3:30 PM	0	2	6	6	14	3:30 PM	0	0	0	0	0
3:45 PM	0	3	0	3	6	3:45 PM	0	0	0	0	0
4:00 PM	0	2	2	3	7	4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	2	3	4:15 PM	0	0	0	0	0
4:30 PM	0	1	1	2	4	4:30 PM	0	0	0	0	0
4:45 PM	0	2	2	2	6	4:45 PM	0	0	0	0	0
Count Total	0	15	16	20	51	Count Total	0	0	0	0	0
Peak Hour	0	10	10	11	31	Peak Hour	0	0	0	0	0



Location: 23 WHITE RD INTERCHANGE & I90 EB ONRAMP PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**



	ļ	<b>t</b>
	HV%	PHF
EB	5.6%	0.80
WB	0.0%	0.00
NB		
SB	8.0%	0.88

All	6.3%	0.85

### **Traffic Counts - All Vehicles**

Interval		I90 EB ( East	OFFRAMI bound	Р		I90 EB West	ONRAMF bound	C		Nort	nbound		WHIT	E RD IN South	TERCHA bound	NGE		Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	44	1	0	0	0	0	0					2	10	0	0	57	268
3:15 PM	0	59	2	0	0	0	0	0					0	23	0	0	84	284
3:30 PM	0	42	0	0	0	0	0	0					0	19	0	0	61	282
3:45 PM	0	45	0	0	0	0	0	0					0	21	0	0	66	278
4:00 PM	0	47	1	0	0	0	0	0					0	25	0	0	73	267
4:15 PM	0	59	1	0	0	0	0	0					0	22	0	0	82	
4:30 PM	0	43	0	0	0	0	0	0					1	13	0	0	57	
4:45 PM	0	41	0	0	0	0	0	0					1	13	0	0	55	
Count Total	0	380	5	0	0	0	0	0					4	146	0	0	535	
Peak Hour	0	193	3	0	0	0	0	0					0	88	0	0	284	_

### Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval		He	eavy Vehicle	es		Interval	Pe	destrians	/Bicycles on	Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1		0	0	1	3:00 PM	0		0	0	0
3:15 PM	3		0	0	3	3:15 PM	0		0	0	0
3:30 PM	2		0	3	5	3:30 PM	0		0	0	0
3:45 PM	3		0	3	6	3:45 PM	0		0	0	0
4:00 PM	3		0	1	4	4:00 PM	0		0	0	0
4:15 PM	0		0	1	1	4:15 PM	0		0	0	0
4:30 PM	1		0	1	2	4:30 PM	0		0	0	0
4:45 PM	1		0	0	1	4:45 PM	0		0	0	0
Count Total	14		0	9	23	Count Total	0		0	0	0
Peak Hour	11		0	7	18	Peak Hour	0		0	0	0



Pedestrians/Bicycles in Crosswalk





Location: 24 SR 970 INTERCHANGE & SR 970 PM Date: Sunday, August 18, 2019 Peak Hour: 03:15 PM - 04:15 PM

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#### **Peak Hour**







Pedestrians/Bicycles in Crosswalk



#### **Traffic Counts - All Vehicles**

Interval		SF Eastl	8 903 bound			SF West	R 970 bound		SR	970 INT North	ERCHAN bound	IGE		Sout	hbound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	48	0	0	73	107	0	0	27	0	0					255	944
3:15 PM	0	0	64	0	0	68	111	0	0	16	0	0					259	959
3:30 PM	0	0	54	0	0	61	95	0	0	26	0	0					236	915
3:45 PM	0	0	41	1	0	50	85	0	0	17	0	0					194	913
4:00 PM	0	0	43	2	0	93	125	0	0	7	0	0					270	917
4:15 PM	0	0	49	2	0	78	82	0	0	4	0	0					215	
4:30 PM	0	0	46	0	0	78	110	0	0	0	0	0					234	
4:45 PM	0	0	56	1	0	61	79	0	0	1	0	0					198	
Count Total	0	0	401	6	0	562	794	0	0	98	0	0					1,861	_
Peak Hour	0	0	202	3	0	272	416	0	0	66	0	0					959	_

Interval		Hea	avy Vehicle	es		Interval	Pe	destrians/E	Bicycles on	Crossw	alk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	1	0	2		3	3:00 PM	0	0	0		0
3:15 PM	1	0	1		2	3:15 PM	0	0	0		0
3:30 PM	0	0	3		3	3:30 PM	0	0	0		0
3:45 PM	0	1	0		1	3:45 PM	0	0	0		0
4:00 PM	1	0	2		3	4:00 PM	0	0	0		0
4:15 PM	0	0	2		2	4:15 PM	0	0	0		0
4:30 PM	0	0	4		4	4:30 PM	0	0	0		0
4:45 PM	1	0	4		5	4:45 PM	0	0	0		0
Count Total	4	1	18		23	Count Total	0	0	0		0
Peak Hour	2	1	6		9	Peak Hour	0	0	0		0



Location: 1 WA 903 & E PENNSYLVANIA AVE PM Date: Sunday, December 8, 2019 Peak Hour: 03:00 PM - 04:00 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**



EB	0.0%	0.82
WB	0.0%	0.46
NB	0.0%	0.85
SB	2.4%	0.82
All	0.9%	0.94



#### Pedestrians/Bicycles in Crosswalk



### Traffic Counts - Motorized Vehicles

Interval Start Time	EF	PENNSY East	LVANIA	AVE	EI	PENNSY West	'LVANIA bound	AVE		WA North	903 bound			WA South	903 Ibound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	3	2	4	0	1	0	2	0	10	30	3	0	2	28	4	89	333
3:15 PM	0	0	3	8	0	4	1	2	0	10	20	0	0	0	35	3	86	317
3:30 PM	0	2	0	4	0	3	0	0	0	11	34	2	0	0	21	4	81	323
3:45 PM	0	0	1	9	0	0	0	0	0	11	29	0	0	0	24	3	77	308
4:00 PM	0	3	0	4	0	0	0	2	0	8	25	1	0	1	25	4	73	312
4:15 PM	0	2	2	14	0	1	1	0	0	9	28	2	0	1	27	5	92	
4:30 PM	0	0	1	7	0	1	0	1	0	2	26	3	1	0	23	1	66	
4:45 PM	0	0	3	9	0	6	0	0	0	7	20	4	0	1	28	3	81	
Count Total	0	10	12	59	0	16	2	7	0	68	212	15	1	5	211	27	645	
Peak Hour	0	5	6	25	0	8	1	4	0	42	113	5	0	2	108	14	333	_

