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RENEWS: 6/30/2024

Northplace Apartments Phase 2

Transportation Impact Analysis

Salem, Oregon

Date:
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Table of Contents

Executive Summary 4

Project Description 5

- Introduction 5
- Location Description 5
  - Vicinity Streets 6
  - Study Intersections 7

Site Trips 9

- Proposed Development Trip Generation 9
- Trip Distribution 10

Traffic Volumes 12

- Existing Conditions 12
  - Intersection Counts 12
  - Seasonal Adjustment Factor 12
  - COVID-19 Adjustments 12
- Background Conditions 13
- Buildout Conditions 13

Safety Analysis 17

- Crash History Review 17
- Sight Distance Evaluation 21
- Warrant Analysis 21
  - Left-Turn Lane Warrants 21
  - Preliminary Traffic Signal Warrants 22

Operational Analysis 23

- Intersection Capacity Analysis 23
  - Performance Standards 23
  - Delay & Capacity Analysis 24

Conclusions 26

Appendices

Appendix A
- Site Plan

Appendix B
- Trip Generation Calculations
- US Residential/Employment Census Data

Appendix C
- Traffic Counts

Appendix D
- Crash History Data
- Left-turn Lane Warrants
- Preliminary Traffic Signal Warrants

Appendix E
- Level of Service Descriptions
- HCM Capacity Reports

List of Figures

Figure 1: Aerial Photo of Site Vicinity (Image from Google Earth) 6
Figure 2: Vicinity Map 8
Figure 3: Trip Distribution & Assignment 11
Figure 4: Year 2023 Existing Conditions 14
Figure 5: Year 2026 Background Conditions 15
Figure 6: Year 2026 Buildout Conditions 16

List of Tables

Table 1: Vicinity Roadway Descriptions 6
Table 2: Study Intersection Descriptions 7
Table 3: Proposed Development Trip Generation Summary 9
Table 4: Analyzed Development Trip Generation Summary 10
Table 5: Crash Type Summary 18
Table 6: Crash Severity and Rate Summary 18
Table 7: Capacity Analysis Summary 24

Executive Summary

1. The proposed Northplace Apartments Phase 2 will include the development of an apartment complex on two properties located at 4650/4680 Hazelgreen Road NE in Salem, Oregon. The project will include the construction of 405 apartment units while removing 1 existing on-site house. Public access to the site will be provided via the extension of Lunar Drive NE from the south edge of the site to Hazelgreen Road NE.
2. The trip generation calculations show that the proposed project is projected to generate a net increase of 147 morning peak hour trips, 194 evening peak hour trips, and 2,662 average weekday trips.
3. All study intersections are expected to operate safely with regard to the crash data analysis or have future planned mitigation which is expected to reduce crashes. No other mitigation is necessary or recommended at the study intersections as part of the proposed development application.
4. Provided any obstructing on-site foliage/debris is removed, adequate intersection sight distances can be made available at the site access intersection to allow for safe and efficient operation along Hazelgreen Road NE. No other sight distance related mitigation is necessary at the intersection.
5. Left-turn lane warrants are not projected to be met at the proposed intersection of Lunar Drive NE at Hazelgreen Road NE. Accordingly, no new left-turn lanes are necessary or recommended at any of the study intersections as part of the proposed Northplace Apartments Phase 2 project.
6. Traffic signal warrants are not projected to be met at any of the applicable unsignalized study intersections under any of the analysis scenarios. Accordingly, no new traffic signals are necessary or recommended as part of the proposed Northplace Apartments Phase 2 application.
7. The intersection of Lancaster Drive at Portland Road NE is projected to exceed ODOT mobility standards under future year 2026 conditions with buildout of the project. Although the intersection is exceeding ODOT mobility targets, mitigation is not recommended as part of the proposed Northplace Apartments Phase 2 development application for the following reasons:
    a. It is recommended capacity/safety mitigation be evaluated at this intersection as part of TSP Project ID 21 to determine potential mitigation that may best serve the impacted community.
    b. The intersection exceeds ODOT standards under existing year 2023 traffic conditions. Therefore, the proposed development is not the trigger for causing the intersection to exceed mobility targets.
    c. The only travel lane at this intersection exceeding ODOT standards is the northwest-bound left-turn lane. The proposed development does not add additional trips to this turn lane, whereby impacts from the proposed development to this intersection are generally expected to be low.

    All other study intersections are currently operating acceptably per their respective agency standards and are projected to continue operating acceptably through the 2026 site buildout year. Accordingly, no other operational mitigation is necessary or recommended at the study intersections as part of the proposed development.

Project Description

Introduction

The proposed Northplace Apartments Phase 2 will include the development of an apartment complex on two properties located at 4650/4680 Hazelgreen Road NE in Salem, Oregon. The project will include the construction of 405 apartment units while removing 1 existing on-site house. Public access to the site will be provided via the extension of Lunar Drive NE from the south edge of the site to Hazelgreen Road NE.

Based on correspondence with the City of Salem, Marion County, and Oregon Department of Transportation (ODOT) staff, the report conducts safety and capacity/level of service analyses at the following intersections during the morning and evening peak hours:

1. Interstate 5 (I-5) Southbound Ramps at Chemawa Road NE
2. I-5 Northbound Ramps at Chemawa Road NE
3. Portland Road NE at Hazelgreen Road NE
4. Lunar Drive NE at Hazelgreen Road NE (Site Access)
5. Portland Road NE at Kale Street NE
6. Lunar Drive NE at Kale Street NE (Site Access)
7. Lancaster Drive at Portland Road NE

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the existing and proposed uses, and to determine any mitigation that may be necessary to do so. Detailed information on traffic counts, trip generation calculations, safety analyses, and level of service calculations is included in the appendix to this report.

Location Description

The project site is located south of Hazelgreen Road NE and east of Portland Road NE (OR-99E) in Salem, Oregon. The subject site is located in a developing, mixed-use area of the City, with residential single-family houses to the north, south, and east, and a future City Park zoned *Public Amusement* (PA) to the west. The site includes two properties (tax lots 062W32C-000400 and 500) which encompass an approximate total of ±15.42 acres. Lot 400 is currently undeveloped/utilized for agricultural purposes while lot 500 is developed with one single-family detached house.

Figure 1 presents an aerial image of the nearby vicinity with the project site outlined in yellow.

Figure 1: Aerial Photo of Site Vicinity (Image from Google Earth)

Vicinity Streets

The study intersections are composed of six roadways (excluding the I-5 and OR-99E ramps). Table 1 provides a description of these vicinity roadways.

Table 1: Vicinity Roadway Descriptions

Street Name	Jurisdiction	Functional Classification	Speed (MPH)	On-Street Parking	Curbs & Sidewalks	Bicycle Lanes
Chemawa Road NE	Salem/ODOT	Parkway/Arterial	45	Not Permitted	Partial Both Sides	Both Sides
Hazelgreen Road NE	Salem/Marion County	Parkway/Arterial	50	Not Permitted	None	Both Sides
Kale Street NE	Salem	Minor Arterial	35/40	Partially Permitted	Partial Both Sides	Both Sides
Portland Road NE	ODOT	Major Arterial/Regional Highway	45/55	Not Permitted	Partial Both Sides	Both Sides
Lancaster Drive	Marion County	Major Arterial	35	Not Permitted	Both Sides	Both Sides
Lunar Drive NE	Salem	Local Street	25	Permitted	Both Sides	None

Table Notes: Functional classification based on City of Salem TSP, Marion County Rural TSP, and ODOT's Online TransGIS Map.

Study Intersections

Based on coordination with agency staff, seven intersections were identified for analysis. A summarized description of these study intersections, under their existing lane configurations, is provided in Table 2.

Table 2: Study Intersection Descriptions

Number	Intersection	Geometry	Traffic Control	Phasing/Stopped Approaches
1	I-5 Southbound Ramps at Chemawa Road NE	Four-Legged	Signalized	Protected SB Right-turns, Protected WB Left-trun
2	I-5 Northbound Ramps at Chemawa Road NE	Four-Legged	Signalized	Protected EB Left-turn
3	Portland Road NE at Hazelgreen Road NE	Four-Legged	Signalized	Protected NB/SB & EB/WB Left-turns
4	Lunar Drive NE at Hazelgreen Road NE (Site Access)	Three-Legged	Stop-Controlled	NB Stop-Controlled Approach
5	Portland Road NE at Kale Street NE	Three-Legged	Signalized	FYA SB Left-turn
6	Lunar Drive NE at Kale Street NE (Site Access)	Three-Legged	Stop-Controlled	SB Stop-Controlled Approach
7	Lancaster Drive at Portland Road NE	Four-Legged	Stop-Controlled	SEB/NWB Stop-Controlled Approach

Table Notes: Flashing-Yellow-Arrow denoted as FYA.

A vicinity map showing the project site, vicinity streets, and study intersection configurations is shown in Figure 2.

Figure 2

Northplace Apartments Phase 2

10/18/2023

VICINITY MAP

LEGEND

- STUDY INTERSECTION (EXISTING)
- STUDY INTERSECTION (PROPOSED)
- STOP SIGN
- TRAFFIC SIGNAL
- BIKE LANE
- PROJECT SITE
- ARTERIAL ROADWAY
- COLLECTOR ROADWAY
- LOCAL ROADWAY
- FUTURE/PROPOSED ROADWAY

Chemawa Road NE

Verda Lane NE

Salem Parkway

Interstate 5

Hyacinth Street NE

Hazelgreen Road NE

Portland Road NE

Lunar Drive NE

Kale Street NE

Cordon Road NE

1 2 3 4 5 6 7

No Scale

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Site Trips

Proposed Development Trip Generation

The proposed development will include the construction of 405 multifamily housing units, while removing 1 existing on-site house. To estimate the number of trips that are currently and will be generated by the existing and proposed uses, trip rates/equations from the *Trip Generation Manual*[1] were used. Data from the following land use codes were utilized to estimate site trip generation:

- 210, *Single-Family Detached Housing*, based on the number of dwelling units.
- 220, *Multifamily Housing (Low-Rise)*, based on the number of dwelling units.

The trip generation calculations show that the proposed project is projected to generate a net increase of 147 morning peak hour trips, 194 evening peak hour trips, and 2,662 average weekday trips. The trip generation estimates are summarized in Table 3. Detailed trip generation calculations are included in the appendix.

Table 3: Proposed Development Trip Generation Summary

ITE Code		Size/Rate	AM Peak Hour			PM Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Existing Conditions									
Single-Family Detached House	210	1 unit	0	1	1	1	0	1	10
Proposed Conditions									
Multifamily Housing (Low-Rise)	220	405 units	36	112	148	123	72	195	2,672
Net Change in Site Trip Generation									
Net New Trips			**36**	**111**	**147**	**122**	**72**	**194**	**2,662**

Note that at the time when a majority of the analysis in this report had been completed, a prior assumed development size of 408 apartment units was evaluated. Since the development proposal will only consist of impacts associated with 405 dwelling units, the transportation impact analysis of 408 dwellings may be considered conservative with respect to the actual, smaller development size. Therefore and for the purposes of this study, all analysis work, findings, and figures in the following sections of this report reflect impacts associated with a 408-unit apartment complex. The trip generation estimates associated with the analyzed 408-unit apartment complex are summarized in Table 4.

[1] Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, 2021.

Table 4: Analyzed Development Trip Generation Summary

ITE Code		Size/Rate	AM Peak Hour			PM Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Existing Conditions									
Single-Family Detached House	210	1 unit	0	1	1	1	0	1	10
Proposed Conditions									
Multifamily Housing (Low-Rise)	220	408 units	36	113	149	123	73	196	2,690
Net Change in Site Trip Generation									
Net New Trips			**36**	**112**	**148**	**122**	**73**	**195**	**2,680**

Trip Distribution

A trip distribution of site trips for the proposed development was estimated based on the geographical location of the project site, locations of likely trip origins and destinations, locations of major transportation facilities in the site vicinity, and US residential/employment census data retrieved at <https://onthemap.ces.census.gov/>.

Based on correspondence with agency staff, the following trip distribution was estimated:

- Approximately 20% of site trips will travel to/from the north along I-5, north of Chemawa Road NE;
- Approximately 20% of site trips will travel to/from the south along Portland Road NE, southwest of Lancaster Drive;
- Approximately 15% of site trips will travel to/from the north along Portland Road NE, north of Hazelgreen Road NE;
- Approximately 10% of site trips will travel to/from the south along Salem Parkway, south of Chemawa Road NE;
- Approximately 10% of site trips will travel to/from the south along Lancaster Drive, south of Portland Road NE;
- Approximately 10% of site trips will travel to/from the south along I-5, south of Chemawa Road NE;
- Approximately 5% of site trips will travel to/from the west along Chemawa Road NE, west of I-5;
- Approximately 5% of site trips will travel to/from the east along Hazelgreen Road NE, east of the Lunar Drive NE; and
- Approximately 5% of site trips will travel to/from the east along Kale Street NE, east of the Lunar Drive NE.

Figure 3 shows the trip distribution and assignment of the proposed development for the morning and evening peak hours.

SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

AM & PM Peak Hours

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Figure 3

Northplace Apartments Phase 2

10/18/2023

Traffic Volumes

Existing Conditions

Intersection Counts

Traffic counts were conducted at the study intersections on Tuesday, June 7, 2022, during the following hours.

- From 6:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM, at the ODOT study intersections.
- From 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM, at the non-ODOT study intersections.

Data was used from each intersection's respective morning and evening peak hours. In order to approximate the existing year 2023 traffic volumes at the study intersections, the growth rates, as described in *Background Conditions* section, were applied to the year 2022 volumes at the study intersections over a year period.

To estimate major-street traffic volumes at the proposed Lunar Drive NE at Hazelgreen Road NE site access intersection, volumes were balanced with the intersection of Portland Road NE at Hazelgreen Road NE.

Seasonal Adjustment Factor

In accordance with the *Analysis Procedures Manual*[2] (APM), a seasonal adjustment factor was applied to the traffic volumes along Portland Road NE (Pacific Highway East Highway No. 81) to estimate the 30th highest hour volumes on the ODOT facility. Utilizing Commuter trend data from ODOT's Seasonal Trend Table, a seasonal adjustment factor of 1.013 was calculated. The seasonal adjustment factor was applied to the existing year morning and evening peak hour volumes along the Portland Road NE through movements.

COVID-19 Adjustments

Due to the COVID-19 viral pandemic, traffic volumes around Oregon had been depressed relative to pre-pandemic conditions; however, in recent times schools and businesses have generally been operating at normal capacities, and indoor mask mandates have been lifted. ODOT began COVID-19 traffic monitoring and reporting in mid-March 2020 when statewide closures were mandated by providing a comparison of 2020 and 2021 traffic volumes versus those of the same time period in 2019. For the month of June 2021, statewide average weekday traffic volumes ranged between 5% below and above 2019 pre-COVID conditions, while weekend volumes ranged between 9% below and equal to 2019 levels[3].

Based on correspondence with agency staff and as a result of overall statewide traffic volumes being close to pre-COVID traffic volumes, adjustments to the collected traffic volumes to account for the potential impacts of COVID-19 were determined to be unnecessary. Accordingly, no COVID-19 adjustment factors were applied to the newly collected count data.

Figure 4 shows the existing traffic volumes at the study intersections during the morning and evening peak hours.

[2] Oregon Department of Transportation, *Analysis Procedures Manual Version 2*. December 2019.
[3] ODOT, Observed Statewide Traffic Volume Patterns Related to COVID-19 Monitoring, July 9, 2021, page 3.