Interval		Hea	avy Vehicle	s		Interval	Peo	destrians/E	Bicycles or	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	0	2	2	3:00 PM	5	7	0	6	18
3:15 PM	0	0	0	1	1	3:15 PM	4	0	4	15	23
3:30 PM	0	0	0	0	0	3:30 PM	2	3	1	3	9
3:45 PM	0	0	0	0	0	3:45 PM	4	0	0	7	11
4:00 PM	0	0	0	0	0	4:00 PM	3	1	3	1	8
4:15 PM	0	1	0	1	2	4:15 PM	5	3	4	6	18
4:30 PM	0	0	0	0	0	4:30 PM	0	0	2	5	7
4:45 PM	0	0	0	0	0	4:45 PM	6	1	0	10	17
Count Total	0	1	0	4	5	Count Total	29	15	14	53	111
Peak Hour	0	0	0	3	3	Peak Hour	15	10	5	31	61



Location: 2 2ND ST & E PACIFIC AVE PM Date: Sunday, December 8, 2019 Peak Hour: 03:45 PM - 04:45 PM

(303) 216-2439 www.alltrafficdata.net

#### **Peak Hour**





**Traffic Counts - Motorized Vehicles** 



Pedestrians/Bicycles in Crosswalk



Interval		E PAC	IFIC AVE			E PAC West	IFIC AVE			2NE North	) ST Ibound			2NE South	) ST Ibound			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	0	0	2	0	0	0	0	1	0	18	1	0	0	15	0	37	159
3:15 PM	0	0	0	1	0	0	0	0	0	1	20	1	0	0	28	0	51	159
3:30 PM	0	0	0	0	0	0	0	0	0	5	10	0	0	0	17	0	32	152
3:45 PM	0	0	0	1	0	0	1	0	0	0	19	0	0	0	18	0	39	163
4:00 PM	0	0	0	1	0	1	0	1	0	5	11	0	0	0	18	0	37	158
4:15 PM	0	1	0	1	0	0	0	0	0	0	18	1	0	0	23	0	44	
4:30 PM	0	0	0	0	0	3	0	0	0	2	12	0	0	1	25	0	43	
4:45 PM	0	0	1	1	0	0	1	0	0	1	12	2	0	1	15	0	34	
Count Total	0	1	1	7	0	4	2	1	1	14	120	5	0	2	159	0	317	
Peak Hour	0	1	0	3	0	4	1	1	0	7	60	1	0	1	84	0	163	

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles or	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	1	1
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
Count Total	0	0	0	0	0	Count Total	0	0	0	1	1
Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0



(303) 216-2439 www.alltrafficdata.net Location: 3 MORREL RD & WA 903 PM Date: Sunday, December 8, 2019 Peak Hour: 03:45 PM - 04:45 PM

**Peak Hour** 

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	HV%	PHF
EB	0.0%	0.85
WB	0.0%	0.91
NB	0.0%	0.75
SB	0.0%	0.85
All	0.0%	0.87

**Traffic Counts - Motorized Vehicles** 



Pedestrians/Bicycles in Crosswalk



Interval		WA Eastt	003 ound			W/ West	A 903 tbound			MORF North	REL RD			ROCK R South	OSE DR			Rolling
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour
3:00 PM	0	1	9	0	0	1	11	3	0	0	2	1	0	3	0	0	31	133
3:15 PM	0	0	19	0	0	4	10	3	0	1	0	2	0	2	1	0	42	134
3:30 PM	0	1	16	0	0	0	6	2	0	0	0	0	0	1	0	0	26	127
3:45 PM	0	1	16	0	0	1	10	0	0	1	0	1	0	4	0	0	34	142
4:00 PM	0	0	12	1	0	4	9	1	0	0	0	1	0	4	0	0	32	132
4:15 PM	0	0	18	0	0	1	8	3	0	0	0	1	0	3	0	1	35	
4:30 PM	0	2	18	0	0	1	12	1	0	0	0	2	0	5	0	0	41	
4:45 PM	0	2	9	1	0	1	7	0	0	0	0	2	0	2	0	0	24	
Count Total	0	7	117	2	0	13	73	13	0	2	2	10	0	24	1	1	265	
Peak Hour	0	3	64	1	0	7	39	5	0	1	0	5	0	16	0	1	142	
							(D)		<b>A</b>									_

Interval		Hea	avy Vehicle	es		Interval	Peo	destrians/E	Bicycles on	n Crosswa	lk
Start Time	EB	NB	WB	SB	Total	Start Time	EB	NB	WB	SB	Total
3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
Count Total	0	0	0	0	0	Count Total	0	0	0	0	0
Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