Background Conditions

To provide an analysis of the impact of the proposed development on the nearby transportation facilities, an estimate of future traffic volumes is required. It is expected that the proposed development will be constructed and in operation by year 2026. In order to approximate the future year 2026 traffic volumes at the study intersections, the following linear growth rates, as calculated per ODOT's Future 2041 Volumes Table, were applied to the adjusted year 2023 highway through volumes at the applicable study intersections over a three-year period:

3. Portland Road NE at Hazelgreen Road NE
    (a) Approximately 0.77% per year along the highway through movements.
5. Portland Road NE at Kale Street NE
    a. Approximately 0.60% per year along the highway through movements.
7. Lancaster Drive at Portland Road NE
    a. Approximately 0.42% per year along the highway through movements.

A conservative compounded growth rate of two percent per year over a three-year period was applied to all other turning movements and study intersections.

According to agency staff, no in-process development projects of significant size are expected to impact the study intersections prior to the development of the proposed Northplace Apartments Phase 2 project. Therefore, no traffic generated by in-process developments were included in the traffic forecasts.

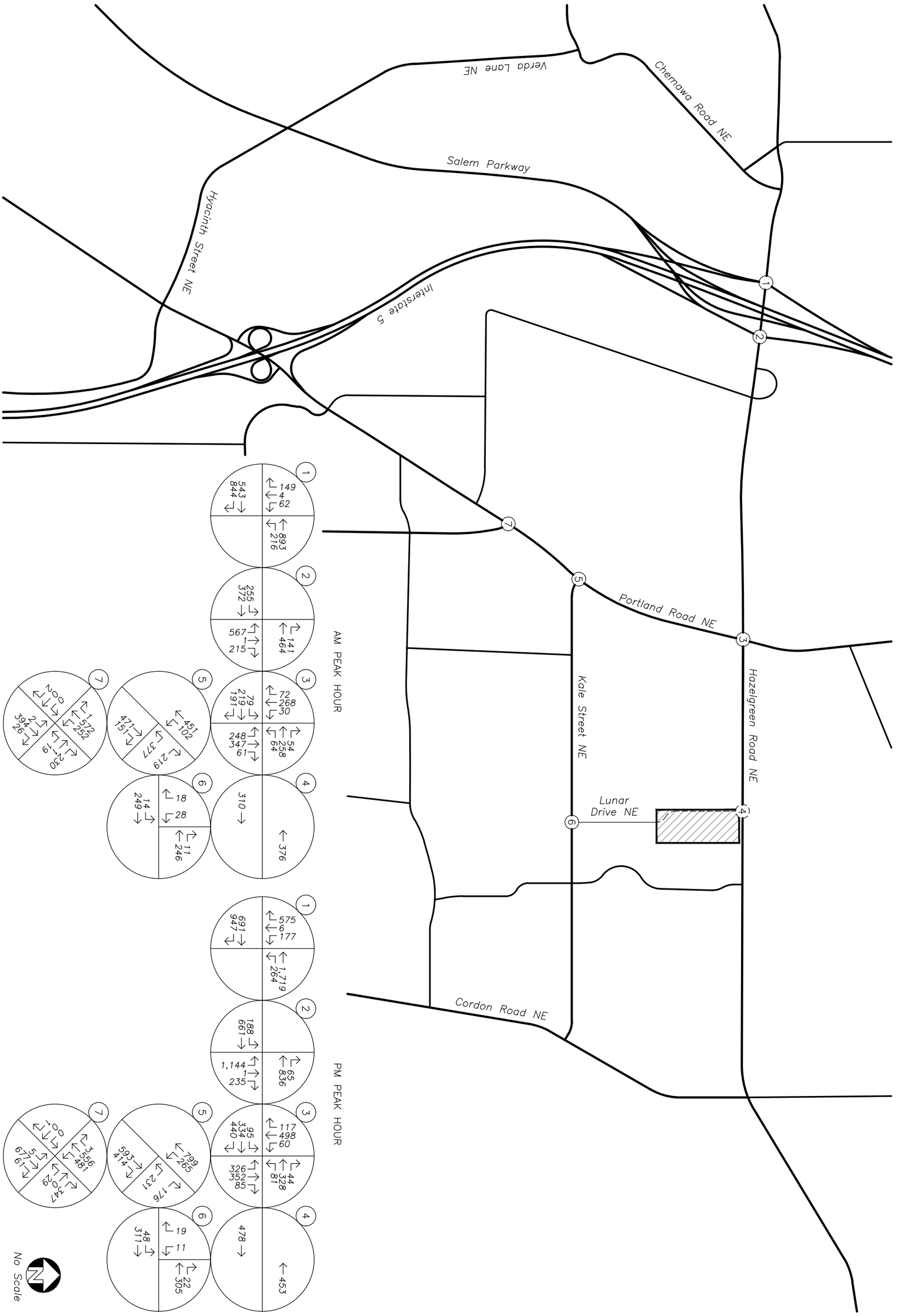
Figure 5 presents the year 2026 background volumes for the morning and evening peak hours.

Buildout Conditions

The net new peak hour trips calculated to be generated by the proposed development, as described earlier in the *Site Trips* section, were added to the projected year 2026 background traffic volumes to obtain the expected 2026 site buildout volumes.

In addition to adding net new proposed development trips, the existing on-site house currently takes access to Hazelgreen Road NE via a private driveway, which will be removed as part of the proposal. It was assumed that trips generated by this house will reroute to the proposed Lunar Drive NE at Hazelgreen Road NE intersection following redevelopment of the site and distributed in a manner consistent with the methodology used in the *Site Trips* section.

Figure 6 shows year 2026 buildout traffic volumes at the study intersections during the morning and evening peak hours.



TRAFFIC VOLUMES

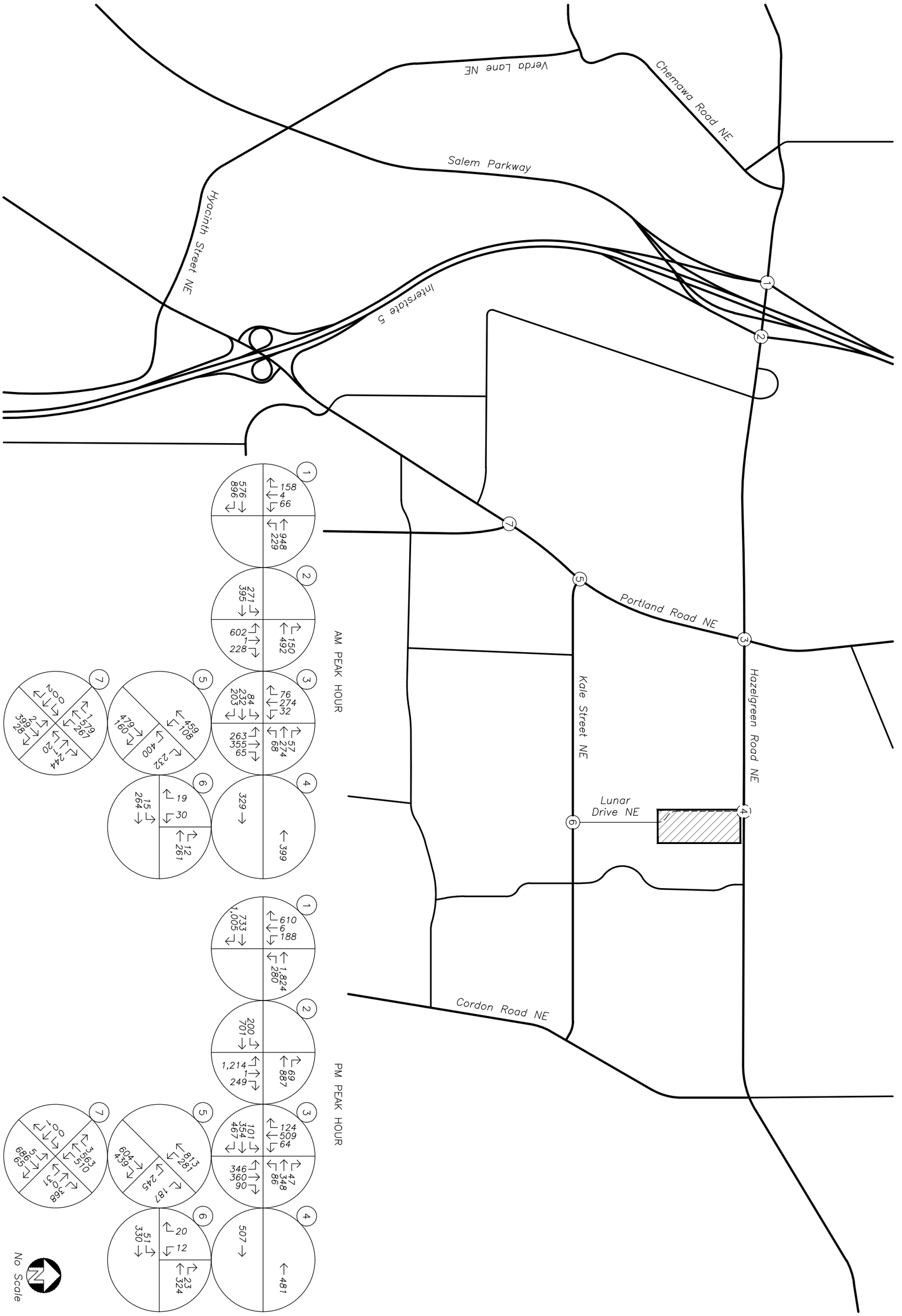
Year 2023 Existing Conditions

AM & PM Peak Hours

Figure 4

Northplace Apartments Phase 2

10/18/2023



TRAFFIC VOLUMES

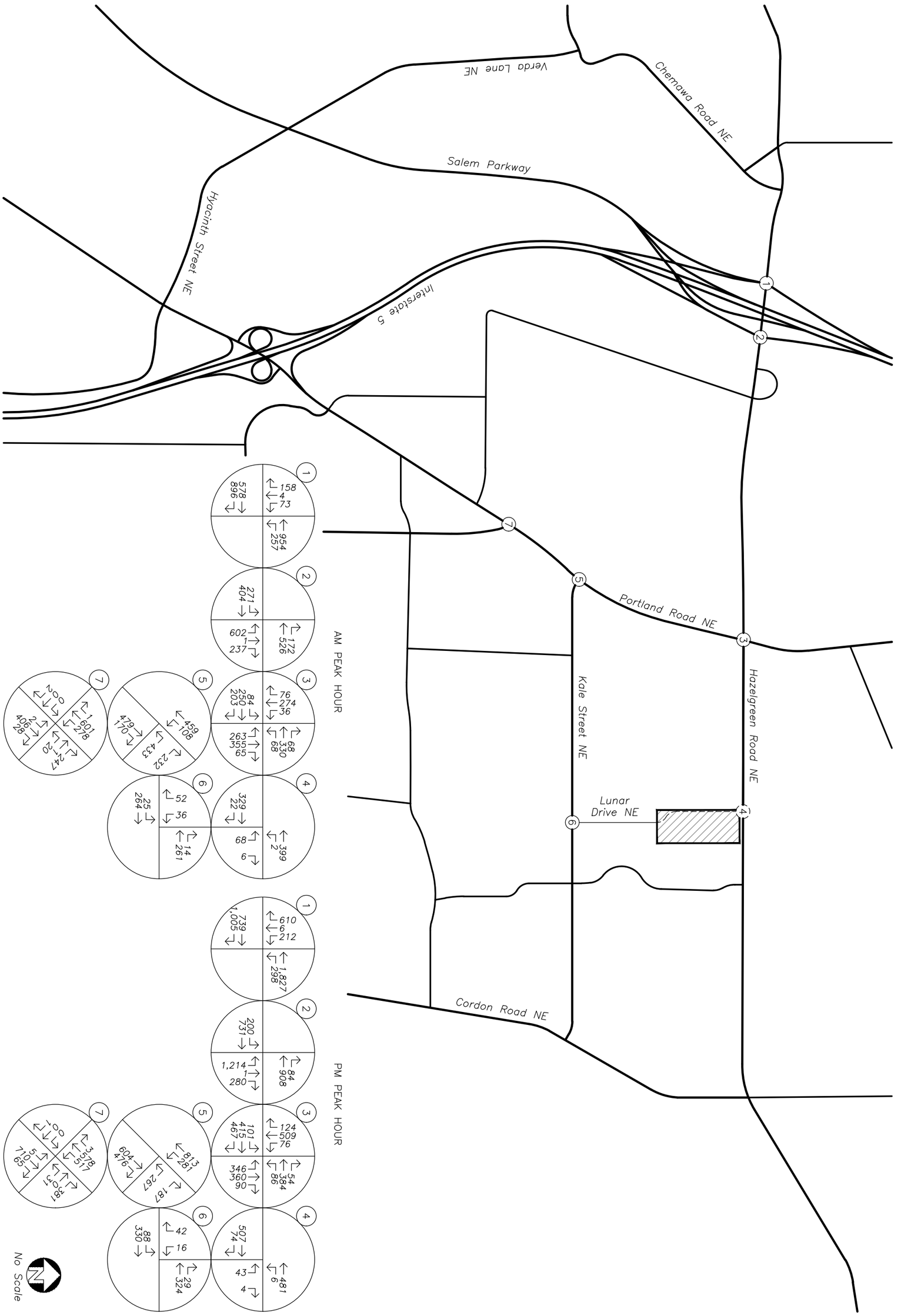
Year 2026 Background Conditions

AM & PM Peak Hours

Figure 5

Northplace Apartments Phase 2

10/18/2023



TRAFFIC VOLUMES

Year 2026 Buildout Conditions

AM & PM Peak Hours

Figure 6

Northplace Apartments Phase 2

10/18/2023

Safety Analysis

Crash History Review

Using data obtained from ODOT's Crash Analysis & Reporting Unit and ODOT's online TransGIS website, a review was performed of the most recent five years of available crash data at the study intersections (January 2016 through December 2020). The crash data was evaluated based on the number of crashes, the type of collisions, the severity of the collisions, and the resulting crash rate for each intersection.

Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated under the common assumption that traffic counted during the evening peak hour represents approximately ten percent of annual average daily traffic (AADT) at each intersection. Crash rates in excess of 1.00 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

With regard to crash severity, ODOT classifies crashes in the following categories:

- Property Damage Only (*PDO*);
- Possible Injury – Complaint of Pain (*Injury C*);
- Non-Incapacitating Injury (*Injury B*);
- Incapacitating Injury – Bleeding, Broken Bones (*Injury A*); and
- Fatality or Fatal Injury.

The I-5 Ramps and Portland Road NE (OR-99E) study intersections are under the jurisdiction of ODOT, which adhere to the crash analysis methodologies in ODOT's APM. According to *Exhibit 4-1: Intersection Crash Rates per MEV by Land Type and Traffic Control* of the APM, intersections which experience crash rates in excess of their respective 90th percentile crash rates should be "flagged for further analysis". The following average and 90th percentile rates for various intersection configurations are shown below:

- Signalized, four-legged intersections in urban settings:
  - Average rate of 0.477 CMEV
  - 90th percentile rate of 0.860 CMEV
- Signalized, three-legged intersections in urban settings:
  - Average rate of 0.275 CMEV
  - 90th percentile rate of 0.509 CMEV
- Stop-controlled, three-legged intersections in urban settings:
  - Average rate of 0.131 CMEV
  - 90th percentile rate of 0.293 CMEV

Table 5 provides a summary of crash types while Table 6 summarizes crash severities and rates for each of the study intersections. Detailed crash data reports are provided in the appendix.

Table 5: Crash Type Summary

Number	Intersection	Crash Type						Total
		Rear End	Turn/ Angle	Fixed Object	Side swipe	Ped/ Bike	Other	
1	I-5 SB Ramps at Chemawa Road NE	40	5	1	2	0	0	48
2	I-5 NB Ramps at Chemawa Road NE	35	5	2	2	0	0	44
3	Portland Road NE at Hazelgreen Road NE	39	9	2	2	0	0	52
5	Portland Road NE at Kale Street NE	6	10	1	1	0	0	18
6	Lunar Drive NE at Kale Street NE (Site Access)	0	0	0	0	0	0	0
7	Lancaster Drive at Portland Road NE	4	26	0	1	1	1	33

Table 6: Crash Severity and Rate Summary

Number	Intersection	Crash Severity						Total Crashes	AADT	Crash Rate
		PDO	C	B	A	Fatal	Unknown			
1	I-5 SB Ramps at Chemawa Road NE	14	25	8	1	0	0	48	43,790	0.601
2	I-5 NB Ramps at Chemawa Road NE	16	23	5	0	0	0	44	31,300	0.770
3	Portland Road NE at Hazelgreen Road NE	22	22	7	0	1	0	52	27,600	**1.032**
5	Portland Road NE at Kale Street NE	4	9	5	0	0	0	18	24,780	0.398
6	Lunar Drive NE at Kale Street NE (Site Access)	0	0	0	0	0	0	0	7,160	0.000
7	Lancaster Drive at Portland Road NE	8	11	12	2	0	0	33	21,600	**0.837**

Table Notes: ***BOLDED*** *text indicates a crash rate in excess of 1.00 CMEV or ODOT's 90th percentile rate.*

There were several crashes at the study intersections that involved a pedestrian/bicyclist, were classified as *Injury A* or resulted in a fatality. Additionally, two of the study intersections exhibit crash rates above either 1.00 CMEV or ODOT's 90th percentile rates. The following provides a summary description of these crashes and evaluates the high crash rates of these study intersections in more detail.

1. I-5 SB Ramps at Chemawa Road NE

The intersection had one reported crash during the analysis period that was classified as *Injury A*. The crash occurred when the driver of a westbound through vehicle disregarded traffic controls and collided with a southbound left turning vehicle. The driver of the westbound vehicle sustained no injury while two occupants in the other vehicle sustained injuries consistent with *Injury A* classification. At the time of the collision, the driver at fault for the crash was operating their vehicle with a suspended/revoked driver's license.

3. Portland Road NE at Hazelgreen Road NE

One of the reported crashes at the intersection resulted in a fatality. The crash occurred on Saturday, May 20, 2017, at approximately 7:00 AM. Driving conditions were during daylight hours with clear weather and dry roads. According to ODOT crash data and a *Statesman Journal* article[4], the crash occurred when the driver of a northbound through vehicle disregarded traffic controls and struck a westbound through vehicle. A third southbound right turning vehicle was struck after the initial collision. A passenger of the northbound vehicle died while five other people involved in the crash sustained injuries consistent with *Injury C* classification.

Additionally, the study intersection was calculated as having a crash rate in excess of ODOT's 90th percentile crash rate. Following a review of ODOT's Safety Priority Index System (SPIS) list, as well as ODOT's Project List and the City's Transportation System Plan (TSP), the intersection is currently not on the Top 15% SPIS list but the following projects are planned that may impact operation/safety at the intersection:

- TSP Project ID 36 (Low Priority): Improve Chemawa Road NE, between I-5 and Portland Road NE, to urban Parkway standards which includes four travel lanes and a center turn lane with curbs, sidewalks, and bicycle lanes.
- TSP Project ID 48 (Low Priority): Improve Hazelgreen Road NE, between Portland Road NE and Cordon Road NE, to an interim two travel lanes and center turn lane with curbs, sidewalks, and bicycle lanes.

The predominate crash type reported at the intersection were rear-end collisions (39 of the 52 crashes, or 75.0% of the crashes), where 18 of these crashes occurred on the eastbound approach, 8 on the westbound approach, 8 on the northbound approach, 3 on the southbound approach, and 2 with an unreported direction of travel. None of the reported rear-end collisions resulted in a fatality or serious injury (i.e. *Injury A* classification). All other crash types at the intersection were relatively infrequent.

Rear-end collisions are relatively common at signalized intersections, are generally difficult to mitigate, and may be indicative of a signalized intersection nearing capacity. As described in the *Operation Analysis* section, the intersection is currently operating at acceptable ODOT standards, but is operating with a high volume-to-capacity ratio. Assuming the aforementioned TSP projects are implemented, capacity at the intersection is expected to increase and subsequently the number of recurring rear-end collisions may decrease.

[4] Albany man dies in Salem car crash – Statesman Journal.

Based on the above evaluation of the intersection and considering rear-end collisions are difficult to mitigate at signalized intersections, none of the rear-end crashes were high severity collisions, and TSP projects to improve operation are planned in the long-term, no mitigation as part of the proposed development application is recommended.

7. Lancaster Drive at Portland Road NE

The intersection had one reported crash during the analysis period that involved a pedestrian and two reported crashes that were classified as *Injury A*. Details of these crashes are as follows:

- The pedestrian-related crash occurred when the driver of a southbound left-turning vehicle failed to yield right-of-way and struck a pedestrian at the intersection. The crash was classified as *Injury C*.
- One of the crashes classified as *Injury A* occurred when the driver of a westbound left-turning vehicle disregarded traffic controls and collided with a northbound through vehicle.
- The second crash classified as *Injury A* occurred when the driver of a southbound left-turning vehicle failed to yield right-of-way and struck a northbound through vehicle.

Additionally, the study intersection was calculated as having a crash rate in excess of ODOT's 90th percentile crash rate. Following a review of ODOT's Safety Priority Index System (SPIS) list, as well as ODOT's Project List and the City's TSP, the intersection is currently not on the Top 15% SPIS list but the following project is planned that may impact operation/safety at the intersection:

- TSP Project ID 21 (Committed Project): Conduct an access management study of the Lancaster Drive NE/SE corridor.

The predominate crash type reported at the intersection were turning movement collisions (26 of the 33 crashes, or 78.8% of the crashes), where 12 of these crashes involved a northwest-bound left-turning vehicle colliding with a southwest-bound through vehicle and 11 of these crashes involved a southwest-bound left-turning vehicle colliding with a northeast-bound through vehicle. All other turning movement crashes and crash types at the intersection were relatively infrequent.

When considering TSP Project ID 21, the intersection may be a potential candidate for restricting left-turn movements between Portland Road NE and Lancaster Drive. Justification for this revision may include the following:

- The intersection is currently and projected to exceed ODOT capacity standards, where the northwest-bound left-turn lane exceeds capacity standards (see the *Operational Analysis* section).
- Left-turning vehicles between Lancaster Drive and Portland Road NE can reroute to the adjacent signalized intersections of Portland Road NE at Kale Street NE and Portland Road NE at Hayesville Drive NE, both of which are expected to have sufficient capacity to accommodate these rerouted vehicles.

Assuming these left-turn movements are restricted at the intersection, subsequently removing the possibility of 24 of the reported collisions at the intersection from occurring, the crash rate of the intersection is expected to decrease to 0.228 CMEV.

Based on the above evaluation of the intersection, it is recommended the City's access management study of Lancaster Drive evaluate whether left-turn movements at the intersection need to be restricted or if another

mitigative measure can be implemented to improve intersection safety. No other safety related mitigation is recommended for the intersection as part of the proposed development application.

Analysis Summary

Based on the crash data analysis, all study intersections are expected to operate safely with regard to the crash data analysis or have future planned mitigation which is expected to reduce crashes. No other mitigation is necessary or recommended at the study intersections as part of the proposed development application.

Sight Distance Evaluation

Intersection sight distances were measured at the proposed site access intersection along Hazelgreen Road NE. Sight distances along Hazelgreen Road NE were measured and evaluated in accordance with standards established in *A Policy on Geometric Design of Highways and Streets*[5].

According to AASHTO, the driver's eye is assumed to be approximately 14.5 feet from the near edge of the nearest travel lane, or traveled way, of the intersecting street and at a height of 3.5 feet above the minor-street approach pavement. The vehicle driver's eye height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement. Based on a posted speed of 50 mph along the applicable segment of Hazelgreen Road NE, the minimum recommended intersection sight distances include the following:

- 555 feet to the east for site egress left-turn vehicles.
- 480 feet to the west for site egress right-turn vehicles.

At the site access intersection along Hazelgreen Road NE, sight distance to the east was measured to be in excess of 555 feet. Provided any obstructing on-site foliage/debris is removed, adequate sight distance in excess of 480 feet to the west may be attained. Based on these measurements, adequate intersection sight distances can be made available at the site access intersection to allow for safe and efficient operation along Hazelgreen Road NE. No other sight distance related mitigation is necessary at the intersection.

Warrant Analysis

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

Left-Turn Lane Warrants

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

[5] American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 7th Edition, 2018.

Left-turn lane warrants are not projected to be met at the proposed intersection of Lunar Drive NE at Hazelgreen Road NE. Accordingly, no new left-turn lanes are necessary or recommended at any of the study intersections as part of the proposed Northplace Apartments Phase 2 project.

Preliminary Traffic Signal Warrants

Preliminary traffic signal warrants were examined for the unsignalized study intersections to determine whether the installation of a new traffic signal will be warranted at the intersections by the 2026 site buildout year. Based on the preliminary analysis following a review of Warrant 1 in the MUTCD and considering methodologies presented in the APM for the ODOT study intersections, traffic signal warrants are not projected to be met at any of the applicable unsignalized study intersections under any of the analysis scenarios. Accordingly, no new traffic signals are necessary or recommended as part of the proposed Northplace Apartments Phase 2 application.

Detailed warrant analyses for each applicable study intersection are included in the technical appendix to this report.

Operational Analysis

Intersection Capacity Analysis

A capacity and delay analysis were conducted for each of the study intersections per the signalized and unsignalized intersection analysis methodologies in the *Highway Capacity Manual* (HCM)[6],as well as the signalized intersection analysis methodology detailed in ODOT's APM Section 13. Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

Performance Standards

The operating standards adopted by the City of Salem, Marion County, and ODOT are summarized below.

City of Salem

According to the City's TSP Policy 2.5, *the City shall design its streets and intersections to function at the lower end of LOS D (where traffic volumes approach 90 percent of the street's effective capacity) during the peak hour*.

Marion County

According to Marion County's Traffic Impact Analysis Requirements, *all signalized and all-way-stop controlled intersections shall operate at Level Of Service D or better (all individual movements shall operate at LOS E or better) with a Volume/Capacity ratio of 0.85 or less. Other unsignalized intersections (including unsignalized private accesses) shall operate at Level Of Service E or better, although LOS F may be allowed if the movement has a relatively low volume (as determined by County staff) and there is no indication that a safety problem will be created. Intersections within the Urban Growth Boundary of a city shall also meet the intersection performance standards of that city. Intersections near state highways shall also meet the standards of the Oregon Department of Transportation*.

ODOT

The study intersections along Portland Road NE and the I-5 ramp intersections operate under the jurisdiction of ODOT. The applicable minimum operation standards for these facilities are established under the *Oregon Highway Plan*[7] (OHP) and the *Interstate 5/Chemawa Road Interchange Area Management Plan* (IAMP), and are based on the v/c ratio of the intersection. According to these documents, the following operation standards are applicable to the study intersections:

- The I-5 southbound and northbound ramp intersections and the Portland Road NE at Hazelgreen Road NE intersection are to operate with a maximum allowable v/c ratio of less than 1.00 when utilizing a peak hour factor of 1.00.

[6] Transportation Research Board, *Highway Capacity Manual 6th Edition*, 2016.
[7] Oregon Department of Transportation, *1999 Oregon Highway Plan*: Including amendments November 1999 through May 2015, 1999

- All other study intersections along Portland Road NE are to operate with a maximum allowable v/c ratio of 0.85 on the major-street approaches and 0.90 on the minor-street approaches.

Delay & Capacity Analysis

The LOS, delay, and v/c results of the capacity analysis are shown in Table 7 for the morning and evening peak hours. The TrafficWare Synchro software utilized for analysis does not report the overall v/c ratio of signalized intersections in the HCM 6th Edition capacity reports. Therefore, the signalized intersection v/c ratio was calculated utilizing methods detailed in ODOT's APM Sections 13. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Table 7: Capacity Analysis Summary

	AM Peak Hour			PM Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
1. I-5 Southbound Ramps at Chemawa Road NE						
2023 Existing Conditions	B	17	0.64	C	30	0.90
2026 Background Conditions	B	18	0.69	D	35	0.98
2026 Buildout Conditions	B	18	0.73	D	36	0.99
2. I-5 Northbound Ramps at Chemawa Road NE						
2023 Existing Conditions	C	22	0.64	C	33	0.83
2026 Background Conditions	C	22	0.68	D	36	0.89
2026 Buildout Conditions	C	23	0.70	D	37	0.90
3. Portland Road NE at Hazelgreen Road NE						
2023 Existing Conditions	B	19	0.60	C	28	0.76
2026 Background Conditions	B	20	0.63	C	31	0.80
2026 Buildout Conditions	C	22	0.68	D	35	0.83
4. Lunar Drive NE at Hazelgreen Road NE (Site Access)						
2026 Buildout Conditions	C	21	0.30	D	29	0.27
5. Portland Road NE at Kale Street NE						
2023 Existing Conditions	B	11	0.63	A	10	0.72
2026 Background Conditions	B	12	0.66	B	11	0.76
2026 Buildout Conditions	B	12	0.69	B	12	0.78
6. Lunar Drive NE at Kale Street NE (Site Access)						
2023 Existing Conditions	B	14	0.14	B	12	0.06
2026 Background Conditions	B	15	0.16	B	13	0.07
2026 Buildout Conditions	C	15	0.25	B	13	0.12

Table Notes: ***BOLDED*** *text indicates intersection operation above jurisdictional standards.*

Table 7: Capacity Analysis Summary (Continued)

	AM Peak Hour			PM Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
7. Lancaster Drive at Portland Road NE						
2023 Existing Conditions	F	51	0.31	F	>120	**1.51**
2026 Background Conditions	F	57	0.33	F	>120	**2.02**
2026 Buildout Conditions	F	64	0.34	F	>120	**2.15**

Table Notes: ***BOLDED*** *text indicates intersection operation above jurisdictional standards.*

As shown in Table 7, the intersection of Lancaster Drive at Portland Road NE is projected to exceed ODOT mobility standards under future year 2026 conditions with buildout of the project. Although the intersection is exceeding ODOT mobility targets, mitigation of this capacity issue is not recommended as part of the proposed Northplace Apartments Phase 2 development application for the following reasons:

- As described in the *Crash History Review* section, the City is planning to conduct an access management study of the Lancaster Drive corridor to determine whether turn lane restrictions or closures of intersecting roads/driveways will be necessary to improve safety/operation (TSP Project ID 21). It is recommended mitigation be evaluated at this intersection as part of the TSP project to determine overall impacts to the Lancaster Drive corridor assuming the restriction to left turns are implemented and/or identify other potential mitigation that may best serve the impacted community.
- The intersection is calculated as exceeding ODOT standards under existing year 2023 traffic conditions, whereby the proposed Northplace Apartments Phase 2 project is not the trigger for causing the intersection to exceed mobility targets.
- The only travel lane at this intersection exceeding ODOT standards is the northwest-bound left-turn lane. Since the proposed development will not add additional trips to the northwest-bound left-turn movement, impacts from the proposed development to this intersection are generally expected to be low.

All other study intersections are currently operating acceptably per their respective agency standards and are projected to continue operating acceptably through the 2026 site buildout year. Accordingly, no other operational mitigation is necessary or recommended at the study intersections as part of the proposed development.

Conclusions

All study intersections are expected to operate safely with regard to the crash data analysis or have future planned mitigation which is expected to reduce crashes. No other mitigation is necessary or recommended at the study intersections as part of the proposed development application.

Provided any obstructing on-site foliage/debris is removed, adequate intersection sight distances can be made available at the site access intersection to allow for safe and efficient operation along Hazelgreen Road NE. No other sight distance related mitigation is necessary at the intersection.

Left-turn lane warrants are not projected to be met at the proposed intersection of Lunar Drive NE at Hazelgreen Road NE. Accordingly, no new left-turn lanes are necessary or recommended at any of the study intersections as part of the proposed Northplace Apartments Phase 2 project.