# APPENDIX B

# Weekday PM Peak Hour Trip Generation Summary and Calculations for SEIS Alternative 6 With 50% RV Occupancy

				-				
		ITE	Directional	Distribution <sup>2</sup>		 Trip	s Generc	ated
Land Use	Units <sup>1</sup>	LUC <sup>2</sup>	In	Out	Trip Rate or Equation <sup>2</sup>	In	Out	Total
WEEKDAY PM PEAK HOUR					`			
Proposed Use:		010	())	2707		1/0	05	050
Single-Family Detached Housing	264 DU	210	63%	31%	Ln(I) = 0.96Ln(X) + 0.20	163	95	258
mentaimps	5%				Subtotal (less internal) =	-9	-0	-15
						104	07	240
Multifamily Housing (Low-Rise)	180 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	63	37	100
Internal Trips <sup>3</sup>	5%					-4	-2	-6
					Subtotal (less internal) =	59	35	94
		417	/ 507	2507	0.07	E E	20	0 <i>E</i>
RV Park		410	63%	33%	0.27	22	30	80 5
internor mps	3%				Subtotal (less internal) =	-3	 	-5 80
						02	20	00
Retail	8,500 SF	820	48%	52%	Ln(T) = 0.74Ln(X)+2.89	42	46	88
Internal Trips <sup>3</sup>	see above					-5	-11	-16
Passby Trips <sup>4</sup>	34%					-12	-12	-24
				Subtotal	(less internal and passby) =	25	23	48
Pactaurant	6 500 SE	932	62%	38%	9 77	40	24	64
Internal Trips <sup>3</sup>		152	02/0	5076	/.//	-5	-5	-10
Passby Trips <sup>4</sup>	13%					-14	_0	-73
1 0350 y 11103	4070			Subtotal	(less internal and passby) =	21	10	31
					(//		-	-
				Gross Prop	oosed PM Peak Hour Trips =	363	232	595
					Less Total Pass By Trips =	-26	-26 21	-52
						-20	-21	-47
				Net	t New PM Peak Hour Trips =	311	185	496

#### 47 North Current Land Use Plan (Alternative 6) - YEAR 2025 SCENARIO Weekday PM Peak Hour Trip Generation Summary

Notes:

<sup>1</sup> DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

<sup>2</sup> Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

<sup>3</sup> Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

<sup>4</sup> Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

	NCHRP 8-51 Internal Trip Capture Estimation Tool										
Project Name:	47 North	Organization:									
Project Location:			Performed By:	TENW							
Scenario Description:	Alternative 6		Date:	1/21/2020							
Analysis Year:	2025 Weekday PM Peak		Checked By:								
Analysis Period:	PM Street Peak Hour		Date:								

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)								
	Developme	ent Data ( <i>For Inf</i>	ormation Only)			Estimated Vehicle-Trips		
Land Ose	ITE LUCs <sup>1</sup>	Quantity	Units		Total	Entering	Exiting	
Office					0			
Retail	820	8,500	SF		88	42	46	
Restaurant	932	6,500	SF		64	40	24	
Cinema/Entertainment					0			
Residential	210/220/416	758	DU's		443	281	162	
Hotel					0			
All Other Land Uses <sup>2</sup>					0			
Total					595	363	232	

	Table 2-P: Mode Split and Vehicle Occupancy Estimates									
		Entering Tri	ps			Exiting Trips				
Land Ose	Veh. Occ.	% Transit	% Non-Motorized	ſ	Veh. Occ.	% Transit	% Non-Motorized			
Office										
Retail				Ī						
Restaurant				Ī						
Cinema/Entertainment				Ī						
Residential				Ī						
Hotel				Ī						
All Other Land Uses <sup>2</sup>										

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)											
Origin (From)		Destination (To)									
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel					
Office											
Retail											
Restaurant											
Cinema/Entertainment											
Residential											
Hotel											

Table 4-P: Internal Person-Trip Origin-Destination Matrix*											
Origin (From)	Destination (To)										
Oligili (Fiolili)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel					
Office		0	0	0	0	0					
Retail	0		12	0	12	0					
Restaurant	0	10		0	4	0					
Cinema/Entertainment	0	0	0		0	0					
Residential	0	4	6	0		0					
Hotel	0	0	0	0	0						

Table 5-P	: Computatio	ons Summary		Table 6-P: Internal Trip Capture Percentages by Land Use			
	Total	Entering	Exiting	Land Use	Entering Trips	Exiting Trips	
All Person-Trips	595	363	232	Office	N/A	N/A	
Internal Capture Percentage	16%	13%	21%	Retail	33%	52%	
				Restaurant	45%	58%	
External Vehicle-Trips <sup>3</sup>	499	315	184	Cinema/Entertainment	N/A	N/A	
External Transit-Trips <sup>4</sup>	0	0	0	Residential	6%	6%	
External Non-Motorized Trips <sup>4</sup>	0	0	0	Hotel	N/A	N/A	

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

<sup>3</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>4</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	47 North
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends									
Land Use	Table	7-P (D): Entering	l Trips		Table 7-P (O): Exiting Trips				
	Veh. Occ.	Vehicle-Trips	Person-Trips*		Veh. Occ.	Vehicle-Trips	Person-Trips*		
Office	1.00	0	0		1.00	0	0		
Retail	1.00	42	42		1.00	46	46		
Restaurant	1.00	40	40		1.00	24	24		
Cinema/Entertainment	1.00	0	0		1.00	0	0		
Residential	1.00	281	281		1.00	162	162		
Hotel	1.00	0	0		1.00	0	0		

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)										
Origin (From)	Destination (To)									
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel				
Office		0	0	0	0	0				
Retail	1		13	2	12	2				
Restaurant	1	10		2	4	2				
Cinema/Entertainment	0	0	0		0	0				
Residential	6	68	34	0		5				
Hotel	0	0	0	0	0					

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)											
Origin (From)		Destination (To)									
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel					
Office		3	1	0	11	0					
Retail	0		12	0	129	0					
Restaurant	0	21		0	45	0					
Cinema/Entertainment	0	2	1		11	0					
Residential	0	4	6	0		0					
Hotel	0	1	2	0	0						

	Table 9-P (D): Internal and External Trips Summary (Entering Trips)									
Destinction Land Llos	P	erson-Trip Estima	ites		External Trips by Mode*					
Destination Land Use	Internal	External	Total		Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>			
Office	0	0	0		0	0	0			
Retail	14	28	42		28	0	0			
Restaurant	18	22	40		22	0	0			
Cinema/Entertainment	0	0	0		0	0	0			
Residential	16	265	281		265	0	0			
Hotel	0	0	0		0	0	0			
All Other Land Uses <sup>3</sup>	0	0	0		0	0	0			

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)									
	P	erson-Trip Estima	tes		External Trips by Mode*				
Origin Land Use	Internal	External	Total		Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>		
Office	0	0	0		0	0	0		
Retail	24	22	46		22	0	0		
Restaurant	14	10	24		10	0	0		
Cinema/Entertainment	0	0	0		0	0	0		
Residential	10	152	162		152	0	0		
Hotel	0	0	0		0	0	0		
All Other Land Uses <sup>3</sup>	0	0	0	7 [	0	0	0		

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>2</sup>Person-Trips

<sup>3</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator \*Indicates computation that has been rounded to the nearest whole number.