Traffic signal warrants are not projected to be met at any of the applicable unsignalized study intersections under any of the analysis scenarios. Accordingly, no new traffic signals are necessary or recommended as part of the proposed Northplace Apartments Phase 2 application.

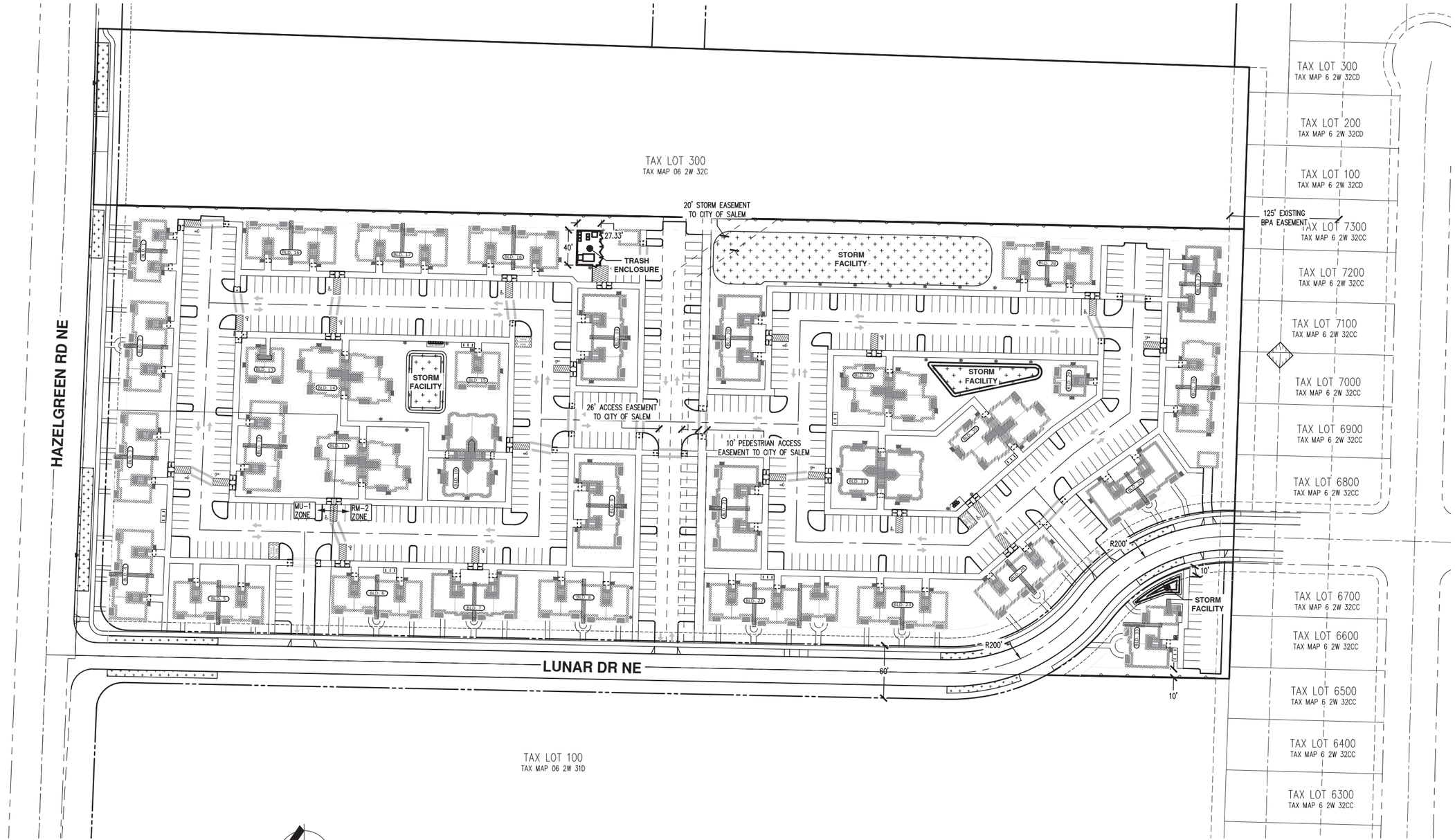
The intersection of Lancaster Drive at Portland Road NE is projected to exceed ODOT mobility standards under future year 2026 conditions with buildout of the project. Although the intersection is exceeding ODOT mobility targets, mitigation is not recommended as part of the proposed Northplace Apartments Phase 2 development application for the following reasons:

- It is recommended capacity/safety mitigation be evaluated at this intersection as part of TSP Project ID 21 to determine potential mitigation that may best serve the impacted community.
- The intersection exceeds ODOT standards under existing year 2023 traffic conditions. Therefore, the proposed development is not the trigger for causing the intersection to exceed mobility targets.
- The only travel lane at this intersection exceeding ODOT standards is the northwest-bound left-turn lane. The proposed development does not add additional trips to this turn lane, whereby impacts from the proposed development to this intersection are generally expected to be low.

All other study intersections are currently operating acceptably per their respective agency standards and are projected to continue operating acceptably through the 2026 site buildout year. Accordingly, no other operational mitigation is necessary or recommended at the study intersections as part of the proposed development.

Appendix A

Site Plan



N

SCALE: 1"= 60 FEET

60 0 12 30 60

ORIGINAL PAGE SIZE: 22" x 34"

DATE: 10/17/2023 AKS JOB: 8321

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ENGINEERING • SURVEYING • NATURAL RESOURCES
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4680 HAELGREEN RD NE

OVERALL CONCEPTUAL SITE LAYOUT II

I&E CONSTRUCTION, INC.
SALEM, OREGON

Appendix B

Trip Generation Calculations

US Residential/Employment Census Data

TRIP GENERATION CALCULATIONS
Source: Trip Generation Manual, 11th Edition
Existing Development

Land Use:	Single-Family Detached Housing
Land Use Code:	210
Land Use Subcategory:	All Sites
Setting/Location	General Urban/Suburban
Variable:	Dwelling Units
Trip Type:	Vehicle
Variable Quantity:	1

WARNING: Variable Quantity is less than Minimum Survey Size for Peak Hours

AM PEAK HOUR

Trip Rate: 0.7

	Enter	Exit	Total
Directional Split	25%	75%	
Trip Ends	0	1	1

PM PEAK HOUR

Trip Rate: 0.94

	Enter	Exit	Total
Directional Split	63%	37%	
Trip Ends	1	0	1

WEEKDAY

Trip Rate: 9.43

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	5	5	10

SATURDAY

Trip Rate: 9.48

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	5	5	10

TRIP GENERATION CALCULATIONS
Proposed Conditions (Actual)

Land Use:	Multifamily Housing (Low-Rise)
Land Use Code:	220
Land Use Subcategory:	Not Close to Rail Transit
Setting/Location	General Urban/Suburban
Variable:	Dwelling Units
Trip Type:	Vehicle
Formula Type:	Equation
Variable Quantity:	405

AM PEAK HOUR

Trip Rate: T=0.31*X+22.85

	Enter	Exit	Total
Directional Split	24%	76%	
Trip Ends	36	112	148

PM PEAK HOUR

Trip Rate: T=0.43*X+20.55

	Enter	Exit	Total
Directional Split	63%	37%	
Trip Ends	123	72	195

WEEKDAY

Trip Rate: T=6.41*X+75.31

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	1,336	1,336	2,672

SATURDAY

Trip Rate: 4.55

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	921	921	1,842

Caution: Small Sample Size

Source: Trip Generation Manual, 11th Edition

TRIP GENERATION CALCULATIONS
Proposed Conditions (Analyzed)

Land Use:	Multifamily Housing (Low-Rise)
Land Use Code:	220
Land Use Subcategory:	Not Close to Rail Transit
Setting/Location	General Urban/Suburban
Variable:	Dwelling Units
Trip Type:	Vehicle
Formula Type:	Equation
Variable Quantity:	408

AM PEAK HOUR

Trip Rate: T=0.31*X+22.85

	Enter	Exit	Total
Directional Split	24%	76%	
Trip Ends	36	113	149

PM PEAK HOUR

Trip Rate: T=0.43*X+20.55

	Enter	Exit	Total
Directional Split	63%	37%	
Trip Ends	123	73	196

WEEKDAY

Trip Rate: T=6.41*X+75.31

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	1,345	1,345	2,690

SATURDAY

Trip Rate: 4.55

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	928	928	1,856

Caution: Small Sample Size

Source: Trip Generation Manual, 11th Edition

OnTheMap

Base Map | Selection | Results

Distance/Direction Analysis

Home to Work

Display Settings

Labor Market Segment Filter: All Workers

Year: 2019

Map Controls

Color Key

Thermal Overlay

Point Overlay

Selection Outline

Identify | Zoom to Selection

Clear Overlays | Animate Overlays

Report/Map Outputs

Detailed Report

Export Geography

Print Chart/Map

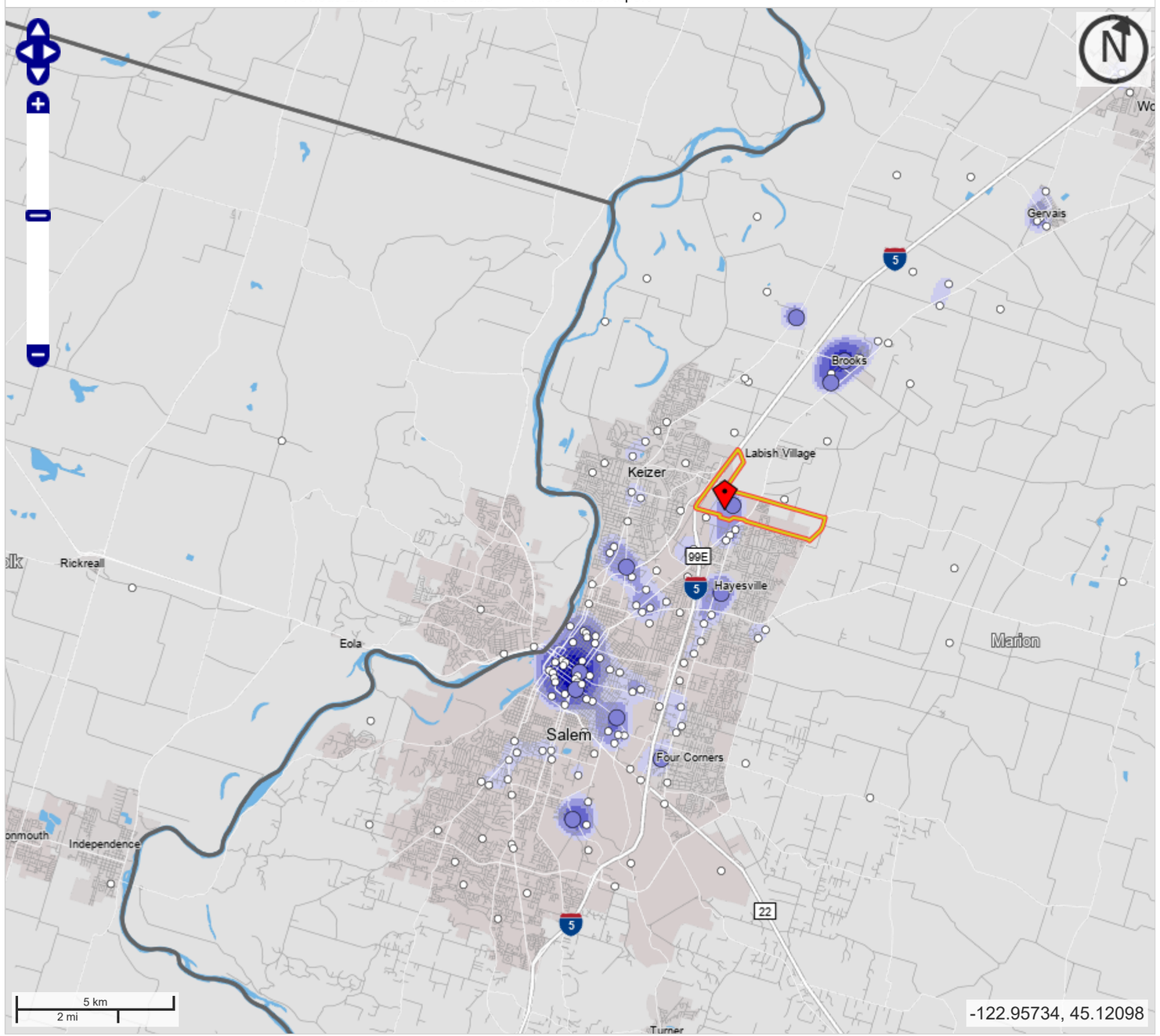
Legends

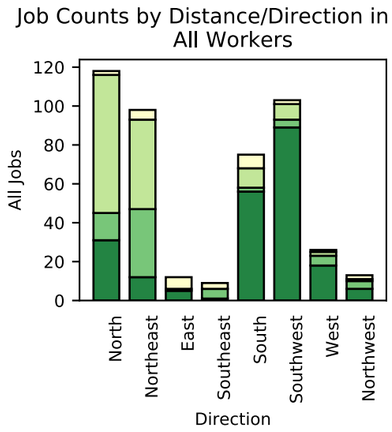
- 5 - 6 Jobs/Sq.Mile
- 7 - 10 Jobs/Sq.Mile
- 11 - 16 Jobs/Sq.Mile
- 17 - 26 Jobs/Sq.Mile
- 27 - 38 Jobs/Sq.Mile
- 1 - 2 Jobs
- 3 - 7 Jobs
- Analysis Selection

Analysis Settings

Change Settings

Save | Load | Feedback | Previous Extent | Hide Tabs | Hide Chart/Report





View as: Bar Chart

Jobs by Distance - Home Census Block to Work Census Block

	2019 Count	2019 Share
Total All Jobs	454	100.0%
Less than 10 miles	218	48.0%
10 to 24 miles	70	15.4%
25 to 50 miles	138	30.4%
Greater than 50 miles	28	6.2%

Appendix C

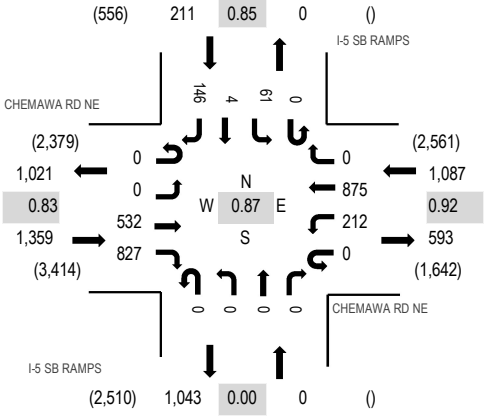
Traffic Counts

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

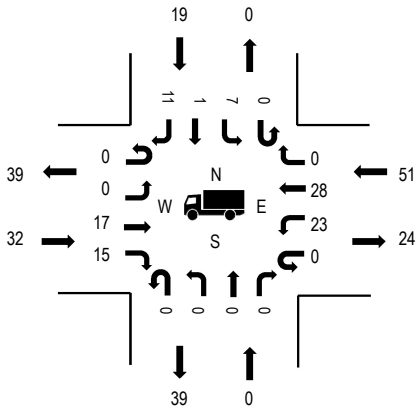
Location: 1 I-5 SB RAMPS & CHEMAWA RD NE AM
Date: Tuesday, June 7, 2022
Peak Hour: 07:25 AM - 08:25 AM
Peak 15-Minutes: 07:40 AM - 07:55 AM

Peak Hour

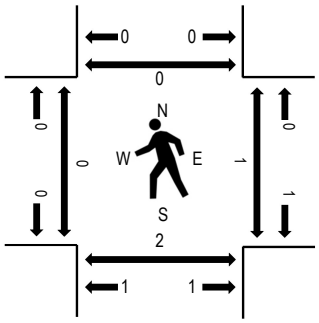
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.4%	0.83
WB	4.7%	0.92
NB	0.0%	0.00
SB	9.0%	0.85
All	3.8%	0.87