			ITE	Directional (	Distribution <sup>2</sup>		Trip	s Genero	hted
Land Use		Units <sup>1</sup>	LUC <sup>2</sup>	In	Out	Trip Rate or Equation <sup>2</sup>	In	Out	Total
WEEKDAY PM PEAK	HOUR								
Proposed Use:		507 511		107	0777			105	501
Single-Family Detac	ched Housing	527 DU	210	63%	3/%	Ln(T) = 0.96Ln(X) + 0.20	316	185	501
	internal irips					Subtatal (less internal) -	-61	-30	-91
							200	155	410
Multifamily Housing	(Low-Rise)	180 DU	220	63%	37%	Ln(T) = 0.89Ln(X)-0.02	63	37	100
, ,	Internal Trips <sup>3</sup>						-12	-6	-18
						Subtotal (less internal) =	51	31	82
					0.577	0.07			0.5
RV Park	later and Trian 3	314 occ. sites	416	65%	35%	0.27	55	30	85
Ir	internal irips					Subtatal (loss internal) -	-11	-5	-16
						Sublotat (less internal) -	44	25	07
Grocery		45,000 SF	850	51%	49%	Ln(T) = 0.75Ln(X)+3.21	220	211	431
In	Internal Trips <sup>3</sup>						-24	-53	-77
F	Passby Trips <sup>4</sup>	36%					-65	-62	-127
					Subtotal	(less internal and passby) =	131	96	227
		17,000,65	000	4007	5007		70	7/	1.47
Refail	Internal Trips <sup>3</sup>	17,000 SF	820	48%	52%	Ln(1) = 0.74Ln(X) + 2.89	70	/6	146
	Baseby Trips <sup>4</sup>	2.407					-/	-19	-20
	Fussby Inps	34%			Subtotal	(less internal and passby) =	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	-41	
					30010101		40	00	//
Restaurant		13,000 SF	932	62%	38%	9.77	79	48	127
	Internal Trips <sup>3</sup>						-9	-12	-21
	Passby Trips <sup>4</sup>	43%					-29	-17	-46
					Subtotal	(less internal and passby) =	41	19	60
					Gross Prop	oosed PM Peak Hour Trips =	803	587	1,390
						Less Total Internal Trips =	-124	-125	-249
						Less Total Pass-By Trips =	-114	-100	-214
					Na	t Now PM Poak Hour Trins -	545	340	027
					Ne	niew r/w reak nour nips =	202	302	727

#### 47 North Current Land Use Plan (Alternative 6) - YEAR 2030 SCENARIO Weekday PM Peak Hour Trip Generation Summary

Notes:

<sup>1</sup> DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

 $^{\rm 2}$  Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

<sup>3</sup> Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

<sup>4</sup> Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

NCHRP 8-51 Internal Trip Capture Estimation Tool									
Project Name:	47 North		Organization:						
Project Location:			Performed By:	TENW					
Scenario Description:	Alternative 6		Date:	1/21/2020					
Analysis Year:	2030 Weekday PM Peak		Checked By:						
Analysis Period:	PM Street Peak Hour		Date:						

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)									
	Development Data (For Information Only)					Estimated Vehicle-Trips			
Land Ose	ITE LUCs <sup>1</sup>	Quantity	Units		Total	Entering	Exiting		
Office									
Retail	850/820	62,000	SF		577	290	287		
Restaurant	932	13,000	SF		127	79	48		
Cinema/Entertainment					0				
Residential	210/220/416	1,021	DU's		686	434	252		
Hotel					0				
All Other Land Uses <sup>2</sup>					0				
Total					1390	803	587		

	Table 2-P: Mode Split and Vehicle Occupancy Estimates								
		Entering Tri	ps			Exiting Trips			
Land Ose	Veh. Occ.	% Transit	% Non-Motorized	ſ	Veh. Occ.	% Transit	% Non-Motorized		
Office									
Retail				Ī					
Restaurant				Ī					
Cinema/Entertainment				Ī					
Residential				Ī					
Hotel				Ī					
All Other Land Uses <sup>2</sup>									

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)									
Origin (From)		Destination (To)							
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel			
Office									
Retail									
Restaurant									
Cinema/Entertainment									
Residential									
Hotel									

Table 4-P: Internal Person-Trip Origin-Destination Matrix*											
Origin (From)		Destination (To)									
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel					
Office		0	0	0	0	0					
Retail	0		23	0	75	0					
Restaurant	0	20		0	9	0					
Cinema/Entertainment	0	0	0		0	0					
Residential	0	29	11	0		0					
Hotel	0	0	0	0	0						

Table 5-P	Computatio	ons Summary		Table 6-P: Interna	Table 6-P: Internal Trip Capture Percentages by Land Use			
	Total	Entering	Exiting	Land Use	Entering Trips	Exiting Trips		
All Person-Trips	1,390	803	587	Office	N/A	N/A		
Internal Capture Percentage	24%	21%	28%	Retail	17%	34%		
				Restaurant	43%	60%		
External Vehicle-Trips <sup>3</sup>	1,056	636	420	Cinema/Entertainment	N/A	N/A		
External Transit-Trips <sup>4</sup>	0	0	0	Residential	19%	16%		
External Non-Motorized Trips <sup>4</sup>	0	0	0	Hotel	N/A	N/A		

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

<sup>3</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>4</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	47 North
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends									
Land Use	Table	7-P (D): Entering	l Trips		٦	able 7-P (O): Exiting Trips			
	Veh. Occ.	Vehicle-Trips	Person-Trips*		Veh. Occ.	Vehicle-Trips	Person-Trips*		
Office	1.00	0	0		1.00	0	0		
Retail	1.00	290	290		1.00	287	287		
Restaurant	1.00	79	79		1.00	48	48		
Cinema/Entertainment	1.00	0	0		1.00	0	0		
Residential	1.00	434	434		1.00	252	252		
Hotel	1.00	0	0		1.00	0	0		

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)									
Origin (From)	Destination (To)								
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel			
Office		0	0	0	0	0			
Retail	6		83	11	75	14			
Restaurant	1	20		4	9	3			
Cinema/Entertainment	0	0	0		0	0			
Residential	10	106	53	0		8			
Hotel	0	0	0	0	0				

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)										
Origin (From)		Destination (To)								
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel				
Office		23	2	0	17	0				
Retail	0		23	0	200	0				
Restaurant	0	145		0	69	0				
Cinema/Entertainment	0	12	2		17	0				
Residential	0	29	11	0		0				
Hotel	0	6	4	0	0					

Table 9-P (D): Internal and External Trips Summary (Entering Trips)									
Destination Land Use	P	erson-Trip Estima	ites		External Trips by Mode*				
	Internal	External	Total		Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>		
Office	0	0	0		0	0	0		
Retail	49	241	290		241	0	0		
Restaurant	34	45	79		45	0	0		
Cinema/Entertainment	0	0	0		0	0	0		
Residential	84	350	434		350	0	0		
Hotel	0	0	0		0	0	0		
All Other Land Uses <sup>3</sup>	0	0	0		0	0	0		

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)									
Origin Land Use	P	Person-Trip Estimates				External Trips by Mode*			
	Internal	External	Total		Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>		
Office	0	0	0		0	0	0		
Retail	98	189	287		189	0	0		
Restaurant	29	19	48		19	0	0		
Cinema/Entertainment	0	0	0		0	0	0		
Residential	40	212	252		212	0	0		
Hotel	0	0	0		0	0	0		
All Other Land Uses <sup>3</sup>	0	0	0		0	0	0		

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>2</sup>Person-Trips

<sup>3</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator \*Indicates computation that has been rounded to the nearest whole number.

			ITE	Directional	Distribution <sup>2</sup>		Trin	s Gener	ated
Land Use		Units <sup>1</sup>		In	Out	Trip Rate or Equation <sup>2</sup>	In	Out	Total
WEEKDAY PM PEAK	HOUR	01110	200		001			001	Tortai
Proposed Use:									
Single-Family Detac	ched Housing	527 DU	210	63%	37%	Ln(T) = 0.96Ln(X) + 0.20	316	185	501
	Internal Trips®					Subtatal (lass internal) -	-71	-43	-114
						Subtotal (less internal) =	245	142	387
Multifamily Housina	(Low-Rise)	180 DU	220	63%	37%	Ln(T) = 0.89Ln(X) - 0.02	63	37	100
international and proceeding	Internal Trips <sup>3</sup>						-14	-9	-23
						Subtotal (less internal) =	49	28	77
RV Park		314 occusites	416	65%	35%	0.27	55	30	85
	Internal Trips <sup>3</sup>			0070	00,0	0127	-12	-7	-19
	in en la mpe					Subtotal (less internal) =	43	23	66
Grocery	2	45,000 SF	850	51%	49%	Ln(T) = 0.75Ln(X)+3.21	220	211	431
	Internal Trips <sup>3</sup>						-26	-38	-64
	Passby Trips <sup>₄</sup>	36%					-67	-65	-132
					Subtota	l (less internal and passby) =	127	108	235
Retail		25,000 SF	820	48%	52%	Ln(T) = 0.74Ln(X)+2.89	94	101	195
	Internal Trips <sup>3</sup>						-11	-18	-29
	Passby Trips <sup>4</sup>	34%					-27	-29	-56
					Subtota	l (less internal and passby) =	56	54	110
Restaurant		20.000 SF	932	62%	38%	9.77	121	74	195
	Internal Trips <sup>3</sup>	-,					-14	-13	-27
	Passby Trips <sup>4</sup>	43%					-45	-27	-72
	, ,				Subtota	l (less internal and passby) =	62	34	96
		(0.000 SF	700	0.007	7007		57	1.40	205
Medical Office	Internal Trins <sup>3</sup>	60,000 SF	720	28%	12%	(1) = 3.39(X) + 2.02	5/	148	205
	internal mps					Subtotal (less internal) =	-/	-27	-34
							50	121	17.1
					Gross Pro	nosed PM Peak Hour Trips =	926	786	1 712
					01033110	Less Total Internal Trips =	-1.5.5	-1.5.5	-310
						Less Total Pass-By Trips =	-139	-121	-260
								510	
					Ne	er new PM Peak Hour Irips =	632	510	1,142

#### 47 North Current Land Use Plan (Alternative 6) - YEAR 2037 SCENARIO Weekday PM Peak Hour Trip Generation Summary

Notes:

 $^{1}$  DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

<sup>2</sup> Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

<sup>3</sup> Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

<sup>4</sup> Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

NCHRP 8-51 Internal Trip Capture Estimation Tool									
Project Name:	47 North	Organization:							
Project Location:			Performed By:	TENW					
Scenario Description:	Alternative 6		Date:	1/21/2020					
Analysis Year:	2037 Weekday PM Peak		Checked By:						
Analysis Period:	PM Street Peak Hour		Date:						

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)									
Land Use	Development Data (For Information Only)				Estimated Vehicle-Trips				
	ITE LUCs <sup>1</sup>	Quantity	Units		Total	Entering	Exiting		
Office	720	60,000	SF		205	57	148		
Retail	850/820	70,000	SF		626	314	312		
Restaurant	932	20,000	SF		195	121	74		
Cinema/Entertainment					0				
Residential	210/220/416	1,021	DU's		686	434	252		
Hotel					0				
All Other Land Uses <sup>2</sup>					0				
Total					1712	926	786		

Table 2-P: Mode Split and Vehicle Occupancy Estimates									
		Entering Tr	ips		Exiting Trips				
Land Ose	Veh. Occ.	% Transit	% Non-Motorized		Veh. Occ.	% Transit	% Non-Motorized		
Office									
Retail									
Restaurant									
Cinema/Entertainment									
Residential									
Hotel									
All Other Land Uses <sup>2</sup>									

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)											
Origin (From)		Destination (To)									
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel					
Office											
Retail											
Restaurant											
Cinema/Entertainment											
Residential											
Hotel											