Traffic Counts - Motorized Vehicles

Interval Start Time	CHEMAWA RD NE Eastbound				CHEMAWA RD NE Westbound				I-5 SB RAMPS Northbound				I-5 SB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
6:00 AM	0	0	32	17	0	10	22	0	0	0	0	0	0	4	0	2	87	1,614
6:05 AM	0	0	36	39	0	5	20	0	0	0	0	0	0	1	0	1	102	1,701
6:10 AM	0	0	48	39	0	3	16	0	0	0	0	0	0	5	0	8	119	1,789
6:15 AM	0	0	36	32	0	4	25	0	0	0	0	0	0	6	0	5	108	1,878
6:20 AM	0	0	27	38	0	10	34	0	0	0	0	0	0	5	0	5	119	1,974
6:25 AM	0	0	38	38	0	10	31	0	0	0	0	0	0	7	0	7	131	2,058
6:30 AM	0	0	36	38	0	11	32	0	0	0	0	0	0	4	0	7	128	2,137
6:35 AM	0	0	47	52	0	16	34	0	0	0	0	0	0	7	0	5	161	2,233
6:40 AM	0	0	39	49	0	11	43	0	0	0	0	0	0	8	0	6	156	2,282
6:45 AM	0	0	36	57	0	10	41	0	0	0	0	0	0	6	0	7	157	2,367
6:50 AM	0	0	42	41	0	16	57	0	0	0	0	0	0	11	1	6	174	2,490
6:55 AM	0	0	39	43	0	21	57	0	0	0	0	0	0	5	0	7	172	2,557
7:00 AM	0	0	45	49	0	17	53	0	0	0	0	0	0	3	0	7	174	2,626
7:05 AM	0	0	57	60	0	11	46	0	0	0	0	0	0	6	0	10	190	2,649
7:10 AM	0	0	47	74	0	15	60	0	0	0	0	0	0	4	0	8	208	2,654
7:15 AM	0	0	44	71	0	11	62	0	0	0	0	0	0	4	0	12	204	2,653
7:20 AM	0	0	39	68	0	16	52	0	0	0	0	0	0	8	1	19	203	2,653
7:25 AM	0	0	37	63	0	22	75	0	0	0	0	0	0	5	0	8	210	2,657
7:30 AM	0	0	37	83	0	18	68	0	0	0	0	0	0	5	0	13	224	2,635
7:35 AM	0	0	43	75	0	20	58	0	0	0	0	0	0	3	0	11	210	2,565
7:40 AM	0	0	54	91	0	19	62	0	0	0	0	0	0	8	1	6	241	2,550
7:45 AM	0	0	57	103	0	18	84	0	0	0	0	0	0	1	0	17	280	2,508
7:50 AM	0	0	63	68	0	27	65	0	0	0	0	0	0	7	0	11	241	2,430
7:55 AM	0	0	49	66	0	14	86	0	0	0	0	0	0	9	1	16	241	2,340
8:00 AM	0	0	39	54	0	11	75	0	0	0	0	0	0	8	1	9	197	2,291
8:05 AM	0	0	31	53	0	13	75	0	0	0	0	0	0	6	0	17	195	
8:10 AM	0	0	46	59	0	17	66	0	0	0	0	0	0	2	0	17	207	
8:15 AM	0	0	35	68	0	13	76	0	0	0	0	0	0	2	0	10	204	

8:20 AM	0	0	41	44	0	20	85	0	0	0	0	0	0	5	1	11	207
8:25 AM	0	0	40	51	0	15	60	0	0	0	0	0	0	6	0	16	188
8:30 AM	0	0	26	40	0	15	52	0	0	0	0	0	0	7	1	13	154
8:35 AM	0	0	28	61	0	16	71	0	0	0	0	0	0	7	1	11	195
8:40 AM	0	0	39	55	0	24	65	0	0	0	0	0	0	6	0	10	199
8:45 AM	0	0	36	55	0	17	77	0	0	0	0	0	0	3	0	14	202
8:50 AM	0	0	23	28	0	22	61	0	0	0	0	0	0	2	1	14	151
8:55 AM	0	0	39	41	0	20	77	0	0	0	0	0	0	5	0	10	192
Count Total	0	0	1,451	1,963	0	538	2,023	0	0	0	0	0	0	191	9	356	6,531
Peak Hour	0	0	532	827	0	212	875	0	0	0	0	0	0	61	4	146	2,657

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

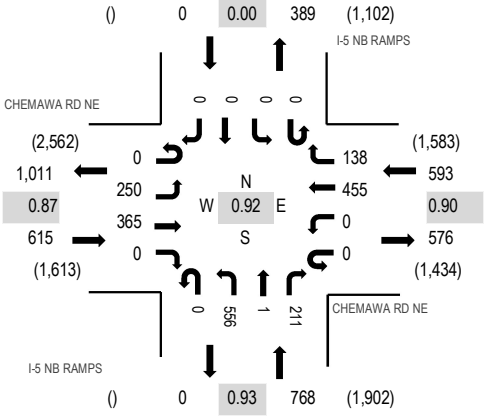
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
6:00 AM	1	0	0	2	3	6:00 AM	0	0	0	0	0	6:00 AM	0	0	0	0	0
6:05 AM	2	0	1	0	3	6:05 AM	0	0	0	0	0	6:05 AM	0	0	0	0	0
6:10 AM	0	0	1	1	2	6:10 AM	0	0	0	0	0	6:10 AM	0	0	0	0	0
6:15 AM	5	0	5	1	11	6:15 AM	0	0	0	0	0	6:15 AM	0	0	0	0	0
6:20 AM	2	0	5	1	8	6:20 AM	0	0	0	0	0	6:20 AM	0	0	0	0	0
6:25 AM	3	0	3	0	6	6:25 AM	0	0	0	0	0	6:25 AM	0	0	0	0	0
6:30 AM	2	0	6	2	10	6:30 AM	0	0	0	0	0	6:30 AM	0	0	0	0	0
6:35 AM	2	0	9	1	12	6:35 AM	1	0	0	0	1	6:35 AM	0	0	0	0	0
6:40 AM	5	0	3	1	9	6:40 AM	0	0	0	0	0	6:40 AM	0	0	0	0	0
6:45 AM	4	0	2	1	7	6:45 AM	1	0	0	0	1	6:45 AM	0	0	0	0	0
6:50 AM	7	0	11	1	19	6:50 AM	0	0	0	0	0	6:50 AM	0	0	0	0	0
6:55 AM	3	0	5	1	9	6:55 AM	0	0	0	0	0	6:55 AM	0	0	0	0	0
7:00 AM	6	0	8	0	14	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	4	0	5	2	11	7:05 AM	0	0	0	0	0	7:05 AM	0	0	1	0	1
7:10 AM	4	0	3	0	7	7:10 AM	1	0	0	0	1	7:10 AM	0	0	0	0	0
7:15 AM	1	0	7	0	8	7:15 AM	1	0	0	0	1	7:15 AM	0	0	0	0	0
7:20 AM	3	0	2	2	7	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	1	0	4	1	6	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	2	0	6	0	8	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	2	0	5	4	11	7:35 AM	0	0	0	0	0	7:35 AM	0	0	1	0	1
7:40 AM	5	0	4	1	10	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	7	0	5	0	12	7:45 AM	0	0	0	0	0	7:45 AM	0	1	0	0	1
7:50 AM	2	0	4	2	8	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	1	0	4	5	10	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	2	0	4	1	7	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	2	0	5	2	9	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	1	0	3	1	5	8:10 AM	1	0	0	0	1	8:10 AM	0	0	0	0	0
8:15 AM	5	0	4	0	9	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	2	0	3	2	7	8:20 AM	0	0	0	0	0	8:20 AM	0	1	0	0	1
8:25 AM	2	0	1	3	6	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	3	0	4	4	11	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	2	0	4	2	8	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	2	0	6	2	10	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	4	0	4	0	8	8:45 AM	0	0	0	0	0	8:45 AM	0	0	1	1	2
8:50 AM	3	0	4	2	9	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	2	0	6	0	8	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	104	0	156	48	308	Count Total	5	0	0	0	5	Count Total	0	2	3	1	6
Peak Hour	32	0	51	19	102	Peak Hour	1	0	0	0	1	Peak Hour	0	2	1	0	3

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

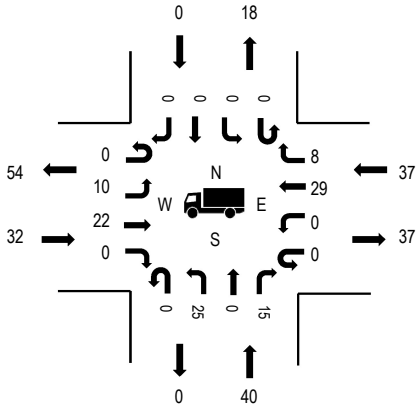
Location: 2 I-5 NB RAMPS & CHEMAWA RD NE AM
Date: Tuesday, June 7, 2022
Peak Hour: 07:05 AM - 08:05 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour

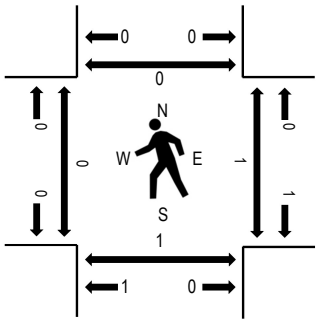
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	5.2%	0.87
WB	6.2%	0.90
NB	5.2%	0.93
SB	0.0%	0.00
All	5.5%	0.92

Traffic Counts - Motorized Vehicles

Interval Start Time	CHEMAWA RD NE Eastbound				CHEMAWA RD NE Westbound				I-5 NB RAMPS Northbound				I-5 NB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
6:00 AM	0	18	16	0	0	0	14	18	0	11	0	8	0	0	0	0	85	1,398
6:05 AM	0	26	10	0	0	0	15	15	0	12	0	6	0	0	0	0	84	1,444
6:10 AM	0	27	27	0	0	0	15	14	0	6	0	8	0	0	0	0	97	1,514
6:15 AM	0	27	13	0	0	0	10	11	0	21	0	9	0	0	0	0	91	1,575
6:20 AM	0	25	13	0	0	0	25	12	0	18	0	10	0	0	0	0	103	1,629
6:25 AM	0	21	19	0	0	0	16	7	0	29	1	21	0	0	0	0	114	1,702
6:30 AM	0	23	19	0	0	0	15	21	0	22	0	15	0	0	0	0	115	1,739
6:35 AM	0	21	27	0	0	0	24	17	0	28	0	15	0	0	0	0	132	1,784
6:40 AM	0	26	31	0	0	0	24	9	0	32	0	21	0	0	0	0	143	1,798
6:45 AM	0	15	22	0	0	0	28	13	0	29	0	14	0	0	0	0	121	1,841
6:50 AM	0	27	28	0	0	0	35	12	0	34	0	22	0	0	0	0	158	1,896
6:55 AM	0	20	23	0	0	0	33	16	0	49	0	14	0	0	0	0	155	1,914
7:00 AM	0	30	17	0	0	0	28	14	0	35	0	7	0	0	0	0	131	1,946
7:05 AM	0	24	33	0	0	0	28	15	0	34	0	20	0	0	0	0	154	1,976
7:10 AM	0	33	26	0	0	0	36	11	0	37	0	15	0	0	0	0	158	1,951
7:15 AM	0	21	24	0	0	0	25	11	0	47	0	17	0	0	0	0	145	1,946
7:20 AM	0	24	29	0	0	0	48	16	0	37	0	22	0	0	0	0	176	1,951
7:25 AM	0	16	23	0	0	0	28	6	0	56	0	22	0	0	0	0	151	1,941
7:30 AM	0	16	24	0	0	0	44	18	0	41	0	17	0	0	0	0	160	1,928
7:35 AM	0	24	25	0	0	0	38	9	0	37	1	12	0	0	0	0	146	1,894
7:40 AM	0	20	37	0	0	0	37	13	0	55	0	24	0	0	0	0	186	1,891
7:45 AM	0	22	32	0	0	0	44	10	0	53	0	15	0	0	0	0	176	1,860
7:50 AM	0	23	41	0	0	0	50	12	0	39	0	11	0	0	0	0	176	1,823
7:55 AM	0	14	48	0	0	0	38	8	0	60	0	19	0	0	0	0	187	1,803
8:00 AM	0	13	23	0	0	0	39	9	0	60	0	17	0	0	0	0	161	1,754
8:05 AM	0	11	27	0	0	0	30	6	0	50	0	5	0	0	0	0	129	
8:10 AM	0	15	29	0	0	0	39	7	0	46	0	17	0	0	0	0	153	
8:15 AM	0	20	22	0	0	0	42	5	0	48	0	13	0	0	0	0	150	

8:20 AM	0	18	31	0	0	0	41	8	0	57	0	11	0	0	0	0	166
8:25 AM	0	11	25	0	0	0	32	6	0	47	0	17	0	0	0	0	138
8:30 AM	0	9	26	0	0	0	40	8	0	23	0	20	0	0	0	0	126
8:35 AM	0	10	28	0	0	0	46	9	0	38	0	12	0	0	0	0	143
8:40 AM	0	14	27	0	0	0	51	11	0	38	0	14	0	0	0	0	155
8:45 AM	0	13	21	0	0	0	43	5	0	47	0	10	0	0	0	0	139
8:50 AM	0	15	16	0	0	0	48	7	0	54	0	16	0	0	0	0	156
8:55 AM	0	14	25	0	0	0	40	5	0	43	0	11	0	0	0	0	138
Count Total	0	706	907	0	0	0	1,189	394	0	1,373	2	527	0	0	0	0	5,098
Peak Hour	0	250	365	0	0	0	455	138	0	556	1	211	0	0	0	0	1,976

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

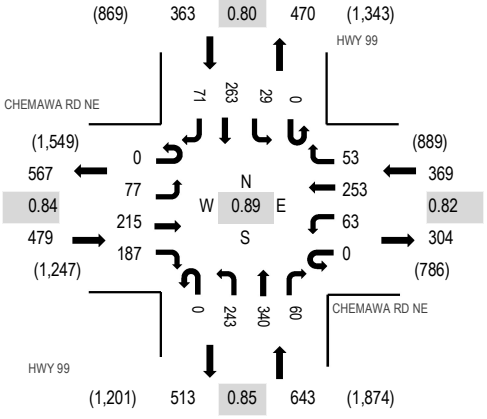
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
6:00 AM	3	1	0	0	4	6:00 AM	0	0	0	0	0	6:00 AM	0	0	0	0	0
6:05 AM	2	0	3	0	5	6:05 AM	0	0	0	0	0	6:05 AM	0	0	0	0	0
6:10 AM	0	1	2	0	3	6:10 AM	0	0	0	0	0	6:10 AM	0	0	0	0	0
6:15 AM	2	4	2	0	8	6:15 AM	0	0	0	0	0	6:15 AM	0	0	0	0	0
6:20 AM	3	4	1	0	8	6:20 AM	0	0	0	0	0	6:20 AM	0	0	0	0	0
6:25 AM	1	5	1	0	7	6:25 AM	0	0	0	0	0	6:25 AM	0	0	0	0	0
6:30 AM	1	5	3	0	9	6:30 AM	0	0	0	0	0	6:30 AM	0	0	0	0	0
6:35 AM	1	9	2	0	12	6:35 AM	1	0	0	0	1	6:35 AM	0	0	0	0	0
6:40 AM	5	5	0	0	10	6:40 AM	0	0	0	0	0	6:40 AM	0	0	0	0	0
6:45 AM	2	5	1	0	8	6:45 AM	0	0	0	0	0	6:45 AM	0	1	0	0	1
6:50 AM	7	7	6	0	20	6:50 AM	0	0	0	0	0	6:50 AM	0	0	0	0	0
6:55 AM	3	8	4	0	15	6:55 AM	0	0	0	0	0	6:55 AM	0	0	0	0	0
7:00 AM	3	3	2	0	8	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	6	5	2	0	13	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	4	5	1	0	10	7:10 AM	1	0	0	0	1	7:10 AM	0	0	0	0	0
7:15 AM	0	6	6	0	12	7:15 AM	1	0	0	0	1	7:15 AM	0	0	0	0	0
7:20 AM	2	2	1	0	5	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	2	4	1	0	7	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	1	2	4	0	7	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	4	4	1	0	9	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	2	1	5	0	8	7:40 AM	0	0	0	0	0	7:40 AM	0	1	1	0	2
7:45 AM	5	3	7	0	15	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	1	0	2	0	3	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	3	1	6	0	10	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	2	7	1	0	10	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	2	3	3	0	8	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	1	1	3	0	5	8:10 AM	1	0	0	0	1	8:10 AM	0	0	0	0	0
8:15 AM	2	4	2	0	8	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	2	2	1	0	5	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	4	3	2	0	9	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	2	3	3	0	8	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	3	3	2	0	8	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	2	6	4	0	12	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	2	5	4	0	11	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	3	4	3	0	10	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	3	5	0	8	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	88	134	96	0	318	Count Total	4	0	0	0	4	Count Total	0	2	1	0	3
Peak Hour	32	40	37	0	109	Peak Hour	2	0	0	0	2	Peak Hour	0	1	1	0	2