Table 4-P: Internal Person-Trip Origin-Destination Matrix*											
Origin (From)		Destination (To)									
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel					
Office		25	2	0	3	0					
Retail	6		35	0	81	0					
Restaurant	2	30		0	13	0					
Cinema/Entertainment	0	0	0		0	0					
Residential	10	31	17	0		0					
Hotel	0	0	0	0	0						

Table 5-P	: Computatio	ons Summary		Table 6-P: Internal Trip Capture Percentages by Land Use			
	Total Entering Exiting Land Use		Land Use	Entering Trips	Exiting Trips		
All Person-Trips	1,712	926	786	Office	32%	20%	
Internal Capture Percentage	30%	28%	32%	Retail	27%	39%	
				Restaurant	45%	61%	
External Vehicle-Trips <sup>3</sup>	1,202	671	531	Cinema/Entertainment	N/A	N/A	
External Transit-Trips <sup>4</sup>	0	0	0	Residential	22%	23%	
External Non-Motorized Trips <sup>4</sup>	0	0	0	Hotel	N/A	N/A	

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

<sup>3</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>4</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute
Project Name:	47 North
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends												
	Table	7-P (D): Entering	j Trips		Table 7-P (O): Exiting Trips							
Lanu Use	Veh. Occ.	Vehicle-Trips	Person-Trips*		Veh. Occ.	Veh. Occ. Vehicle-Trips						
Office	1.00	57	57		1.00	148	148					
Retail	1.00	1.00 314 314			1.00	312	312					
Restaurant	1.00	121	121		1.00	74	74					
Cinema/Entertainment	1.00	0	0		1.00	0	0					
Residential	1.00 434 434		434		1.00	252	252					
Hotel	1.00 0 0			1.00	0	0						

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)													
	Destination (To)												
Oligin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel							
Office		30	6	0	3	0							
Retail	6		90	12	81	16							
Restaurant	2	30		6	13	5							
Cinema/Entertainment	0	0	0		0	0							
Residential	10	106	53	0		8							
Hotel	0	0	0	0	0								

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)													
Origin (From)	Destination (To)												
Oligili (FIOIII)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel							
Office		25	2	0	17	0							
Retail	18		35	0	200	0							
Restaurant	17	157		0	69	0							
Cinema/Entertainment	3	13	4		17	0							
Residential	32	31	17	0		0							
Hotel	0	6	6	0	0								

	Table 9-P (D): Internal and External Trips Summary (Entering Trips)												
Destinction Land Llos	P	erson-Trip Estima	ites		External Trips by Mode*								
Destination Land Ose	Internal	External	Total		Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>						
Office	18	39	57		39	0	0						
Retail	86	228	314		228	0	0						
Restaurant	54	67	121		67	0	0						
Cinema/Entertainment	0	0	0		0	0	0						
Residential	97	337	434		337	0	0						
Hotel	0	0	0		0	0	0						
All Other Land Uses <sup>3</sup>	0	0	0		0	0	0						

	Table 9-P (O): Internal and External Trips Summary (Exiting Trips)												
	P	erson-Trip Estimat	tes		External Trips by Mode*								
Origin Land Use	Internal	External	Total		Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>						
Office	30	118	148		118	0	0						
Retail	122	190	312		190	0	0						
Restaurant	45	29	74		29	0	0						
Cinema/Entertainment	0	0	0		0	0	0						
Residential	58	194	252		194	0	0						
Hotel	0	0	0		0	0	0						
All Other Land Uses <sup>3</sup>	0	0	0		0	0	0						

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>2</sup>Person-Trips

<sup>3</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator \*Indicates computation that has been rounded to the nearest whole number.

					•			
		ITE	Direction	al Distribution <sup>2</sup>		Trip	s Genero	ated
Land Use	Units <sup>1</sup>	LUC <sup>2</sup>	In	Out	Trip Rate or Equation <sup>2</sup>	In	Out	Total
SUNDAY PEAK HOUR								
Proposed Use:								
Single-Family Detached Housing	264 DU	210	53%	47%	(T) = 0.79(X) + 11.02	117	103	220
Internal Trips <sup>°</sup>	5%					-6	-5	-11
					Subtotal (less internal) =	111	98	209
Multifamily Housing (Low Pise)	180 חום	220	50%	50%	0.47	60	61	121
Internal Trips <sup>3</sup>	5%	220	0070	0070	0.07	-3	-3	-6
internal mps	570				Subtotal (less internal) =	57	58	115
RV Park⁵	314 occ. sites	416	50%	50%	0.27	42	43	85
Internal Trips <sup>3</sup>	5%					-2	-2	-4
					Subtotal (less internal) =	40	41	81
Retail	8,500 SF	820	49%	51%	2.79	12	12	24
Internal Trips <sup>3</sup>	from above					-4	-5	-9
Passby Trips <sup>4</sup>	34%					-2	-3	-5
				Subtotal	(less internal and passby) =	6	4	10
		000	F F 67	4 5 67	5.40	10	1.4	25
Restaurant <sup>2</sup>	6,500 SF	932	55%	45%	5.42	19	16	35
nienai mps	from above					-0	-0	-12
Passby Inps	43%			Subtatal	(loss internal and passby) =	-5	-5	-10
				30010101	(less internal and passby) –	0	5	15
				Gross Propose	d Sunday Peak Hour Trips =	250	235	485
					Less Total Internal Trips =	-21	-21	-42
					Less Total Pass-By Trips =	-7	-8	-15
				NetNet	w Sunday Deals Hour Trins -	222	204	400
				Net Net	w sunday reak hour irips =	222	206	428

## 47 North Current Land Use Plan (Alternative 6) - YEAR 2025 SCENARIO Sunday Peak Hour Trip Generation Summary

Notes:

 $^1\,$  DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

<sup>2</sup> Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

<sup>3</sup> Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

<sup>4</sup> Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017. Sunday peak hour pass-by rates assumed to be equal to weekday PM peak t

<sup>5</sup> There are no Sunday trip rates for an RV park. Therefore, the Sunday trip rates and directional distribution were assumed to be equal to the Weekday trip rates.

<sup>6</sup> Sunday peak hour trip rate for restaurant based on hourly distribution data in ITE Trip Generation Handbook, 3rd Edition, 2017.