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

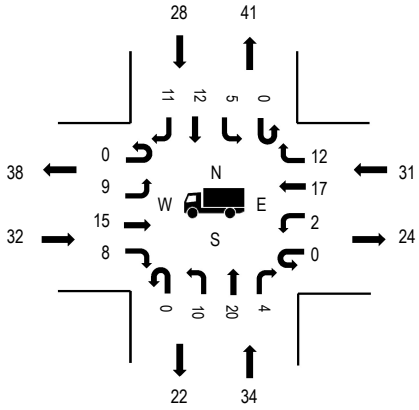
Location: 3 HWY 99 & CHEMAWA RD NE AM
Date: Tuesday, June 7, 2022
Peak Hour: 07:10 AM - 08:10 AM
Peak 15-Minutes: 07:40 AM - 07:55 AM

Peak Hour

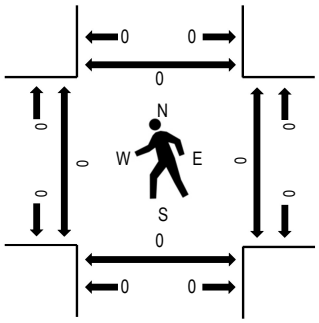
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	6.7%	0.84
WB	8.4%	0.82
NB	5.3%	0.85
SB	7.7%	0.80
All	6.7%	0.89

Traffic Counts - Motorized Vehicles

Interval Start Time	CHEMAWA RD NE Eastbound				CHEMAWA RD NE Westbound				HWY 99 Northbound				HWY 99 Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
6:00 AM	0	1	9	8	0	5	4	0	0	21	21	1	0	1	9	4	84	1,480
6:05 AM	0	5	4	5	0	3	12	0	0	23	21	0	0	1	10	0	84	1,515
6:10 AM	0	6	16	7	0	2	6	0	0	14	39	1	0	1	11	3	106	1,559
6:15 AM	0	7	13	5	0	1	11	2	0	11	35	2	0	0	12	4	103	1,597
6:20 AM	0	4	7	7	0	2	12	0	0	18	37	2	0	0	12	2	103	1,648
6:25 AM	0	5	19	7	0	0	11	2	0	16	41	2	0	2	6	6	117	1,693
6:30 AM	0	8	12	10	0	3	16	0	0	10	60	3	0	1	5	3	131	1,748
6:35 AM	0	7	23	7	0	3	17	2	0	21	39	2	0	1	12	3	137	1,777
6:40 AM	0	12	20	15	0	1	11	1	0	14	51	2	0	3	21	4	155	1,767
6:45 AM	0	9	14	11	0	5	19	1	0	26	56	9	0	1	18	5	174	1,780
6:50 AM	0	8	18	11	0	5	16	2	0	18	34	8	0	3	11	7	141	1,799
6:55 AM	0	6	8	13	0	2	13	1	0	28	33	11	0	2	21	7	145	1,820
7:00 AM	0	6	13	11	0	5	13	2	0	27	19	3	0	4	11	5	119	1,836
7:05 AM	0	2	16	18	0	2	15	1	0	22	30	3	0	2	13	4	128	1,849
7:10 AM	0	2	20	17	0	5	15	3	0	16	27	7	0	1	27	4	144	1,854
7:15 AM	0	8	16	8	0	10	26	1	0	15	41	4	0	0	20	5	154	1,824
7:20 AM	0	8	21	8	0	2	21	7	0	22	32	5	0	1	16	5	148	1,813
7:25 AM	0	5	25	13	0	7	34	7	0	25	29	1	0	2	21	3	172	1,793
7:30 AM	0	7	10	13	0	4	23	4	0	23	34	6	0	2	29	5	160	1,753
7:35 AM	0	4	16	9	0	5	16	3	0	19	23	5	0	4	17	6	127	1,745
7:40 AM	0	7	19	28	0	3	18	8	0	27	28	7	0	4	13	6	168	1,748
7:45 AM	0	12	16	17	0	10	31	5	0	20	27	9	0	3	31	12	193	1,724
7:50 AM	0	8	17	22	0	6	22	3	0	14	32	6	0	2	20	10	162	1,652
7:55 AM	0	7	12	21	0	4	18	3	0	27	28	3	0	3	31	4	161	1,612
8:00 AM	0	7	28	17	0	0	18	4	0	19	18	1	0	1	13	6	132	1,563
8:05 AM	0	2	15	14	0	7	11	5	0	16	21	6	0	6	25	5	133	
8:10 AM	0	9	15	8	0	5	24	1	0	17	12	2	0	3	17	1	114	
8:15 AM	0	10	10	15	0	4	24	2	0	18	22	6	0	0	25	7	143	

8:20 AM	0	4	25	11	0	0	20	5	0	17	14	5	0	2	15	10	128
8:25 AM	0	4	23	11	0	2	17	1	0	18	26	5	0	2	20	3	132
8:30 AM	0	12	15	15	0	5	28	4	0	15	11	5	0	4	30	8	152
8:35 AM	0	0	23	12	0	0	31	4	0	21	17	7	0	0	12	3	130
8:40 AM	0	9	15	19	0	6	25	4	0	15	18	2	0	3	17	11	144
8:45 AM	0	3	10	17	0	9	16	1	0	29	12	3	0	0	14	7	121
8:50 AM	0	5	10	10	0	3	30	4	0	23	16	1	0	4	9	7	122
8:55 AM	0	4	16	15	0	1	13	2	0	17	21	2	0	1	15	5	112
Count Total	0	223	569	455	0	137	657	95	0	702	1,025	147	0	70	609	190	4,879
Peak Hour	0	77	215	187	0	63	253	53	0	243	340	60	0	29	263	71	1,854

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

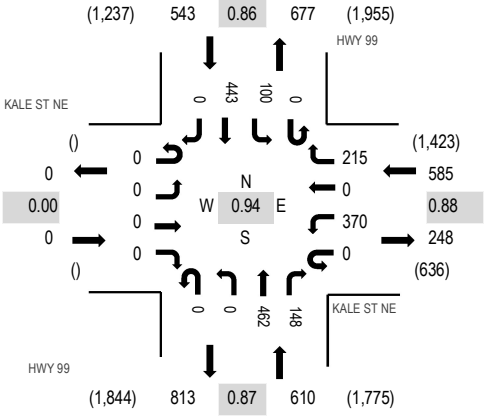
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
6:00 AM	2	2	0	1	5	6:00 AM	0	0	0	0	0	6:00 AM	2	0	0	0	2
6:05 AM	1	0	3	0	4	6:05 AM	0	0	0	0	0	6:05 AM	0	0	0	0	0
6:10 AM	0	1	1	0	2	6:10 AM	0	0	0	0	0	6:10 AM	0	0	0	0	0
6:15 AM	1	2	2	0	5	6:15 AM	0	0	0	0	0	6:15 AM	0	0	0	0	0
6:20 AM	0	2	1	0	3	6:20 AM	0	0	0	0	0	6:20 AM	0	0	0	0	0
6:25 AM	1	0	2	2	5	6:25 AM	0	0	0	0	0	6:25 AM	0	0	0	0	0
6:30 AM	3	2	2	1	8	6:30 AM	0	0	0	0	0	6:30 AM	0	0	0	0	0
6:35 AM	2	1	3	0	6	6:35 AM	0	0	0	0	0	6:35 AM	0	0	0	0	0
6:40 AM	2	0	0	4	6	6:40 AM	1	0	0	0	1	6:40 AM	0	0	0	0	0
6:45 AM	2	1	2	5	10	6:45 AM	0	0	0	0	0	6:45 AM	0	0	0	0	0
6:50 AM	5	3	3	2	13	6:50 AM	0	0	0	0	0	6:50 AM	0	0	0	0	0
6:55 AM	1	1	1	5	8	6:55 AM	0	0	0	0	0	6:55 AM	0	0	0	0	0
7:00 AM	1	4	0	2	7	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	4	1	1	5	11	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	3	2	2	0	7	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	2	3	5	4	14	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	1	3	3	2	9	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	4	6	4	2	16	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	1	1
7:30 AM	0	4	0	2	6	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	1	1	1	2	5	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	3	4	5	2	14	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	3	3	4	4	14	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	4	2	1	2	9	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	1	3	3	7	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	7	1	2	2	12	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	4	4	1	3	12	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	4	2	1	2	9	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	1	3	0	3	7	8:15 AM	1	0	0	0	1	8:15 AM	0	0	0	0	0
8:20 AM	2	2	0	1	5	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	3	3	1	3	10	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	5	1	2	7	15	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	2	2	2	3	9	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	5	1	4	2	12	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	3	1	4	0	8	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	3	2	4	5	14	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	2	2	5	1	10	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	87	73	75	82	317	Count Total	2	0	0	0	2	Count Total	2	0	0	1	3
Peak Hour	32	34	31	28	125	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	1	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

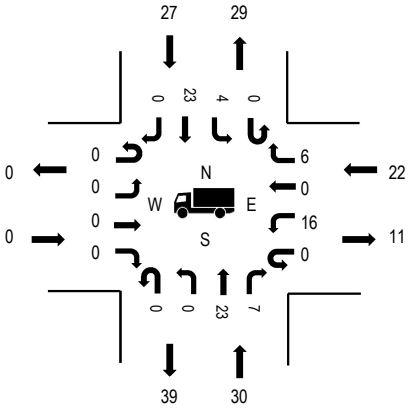
Location: 4 HWY 99 & KALE ST NE AM
Date: Tuesday, June 7, 2022
Peak Hour: 07:10 AM - 08:10 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour

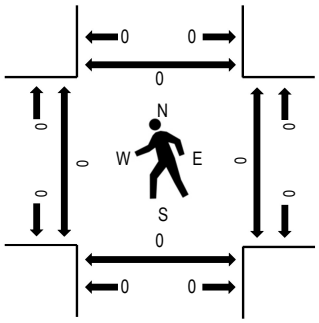
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	3.8%	0.88
NB	4.9%	0.87
SB	5.0%	0.86
All	4.5%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	KALE ST NE Eastbound				KALE ST NE Westbound				HWY 99 Northbound				HWY 99 Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
6:00 AM	0	0	0	0	0	9	0	15	0	0	35	1	0	3	21	0	84	1,310
6:05 AM	0	0	0	0	0	13	0	16	0	0	28	4	0	5	19	0	85	1,337
6:10 AM	0	0	0	0	0	10	0	14	0	0	45	6	0	1	19	0	95	1,368
6:15 AM	0	0	0	0	0	16	0	17	0	0	38	2	0	2	12	0	87	1,405
6:20 AM	0	0	0	0	0	12	0	14	0	0	40	6	0	4	16	0	92	1,474
6:25 AM	0	0	0	0	0	8	0	16	0	0	61	3	0	2	10	0	100	1,531
6:30 AM	0	0	0	0	0	20	0	22	0	0	55	3	0	3	14	0	117	1,589
6:35 AM	0	0	0	0	0	18	0	14	0	0	51	5	0	5	18	0	111	1,617
6:40 AM	0	0	0	0	0	33	0	16	0	0	62	7	0	2	20	0	140	1,646
6:45 AM	0	0	0	0	0	16	0	21	0	0	58	5	0	9	23	0	132	1,645
6:50 AM	0	0	0	0	0	29	0	24	0	0	54	10	0	9	20	0	146	1,671
6:55 AM	0	0	0	0	0	18	0	27	0	0	39	9	0	7	21	0	121	1,686
7:00 AM	0	0	0	0	0	17	0	21	0	0	30	7	0	10	26	0	111	1,704
7:05 AM	0	0	0	0	0	21	0	12	0	0	39	12	0	8	24	0	116	1,718
7:10 AM	0	0	0	0	0	23	0	16	0	0	42	8	0	12	31	0	132	1,738
7:15 AM	0	0	0	0	0	34	0	15	0	0	54	16	0	9	28	0	156	1,706
7:20 AM	0	0	0	0	0	32	0	29	0	0	35	15	0	6	32	0	149	1,672
7:25 AM	0	0	0	0	0	31	0	25	0	0	37	19	0	8	38	0	158	1,640
7:30 AM	0	0	0	0	0	29	0	19	0	0	45	15	0	5	32	0	145	1,608
7:35 AM	0	0	0	0	0	43	0	18	0	0	34	7	0	6	32	0	140	1,581
7:40 AM	0	0	0	0	0	26	0	23	0	0	32	8	0	14	36	0	139	1,571
7:45 AM	0	0	0	0	0	38	0	11	0	0	55	6	0	5	43	0	158	1,551
7:50 AM	0	0	0	0	0	43	0	16	0	0	41	11	0	12	38	0	161	1,527
7:55 AM	0	0	0	0	0	17	0	17	0	0	31	15	0	9	50	0	139	1,466
8:00 AM	0	0	0	0	0	23	0	10	0	0	31	15	0	8	38	0	125	1,421
8:05 AM	0	0	0	0	0	31	0	16	0	0	25	13	0	6	45	0	136	
8:10 AM	0	0	0	0	0	29	0	9	0	0	22	10	0	7	23	0	100	
8:15 AM	0	0	0	0	0	16	0	11	0	0	36	17	0	5	37	0	122	

8:20 AM	0	0	0	0	0	21	0	14	0	0	29	18	0	6	29	0	117
8:25 AM	0	0	0	0	0	19	0	17	0	0	23	25	0	6	36	0	126
8:30 AM	0	0	0	0	0	26	0	10	0	0	25	22	0	8	27	0	118
8:35 AM	0	0	0	0	0	24	0	14	0	0	29	22	0	9	32	0	130
8:40 AM	0	0	0	0	0	33	0	10	0	0	29	9	0	10	28	0	119
8:45 AM	0	0	0	0	0	29	0	9	0	0	28	27	0	7	34	0	134
8:50 AM	0	0	0	0	0	20	0	11	0	0	28	13	0	3	25	0	100
8:55 AM	0	0	0	0	0	15	0	12	0	0	28	10	0	4	25	0	94
Count Total	0	0	0	0	0	842	0	581	0	0	1,374	401	0	235	1,002	0	4,435
Peak Hour	0	0	0	0	0	370	0	215	0	0	462	148	0	100	443	0	1,738