			ITE	Direction	al Distribution <sup>2</sup>		Trip	c Conor	atod
Land Liso		Lipits <sup>1</sup>	IIE	Direction		Trip Pata or Equation <sup>2</sup>			Total
Lana Use	R	UTIIIS	LUC	Iri	001		111	001	10101
Proposed Use:	<u> </u>	4							
Single-Family Detac	ched Housing	527 DU	210	53%	47%	(T) = 0.79(X) + 11.02	226	201	427
	Internal Trips <sup>3</sup>	18%					-41	-36	-77
						Subtotal (less internal) =	185	165	350
Multifamily Housing	(Low-Rise)	180 DU	220	50%	50%	0.67	60	61	121
Monnaring Hocorig	Internal Trips <sup>3</sup>	18%		00/0	00,0	0.07	-11	-11	-22
	internal mpe	10/0				Subtotal (less internal) =	49	50	99
RV Park⁵	0	314 occ. sites	416	50%	50%	0.27	42	43	85
	Internal Trips <sup>3</sup>	18%					-8	-7	-15
						Subtotal (less internal) =	34	36	70
Grocery <sup>6</sup>		45,000 SF	850	50%	50%	13.98	314	315	629
· · ,	Internal Trips <sup>3</sup>	from above					-45	-51	-96
	Passby Trips <sup>4</sup>	36%					-96	-96	-192
	<i>,</i> .				Subtotal	(less internal and passby) =	173	168	341
Retail		17.000 SF	820	49%	51%	2 79	23	24	47
Korali	Internal Trips <sup>3</sup>	from above			/ -	2 /	-3	-4	-7
	Passby Trips <sup>4</sup>	34%					-7	-7	-14
					Subtotal	(less internal and passby) =	13	13	26
Postaurant <sup>6</sup>		13.000 SE	030	550%	1597	5 10	38	30	70
Kesidorani	Internal Trips <sup>3</sup>	from above	/52	5576	4070	0.42	-5	-5	-10
	Passby Trips <sup>4</sup>	13%					-JA	-J -12	-76
	1 03567 11195	4070			Subtotal	(less internal and passby) =	19	15	34
					Gross Propose	d Sunday Peak Hour Trips =	703	676	1.379
					••••••	Less Total Internal Trips =	-113	-114	-227
						Less Total Pass-By Trips =	-117	-115	-232
					Net Nev	v Sunday Peak Hour Trips =	473	447	920

## 47 North Current Land Use Plan (Alternative 6) - YEAR 2030 SCENARIO Sunday Peak Hour Trip Generation Summary

Notes:

 $^1$  DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

<sup>2</sup> Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

<sup>3</sup> Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

<sup>4</sup> Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017. Sunday peak hour pass-by rates assumed to be equal to weekday PM peak h

<sup>5</sup> There are no Sunday trip rates for an RV park. Therefore, the Sunday trip rates and directional distribution were assumed to be equal to the Weekday trip rates.

<sup>6</sup> Sunday peak hour trip rate for grocery and restaurant based on hourly distribution data in ITE Trip Generation Handbook, 3rd Edition, 2017.

			ITE	Direction	al Distribution <sup>2</sup>		Trip	Gener	ated
		1 Inits <sup>1</sup>	$\Pi L$	In		- Trip Rate or Equation <sup>2</sup>	ln	Out	Total
SUNDAY PEAK HOU	IR	01113	LUC		001			001	Total
Proposed Use:		4							
Single-Family Deta	ched Housing	527 DU	210	53%	47%	(T) = 0.79(X) + 11.02	226	201	427
	Internal Trips <sup>3</sup>	23%					-52	-46	-98
						Subtotal (less internal) =	174	155	329
Multifamily Housing	n (Low-Rise)	180 DU	220	50%	50%	0.67	60	61	121
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Internal Trips <sup>3</sup>	23%	-			0.07	-14	-14	-28
						Subtotal (less internal) =	46	47	93
			.1.	507	5007	<u> </u>	10	10	25
RV Park	the set Takes 3	314 occ. sites	416	50%	50%	0.27	42	43	85
	Internal Irips <sup>-</sup>	23%				Subtatal (lass internal) -	-10	-10	-20
							32	33	60
Grocery <sup>6</sup>		45,000 SF	850	50%	50%	13.98	314	315	629
	Internal Trips <sup>3</sup>	from above					-52	-58	-110
	Passby Trips <sup>4</sup>	36%					-93	-94	-187
					Subtoto	= (less internal and passby) =	169	163	332
Retail		25.000 SF	820	49%	51%	279	34	36	70
Keran	Internal Trips <sup>3</sup>	from above	0_1			2.17	-6	-7	-13
	Passby Trips <sup>4</sup>	34%					-9	-10	-19
					Subtoto	al (less internal and passby) =	19	19	38
D. January 1 6		20,000,65	020	F F 67	4 5 07	E 40	50	40	100
Restaurant	Internal Trips <sup>3</sup>	20,000 SF	73Z	33%	40%	5.42	57 10	47	108
	Passby Trips <sup>4</sup>						-10	-y 17	-17
	russby ilips	43%			Subtoto	al (less internal and passby) =	-21	-17	-30
							20	20	0.
Medical Office	2	60,000 SF	720	52%	48%	0.32	10	9	19
	Internal Trips <sup>°</sup>	from above					-2	-2	-4
						Subtotal (less internal) =	8	7	15
					Gross Propos	ed Sunday Peak Hour Trips =	745	714	1,459
						Less Total Internal Trips =	-146	-146	-292
						Less Total Pass-By Trips =	-123	-121	-244
					Net Ne	ew Sunday Peak Hour Trips =	476	447	923

## 47 North Current Land Use Plan (Alternative 6) - YEAR 2037 SCENARIO Sunday Peak Hour Trip Generation Summary

Notes:

 $^{1}$  DU = Dwelling Units, Occ. Sites = Occupied Sites, SF = Square Feet.

 $^{\rm 2}$  Institute of Transportation Engineers, Trip Generation Manual, 10th Edition.

<sup>3</sup> Internal trip reductions based on methodology documented in the ITE Trip Generation Handbook, 3rd Edition, 2017.