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

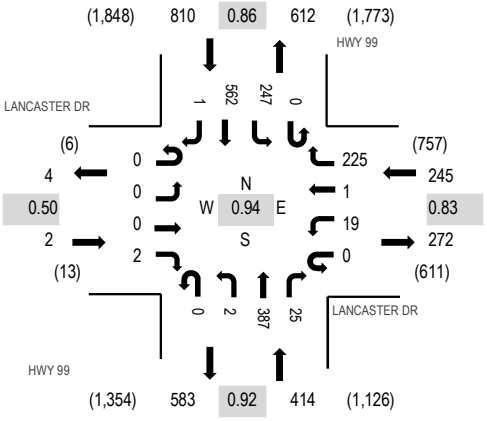
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
6:00 AM	0	1	1	1	3	6:00 AM	0	0	0	0	0	6:00 AM	0	0	0	0	0
6:05 AM	0	0	0	2	2	6:05 AM	0	0	0	0	0	6:05 AM	0	0	0	0	0
6:10 AM	0	2	0	0	2	6:10 AM	0	0	0	0	0	6:10 AM	0	0	0	0	0
6:15 AM	0	2	0	0	2	6:15 AM	0	0	0	0	0	6:15 AM	0	0	0	0	0
6:20 AM	0	1	0	0	1	6:20 AM	0	0	0	0	0	6:20 AM	0	0	0	0	0
6:25 AM	0	1	0	3	4	6:25 AM	0	0	0	0	0	6:25 AM	0	0	0	0	0
6:30 AM	0	1	0	0	1	6:30 AM	0	0	0	0	0	6:30 AM	0	0	0	0	0
6:35 AM	0	3	0	4	7	6:35 AM	0	0	0	0	0	6:35 AM	0	0	0	0	0
6:40 AM	0	1	2	4	7	6:40 AM	0	0	0	0	0	6:40 AM	0	0	0	0	0
6:45 AM	0	2	1	3	6	6:45 AM	0	0	0	0	0	6:45 AM	0	0	0	0	0
6:50 AM	0	3	1	3	7	6:50 AM	0	0	0	0	0	6:50 AM	0	0	0	0	0
6:55 AM	0	1	0	3	4	6:55 AM	0	0	0	0	0	6:55 AM	0	0	0	0	0
7:00 AM	0	4	2	2	8	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	3	2	4	9	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	1	2	2	5	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	3	3	2	8	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	4	2	2	8	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	2	2	1	5	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	3	0	2	5	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	1	2	1	4	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	1	1	3	5	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	4	2	2	8	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	2	0	5	7	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	1	1	1	3	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	4	3	4	11	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	4	4	2	10	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	2	0	2	4	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	5	1	5	11	8:15 AM	0	0	0	1	1	8:15 AM	0	0	0	0	0
8:20 AM	0	2	0	2	4	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	7	0	3	10	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	3	0	3	6	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	1	1	5	7	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	4	1	5	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	2	0	0	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	2	2	3	7	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	2	2	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	79	39	82	200	Count Total	0	0	0	1	1	Count Total	0	0	0	0	0
Peak Hour	0	30	22	27	79	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

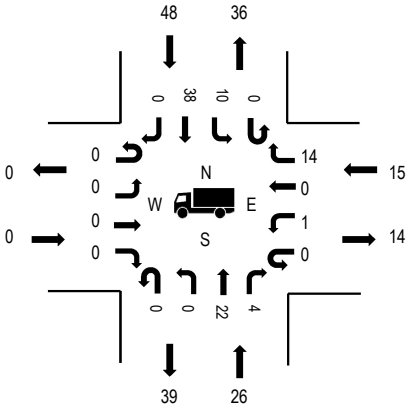
Location: 5 HWY 99 & LANCASTER DR AM
Date: Tuesday, June 7, 2022
Peak Hour: 07:10 AM - 08:10 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour

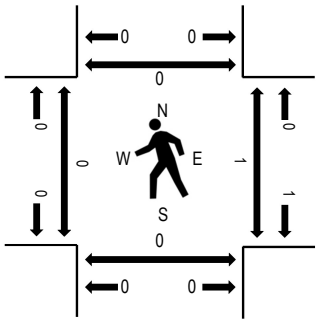
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB	6.1%	0.83
NB	6.3%	0.92
SB	5.9%	0.86
All	6.1%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	LANCASTER DR Eastbound				LANCASTER DR Westbound				HWY 99 Northbound				HWY 99 Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
6:00 AM	0	0	0	0	0	2	0	22	0	0	16	0	0	4	28	0	72	1,064
6:05 AM	0	0	0	0	0	0	0	11	0	0	21	0	0	11	22	0	65	1,082
6:10 AM	0	0	0	0	0	0	0	23	0	0	25	0	0	7	21	0	76	1,106
6:15 AM	0	0	0	1	0	1	0	22	0	0	22	0	0	9	19	0	74	1,136
6:20 AM	0	0	0	0	0	3	0	21	0	0	24	1	0	6	25	0	80	1,191
6:25 AM	0	0	0	0	0	0	0	28	0	0	35	1	0	4	12	0	80	1,236
6:30 AM	0	0	0	2	0	2	0	31	0	0	24	1	0	10	24	0	94	1,276
6:35 AM	0	1	0	1	0	1	0	23	0	0	35	2	0	10	25	0	98	1,314
6:40 AM	0	0	0	0	0	0	0	30	0	0	42	0	0	8	42	0	122	1,338
6:45 AM	0	0	0	0	0	0	0	26	0	0	31	1	0	17	27	0	102	1,330
6:50 AM	0	1	0	2	0	2	0	31	0	0	33	0	0	8	35	0	112	1,355
6:55 AM	0	0	0	0	0	2	0	16	0	0	27	1	0	16	27	0	89	1,388
7:00 AM	0	0	0	0	0	1	0	13	0	1	31	2	0	13	29	0	90	1,419
7:05 AM	0	0	0	0	0	2	0	16	0	0	29	2	0	7	33	0	89	1,437
7:10 AM	0	0	0	0	0	2	0	11	0	0	39	1	0	24	29	0	106	1,471
7:15 AM	0	0	0	0	0	3	0	21	0	0	40	2	0	22	41	0	129	1,450
7:20 AM	0	0	0	0	0	2	0	26	0	1	30	3	0	17	46	0	125	1,436
7:25 AM	0	0	0	0	0	0	0	15	0	0	33	0	0	16	56	0	120	1,428
7:30 AM	0	0	0	2	0	2	0	22	0	0	40	1	0	21	44	0	132	1,417
7:35 AM	0	0	0	0	0	0	0	19	0	0	27	2	0	14	60	0	122	1,382
7:40 AM	0	0	0	0	0	2	0	18	0	0	35	2	0	16	41	0	114	1,372
7:45 AM	0	0	0	0	0	1	0	13	0	1	28	0	0	23	60	1	127	1,359
7:50 AM	0	0	0	0	0	2	0	25	0	0	36	4	0	23	55	0	145	1,362
7:55 AM	0	0	0	0	0	1	0	22	0	0	21	3	0	27	46	0	120	1,302
8:00 AM	0	0	0	0	0	2	0	18	0	0	29	4	0	19	36	0	108	1,261
8:05 AM	0	0	0	0	0	2	1	15	0	0	29	3	0	25	48	0	123	
8:10 AM	0	0	0	0	0	2	0	14	0	0	18	1	0	16	34	0	85	
8:15 AM	0	0	0	1	0	1	1	23	0	0	27	4	0	20	38	0	115	

8:20 AM	0	0	0	1	0	4	0	19	0	0	34	4	0	15	40	0	117
8:25 AM	0	0	0	0	0	2	0	15	0	0	33	3	0	22	34	0	109
8:30 AM	0	0	0	0	0	0	0	20	0	0	30	0	0	13	34	0	97
8:35 AM	0	0	0	0	0	1	0	16	0	0	36	0	0	12	47	0	112
8:40 AM	0	0	0	1	0	1	0	14	0	0	23	3	0	21	38	0	101
8:45 AM	0	0	0	0	0	3	0	17	0	0	36	4	0	29	41	0	130
8:50 AM	0	0	0	0	0	2	0	16	0	0	21	1	0	15	30	0	85
8:55 AM	0	0	0	0	0	0	0	12	0	0	27	0	0	15	25	0	79
Count Total	0	2	0	11	0	51	2	704	0	3	1,067	56	0	555	1,292	1	3,744
Peak Hour	0	0	0	2	0	19	1	225	0	2	387	25	0	247	562	1	1,471

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

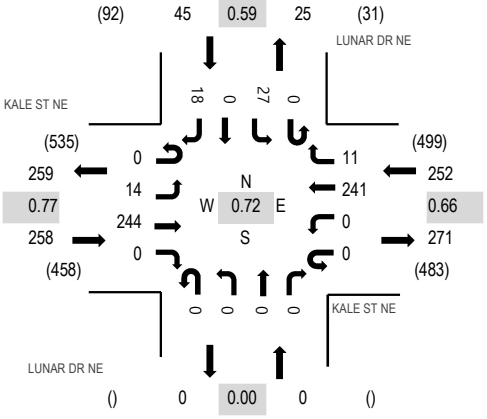
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
6:00 AM	0	1	0	1	2	6:00 AM	0	0	0	0	0	6:00 AM	0	0	0	0	0
6:05 AM	0	1	0	2	3	6:05 AM	0	0	0	0	0	6:05 AM	0	0	0	0	0
6:10 AM	0	1	1	0	2	6:10 AM	0	0	0	0	0	6:10 AM	0	0	0	0	0
6:15 AM	0	1	0	0	1	6:15 AM	0	0	0	0	0	6:15 AM	0	0	0	0	0
6:20 AM	0	0	2	0	2	6:20 AM	0	0	0	0	0	6:20 AM	0	0	0	0	0
6:25 AM	0	1	0	2	3	6:25 AM	0	0	0	0	0	6:25 AM	0	0	0	0	0
6:30 AM	0	0	2	1	3	6:30 AM	0	0	0	0	0	6:30 AM	0	0	0	0	0
6:35 AM	0	3	0	3	6	6:35 AM	0	0	0	0	0	6:35 AM	0	0	0	0	0
6:40 AM	0	1	0	6	7	6:40 AM	0	0	0	0	0	6:40 AM	0	0	0	0	0
6:45 AM	0	2	0	3	5	6:45 AM	0	0	0	0	0	6:45 AM	0	0	0	0	0
6:50 AM	0	1	1	0	2	6:50 AM	0	0	0	0	0	6:50 AM	0	0	1	0	1
6:55 AM	0	2	0	5	7	6:55 AM	0	0	0	0	0	6:55 AM	0	0	1	0	1
7:00 AM	0	3	2	5	10	7:00 AM	0	0	0	0	0	7:00 AM	1	0	0	0	1
7:05 AM	0	3	2	4	9	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	2	5	7	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	4	2	5	11	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	3	1	4	8	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	1	1	4	6	7:25 AM	0	0	0	0	0	7:25 AM	0	0	1	0	1
7:30 AM	0	4	1	2	7	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	3	0	4	7	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	1	0	4	5	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	2	2	5	9	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	1	2	4	7	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	1	3	4	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	3	2	4	9	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	4	1	4	9	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	2	1	2	5	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	2	4	6	8:15 AM	0	0	0	1	1	8:15 AM	0	0	0	0	0
8:20 AM	0	1	5	3	9	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	7	1	3	11	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	2	1	2	5	8:30 AM	0	0	0	0	0	8:30 AM	0	0	2	0	2
8:35 AM	0	1	1	2	4	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	1	1
8:40 AM	0	1	0	6	7	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	0	1	1	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	1	3	4	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	1	0	1	2	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	61	38	107	206	Count Total	0	0	0	1	1	Count Total	1	0	5	1	7
Peak Hour	0	26	15	48	89	Peak Hour	0	0	0	0	0	Peak Hour	0	0	1	0	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

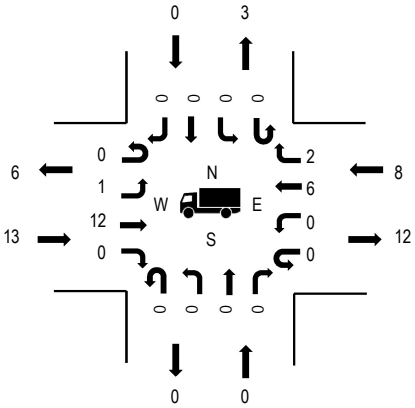
Location: 1 LUNAR DR NE & KALE ST NE AM
Date: Tuesday, June 7, 2022
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:30 AM - 08:45 AM

Peak Hour

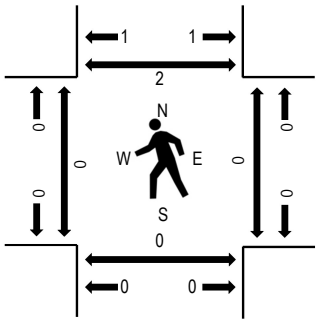
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	5.0%	0.77
WB	3.2%	0.66
NB	0.0%	0.00
SB	0.0%	0.59
All	3.8%	0.72

Traffic Counts - Motorized Vehicles

Interval Start Time	KALE ST NE Eastbound				KALE ST NE Westbound				LUNAR DR NE Northbound				LUNAR DR NE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	1	10	0	0	0	15	0	0	0	0	0	0	2	0	2	30	494
7:05 AM	0	0	19	0	0	0	12	0	0	0	0	0	0	1	0	1	33	506
7:10 AM	0	0	16	0	0	0	23	1	0	0	0	0	0	3	0	2	45	500
7:15 AM	0	0	19	0	0	0	21	0	0	0	0	0	0	1	0	9	50	490
7:20 AM	0	0	23	0	0	0	18	0	0	0	0	0	0	1	0	4	46	475
7:25 AM	0	0	22	0	0	0	22	0	0	0	0	0	0	2	0	1	47	482
7:30 AM	0	0	17	0	0	0	19	0	0	0	0	0	0	1	0	1	38	476
7:35 AM	0	0	8	0	0	0	25	1	0	0	0	0	0	0	0	1	35	524
7:40 AM	0	1	24	0	0	0	28	0	0	0	0	0	0	2	0	1	56	541
7:45 AM	0	1	13	0	0	0	26	0	0	0	0	0	0	0	0	2	42	539
7:50 AM	0	0	12	0	0	0	17	0	0	0	0	0	0	3	0	3	35	550
7:55 AM	0	1	13	0	0	0	19	0	0	0	0	0	0	0	0	4	37	550
8:00 AM	0	2	20	0	0	0	16	1	0	0	0	0	0	0	0	3	42	555
8:05 AM	0	0	11	0	0	0	14	0	0	0	0	0	0	2	0	0	27	
8:10 AM	0	0	19	0	0	0	14	0	0	0	0	0	0	0	0	2	35	
8:15 AM	0	1	21	0	0	0	11	0	0	0	0	0	0	1	0	1	35	
8:20 AM	0	3	27	0	0	0	19	1	0	0	0	0	0	2	0	1	53	
8:25 AM	0	2	17	0	0	0	17	1	0	0	0	0	0	3	0	1	41	
8:30 AM	0	2	33	0	0	0	41	1	0	0	0	0	0	5	0	4	86	
8:35 AM	0	1	26	0	0	0	19	1	0	0	0	0	0	2	0	3	52	
8:40 AM	0	0	16	0	0	0	31	2	0	0	0	0	0	5	0	0	54	
8:45 AM	0	0	27	0	0	0	21	3	0	0	0	0	0	2	0	0	53	
8:50 AM	0	1	13	0	0	0	18	0	0	0	0	0	0	3	0	0	35	
8:55 AM	0	2	14	0	0	0	20	1	0	0	0	0	0	2	0	3	42	
Count Total	0	18	440	0	0	0	486	13	0	0	0	0	0	43	0	49	1,049	
Peak Hour	0	14	244	0	0	0	241	11	0	0	0	0	0	27	0	18	555	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