<sup>4</sup> Passby percent based on studies documented in the ITE Trip Generation Handbook, 3rd Edition, 2017. Sunday peak hour pass-by rates assumed to be equal to weekday PM peak t

<sup>5</sup> There are no Sunday trip rates for an RV park. Therefore, the Sunday trip rates and directional distribution were assumed to be equal to the Weekday trip rates.

<sup>6</sup> Sunday peak hour trip rate for grocery and restaurant based on hourly distribution data in ITE Trip Generation Handbook, 3rd Edition, 2017.

# APPENDIX C

## Detailed Pro-Rata Share Calculations – Method A and Method B

### WEEKDAY PM PEAK HOUR PRO-RATA CALCULATIONS - METHOD A

Assumes 50% RV occupancy

					Year 20	25					Year	2031			Year 2037					
					SEIS A	lternative	6			SEIS Alternative 6						SEIS Alternative 6				
# Intersection	Year/Scenario Improvement is Needed (based on 100% RV occupancy)	Existing (2019) Traffic Volumes	Baseline Traffic Volumes	SEIS Alt 6 Project Trips (50% RV occupancy )	Traffic Volumes with SEIS Alt 6	SEIS Alt 6 Pro- Rata Share	47 North Share (84%)	Commer cial Share (16%)	Baseline Traffic Volumes	SEIS Alt 6 Project Trips (50% RV occupan cy)	Traffic Volume s with SEIS Alt 6	SEIS Alt 6 Pro- Rata Share	47 North Share (61%)	Commer cial Share (39%)	Baseline Traffic Volumes	SEIS Alt 6 Project Trips (50% RV occupan cy)	Traffic Volume s with SEIS Alt 6	SEIS Alt 6 Pro- Rata Share	47 North Share (46%)	Commer cial Share (54%)
1 Bullfrog Rd / I 90 EB Ramps	2031 Alt 6	244	375						485	116	357	100.0%	61.0%	39.0%						
2 Bullfrog Rd / I 90 WB Ramps	2037 Alt 5 & Alt 6	346	605												1,165	219	1,038	100.0%	0.0%	100.0%
3 Tumble Creek Dr / Bullfrog Rd	2037 Alt 5 & Alt 6	382	630												1,220	245	1,083	100.0%	0.0%	100.0%
7 Denny Ave / W Second St (SR 903)	2031 Alt 5 & Alt 6	695	1000						1190	533	1028	100.0%	61.0%	39.0%						
8 Ranger Station Rd / Miller Ave / W Second St (SR 9	2025 baseline	741	1110	312	681	45.8%	38.5%	7.3%												
9 N Pine St / W Second St (SR 903)	2025 Alt 5 & Alt 6	613	990	270	647	100.0%	84.0%	16.0%												
11 Douglas Munro Blvd / W First St	2025 baseline	1022	1185	36	199	18.1%	15.2%	2.9%												
12 Pine St / W First St	2025 baseline	1001	1085	29	113	25.7%	21.6%	4.1%												
13 N Stafford Ave / W Second St (SR 903)	2025 baseline	667	1080	234	647	36.2%	30.4%	5.8%												
15 N Oakes Ave / W Second St	2025 baseline	512	870	153	511	29.9%	25.1%	4.8%												
21 SR 903 / Pennsylvania Ave	2031 Alt 5 & Alt 6	711	910						1030	110	429	100.0%	61.0%	39.0%						

### WEEKDAY PM PEAK HOUR PRO-RATA CALCULATIONS - METHOD B

Assumes 50% RV occupancy

					Year 2025					Year 2031						Year 2037					
					SEIS Alternative 6						SEIS	Alternati	ve 6				SEIS Alternative 6				
		Year/Scenario		Pacolino	SEIS Alt 6 Project Trips (50%	Traffic	SEIS Alt	47 North	Comme	Pacalina	SEIS Alt 6 Project Trips	Traffic Volume	SEIS Alt	47 North	Comme	Pacolino	SEIS Alt 6 Project Trips	Traffic Volume	SEIS Alt	47 North	Comme
		(based on 100% RV	EVISTING	Traffic	KV OCCUDADOV	with SEIS	Prio-	Share	Share	Traffic	(50% KV	S WILLI	Rata	Share	Share	Traffic	(50% KV	S WILLI	Pata	Share	Share
#	Intersection	occupancy)	(2019)	Volumes	)	Alt 6	Share	(84%)	(16%)	Volumes	cy)	6	Share	(61%)	(39%)	Volumes	cy)	6	Share	(46%)	(54%)
1	Bullfrog Rd / I 90 EB Ramps	2031 Alt 6	244	375						485	116	357	32.5%	19.8%	12.7%						
2	Bullfrog Rd / I 90 WB Ramps	2037 Alt 5 & Alt 6	346	605												1,165	219	1,038	21.1%	9.7%	11.4%
3	Tumble Creek Dr / Bullfrog Rd	2037 Alt 5 & Alt 6	382	630												1,220	245	1,083	22.6%	10.4%	12.2%
7	Denny Ave / W Second St (SR 903)	2031 Alt 5 & Alt 6	695	1000						1190	533	1028	51.8%	31.6%	20.2%						
8	Ranger Station Rd / Miller Ave / W Second St (SR 9	2025 Baseline	741	1110	312	681	45.8%	38.5%	7.3%												
9	N Pine St / W Second St (SR 903)	2025 Alt 5 & Alt 6	613	990	270	647	41.7%	35.0%	6.7%												
11	Douglas Munro Blvd / W First St	2025 baseline	1022	1185	36	199	18.1%	15.2%	2.9%												
12	Pine St / W First St	2025 baseline	1001	1085	29	113	25.7%	21.6%	4.1%												
13	N Stafford Ave / W Second St (SR 903)	2025 baseline	667	1080	234	647	36.2%	30.4%	5.8%												
15	N Oakes Ave / W Second St	2025 baseline	512	870	153	511	29.9%	25.1%	4.8%												
21	SR 903 / Pennsylvania Ave	2031 Alt 5 & Alt 6	711	910						1030	110	429	25.6%	15.6%	10.0%						