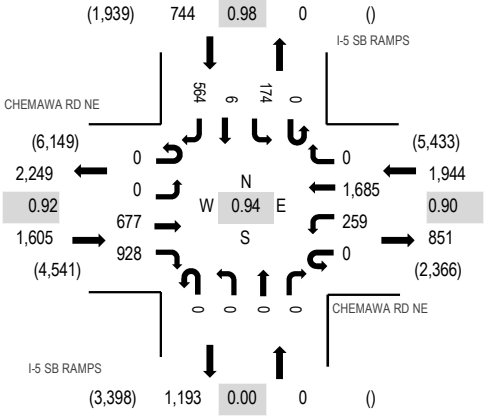
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	1	0	0	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	1	0	1	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	2	0	1	0	3	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	1	0	1	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	2	0	1	0	3	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	0	1	0	1	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	3	0	3	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	2	2
8:00 AM	2	0	1	0	3	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	1	0	0	0	1	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	1	0	1	0	2	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	1	0	2	0	3	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	3	0	0	0	3	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	2	0	1	0	3	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	0	1	0	1	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	1	0	1	0	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	1	1
8:50 AM	1	0	0	0	1	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	1	1
8:55 AM	0	0	1	0	1	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	1	1
Count Total	18	0	16	0	34	Count Total	0	0	0	0	0	Count Total	0	0	0	6	6
Peak Hour	13	0	8	0	21	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	3	3

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

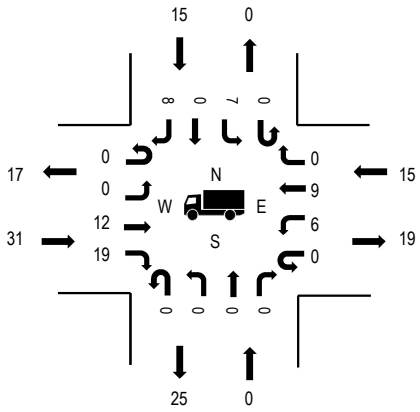
Location: 1 I-5 SB RAMPS & CHEMAWA RD NE PM
Date: Tuesday, June 7, 2022
Peak Hour: 04:35 PM - 05:35 PM
Peak 15-Minutes: 05:10 PM - 05:25 PM

Peak Hour

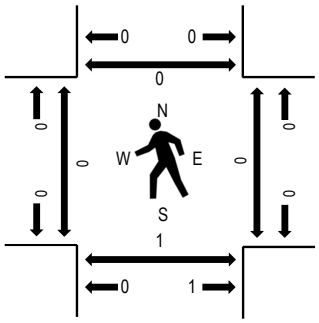
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.9%	0.92
WB	0.8%	0.90
NB	0.0%	0.00
SB	2.0%	0.98
All	1.4%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	CHEMAWA RD NE Eastbound				CHEMAWA RD NE Westbound				I-5 SB RAMPS Northbound				I-5 SB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
3:00 PM	0	0	58	77	0	19	121	0	0	0	0	0	0	9	0	27	311	3,631
3:05 PM	0	0	51	62	0	11	95	0	0	0	0	0	0	11	2	38	270	3,626
3:10 PM	0	0	54	60	0	20	103	0	0	0	0	0	0	14	0	33	284	3,706
3:15 PM	0	0	49	69	0	17	107	0	0	0	0	0	0	9	0	22	273	3,751
3:20 PM	0	0	49	58	0	16	129	0	0	0	0	0	0	14	4	41	311	3,814
3:25 PM	0	0	58	63	0	24	109	0	0	0	0	0	0	8	0	26	288	3,859
3:30 PM	0	0	43	64	0	21	114	0	0	0	0	0	0	10	1	28	281	3,908
3:35 PM	0	0	51	87	0	22	119	0	0	0	0	0	0	9	0	21	309	3,935
3:40 PM	0	0	61	76	0	26	133	0	0	0	0	0	0	7	0	37	340	3,993
3:45 PM	0	0	58	55	0	22	141	0	0	0	0	0	0	5	0	26	307	4,003
3:50 PM	0	0	62	68	0	17	136	0	0	0	0	0	0	7	1	32	323	4,044
3:55 PM	0	0	44	74	0	20	129	0	0	0	0	0	0	13	1	53	334	4,059
4:00 PM	0	0	49	63	0	19	122	0	0	0	0	0	0	13	1	39	306	4,064
4:05 PM	0	0	70	81	0	26	131	0	0	0	0	0	0	15	1	26	350	4,101
4:10 PM	0	0	50	80	0	18	128	0	0	0	0	0	0	14	4	35	329	4,116
4:15 PM	0	0	56	73	0	24	135	0	0	0	0	0	0	15	2	31	336	4,163
4:20 PM	0	0	59	71	0	21	137	0	0	0	0	0	0	17	1	50	356	4,228
4:25 PM	0	0	46	90	0	19	137	0	0	0	0	0	0	11	1	33	337	4,238
4:30 PM	0	0	35	59	0	28	129	0	0	0	0	0	0	15	0	42	308	4,265
4:35 PM	0	0	75	74	0	23	147	0	0	0	0	0	0	16	1	31	367	4,293
4:40 PM	0	0	70	75	0	21	125	0	0	0	0	0	0	21	0	38	350	4,270
4:45 PM	0	0	55	65	0	22	123	0	0	0	0	0	0	17	1	65	348	4,268
4:50 PM	0	0	47	78	0	21	136	0	0	0	0	0	0	11	1	44	338	4,248
4:55 PM	0	0	53	72	0	15	142	0	0	0	0	0	0	12	1	44	339	4,211
5:00 PM	0	0	45	83	0	18	133	0	0	0	0	0	0	16	0	48	343	4,218
5:05 PM	0	0	53	76	0	34	133	0	0	0	0	0	0	12	0	57	365	
5:10 PM	0	0	64	88	0	22	143	0	0	0	0	0	0	11	0	48	376	
5:15 PM	0	0	59	96	0	16	169	0	0	0	0	0	0	17	1	43	401	

5:20 PM	0	0	51	70	0	31	142	0	0	0	0	0	0	15	1	56	366
5:25 PM	0	0	59	67	0	24	163	0	0	0	0	0	0	9	0	42	364
5:30 PM	0	0	46	84	0	12	129	0	0	0	0	0	0	17	0	48	336
5:35 PM	0	0	44	83	0	12	126	0	0	0	0	0	0	10	0	69	344
5:40 PM	0	0	56	72	0	30	132	0	0	0	0	0	0	15	0	43	348
5:45 PM	0	0	58	81	0	18	112	0	0	0	0	0	0	8	1	50	328
5:50 PM	0	0	37	55	0	17	127	0	0	0	0	0	0	13	0	52	301
5:55 PM	0	0	45	72	0	25	145	0	0	0	0	0	0	10	0	49	346
Count Total	0	0	1,920	2,621	0	751	4,682	0	0	0	0	0	0	446	26	1,467	11,913
Peak Hour	0	0	677	928	0	259	1,685	0	0	0	0	0	0	174	6	564	4,293

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	3	0	7	1	11	3:00 PM	0	0	1	0	1	3:00 PM	0	0	0	0	0
3:05 PM	2	0	2	2	6	3:05 PM	0	0	0	0	0	3:05 PM	0	0	0	0	0
3:10 PM	6	0	2	1	9	3:10 PM	0	0	0	0	0	3:10 PM	0	0	0	0	0
3:15 PM	4	0	3	0	7	3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:20 PM	2	0	0	1	3	3:20 PM	0	0	0	0	0	3:20 PM	0	0	0	0	0
3:25 PM	0	0	1	2	3	3:25 PM	0	0	0	0	0	3:25 PM	0	0	0	0	0
3:30 PM	2	0	3	0	5	3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:35 PM	4	0	4	1	9	3:35 PM	1	0	0	0	1	3:35 PM	0	0	0	0	0
3:40 PM	4	0	1	2	7	3:40 PM	0	0	0	0	0	3:40 PM	0	0	0	0	0
3:45 PM	5	0	0	1	6	3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
3:50 PM	2	0	2	1	5	3:50 PM	0	0	0	0	0	3:50 PM	0	0	0	0	0
3:55 PM	1	0	2	1	4	3:55 PM	0	0	0	0	0	3:55 PM	0	0	0	0	0
4:00 PM	2	0	4	3	9	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	4	0	2	1	7	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	4	0	1	2	7	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	4	0	4	2	10	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	2	1	3	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	2	0	0	1	3	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	1	0	4	1	6	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	3	0	2	2	7	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	4	0	1	2	7	4:40 PM	0	0	1	0	1	4:40 PM	0	0	0	0	0
4:45 PM	6	0	0	1	7	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	2	0	0	1	3	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	2	0	2	0	4	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	2	0	5	1	8	5:00 PM	0	0	0	0	0	5:00 PM	0	1	0	0	1
5:05 PM	3	0	0	1	4	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	5	0	2	2	9	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	2	0	1	0	3	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	2	1	3	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	1	1	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	2	0	0	3	5	5:30 PM	0	0	0	0	0	5:30 PM	0	1	0	0	1
5:35 PM	2	0	2	1	5	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	1	0	1	0	2	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	3	0	1	1	5	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	3	0	3	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	1	0	0	2	3	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	90	0	66	43	199	Count Total	1	0	2	0	3	Count Total	0	2	0	0	2
Peak Hour	31	0	15	15	61	Peak Hour	0	0	1	0	1	Peak Hour	0	2	0	0	2

ALL TRAFFIC DATA SERVICES
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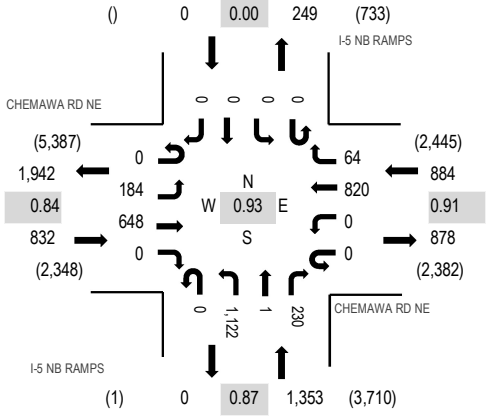
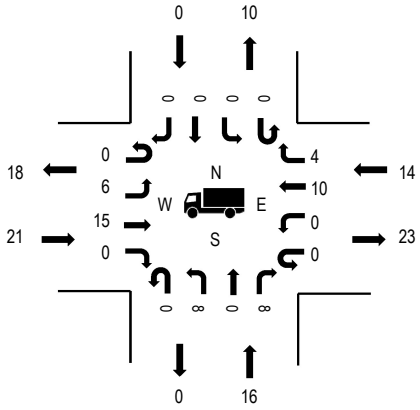
Location: 2 I-5 NB RAMPS & CHEMAWA RD NE PM
Date: Tuesday, June 7, 2022
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour

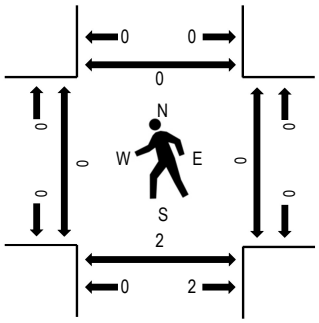
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.5%	0.84
WB	1.6%	0.91
NB	1.2%	0.87
SB	0.0%	0.00
All	1.7%	0.93

Traffic Counts - Motorized Vehicles

Interval Start Time	CHEMAWA RD NE Eastbound				CHEMAWA RD NE Westbound				I-5 NB RAMPS Northbound				I-5 NB RAMPS Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
3:00 PM	0	13	46	0	0	0	57	6	0	66	3	12	0	0	0	0	203	2,640
3:05 PM	0	14	49	0	0	0	49	7	0	68	0	10	0	0	0	0	197	2,682
3:10 PM	0	24	44	0	0	0	49	7	0	67	1	10	0	0	0	0	202	2,738
3:15 PM	0	13	41	0	0	0	49	3	0	74	0	18	0	0	0	0	198	2,759
3:20 PM	0	12	56	0	0	0	62	4	0	91	0	15	0	0	0	0	240	2,814
3:25 PM	0	15	47	0	0	0	47	2	0	79	0	12	0	0	0	0	202	2,820
3:30 PM	0	9	52	0	0	0	73	4	0	52	2	14	0	0	0	0	206	2,856
3:35 PM	0	12	48	0	0	0	76	8	0	84	0	10	0	0	0	0	238	2,890
3:40 PM	0	18	37	0	0	0	52	5	0	114	0	13	0	0	0	0	239	2,908
3:45 PM	0	23	55	0	0	0	56	6	0	80	0	12	0	0	0	0	232	2,935
3:50 PM	0	12	56	0	0	0	77	7	0	82	0	14	0	0	0	0	248	2,960
3:55 PM	0	12	38	0	0	0	59	3	0	102	0	21	0	0	0	0	235	2,938
4:00 PM	0	21	48	1	0	0	38	9	0	108	0	20	0	0	0	0	245	2,957
4:05 PM	0	18	63	0	0	0	80	6	0	75	0	11	0	0	0	0	253	2,949
4:10 PM	0	5	54	0	0	0	51	7	0	90	0	16	0	0	0	0	223	2,939
4:15 PM	0	10	56	0	0	0	55	5	0	113	0	14	0	0	0	0	253	2,977
4:20 PM	0	22	59	0	0	0	68	11	0	75	2	9	0	0	0	0	246	3,023
4:25 PM	0	11	42	0	0	0	80	4	0	87	0	14	0	0	0	0	238	3,042
4:30 PM	0	10	36	0	0	0	63	8	0	107	0	16	0	0	0	0	240	3,069
4:35 PM	0	26	59	0	0	0	64	6	0	89	0	12	0	0	0	0	256	3,050
4:40 PM	0	23	71	0	0	0	72	3	0	75	1	21	0	0	0	0	266	3,022
4:45 PM	0	11	62	0	0	0	54	2	0	108	0	20	0	0	0	0	257	2,990
4:50 PM	0	12	49	0	0	0	52	4	0	87	0	22	0	0	0	0	226	2,940
4:55 PM	0	13	56	0	0	0	79	7	0	84	0	15	0	0	0	0	254	2,935
5:00 PM	0	8	44	0	0	0	65	6	0	99	0	15	0	0	0	0	237	2,906
5:05 PM	0	17	59	0	0	0	72	2	0	79	0	14	0	0	0	0	243	
5:10 PM	0	19	50	0	0	0	68	7	0	90	0	27	0	0	0	0	261	
5:15 PM	0	9	60	0	0	0	94	4	0	101	0	31	0	0	0	0	299	

5:20 PM	0	16	44	0	0	0	60	5	0	120	0	20	0	0	0	0	265
5:25 PM	0	20	58	0	0	0	77	10	0	83	0	17	0	0	0	0	265
5:30 PM	0	14	51	0	0	0	52	8	0	85	0	11	0	0	0	0	221
5:35 PM	0	10	40	0	0	0	55	1	0	109	0	13	0	0	0	0	228
5:40 PM	0	16	58	0	0	0	58	5	0	79	0	18	0	0	0	0	234
5:45 PM	0	14	51	0	0	0	75	4	0	47	0	16	0	0	0	0	207
5:50 PM	0	7	31	0	0	0	51	7	0	108	0	17	0	0	0	0	221
5:55 PM	0	18	50	0	0	0	59	4	0	82	0	12	0	0	0	0	225
Count Total	0	527	1,820	1	0	0	2,248	197	0	3,139	9	562	0	0	0	0	8,503
Peak Hour	0	184	648	0	0	0	820	64	0	1,122	1	230	0	0	0	0	3,069

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	1	4	6	0	11	3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	1	1
3:05 PM	1	1	3	0	5	3:05 PM	0	0	0	0	0	3:05 PM	0	0	0	0	0
3:10 PM	0	2	4	0	6	3:10 PM	0	0	0	0	0	3:10 PM	0	0	0	0	0
3:15 PM	2	2	1	0	5	3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:20 PM	2	3	0	0	5	3:20 PM	0	0	0	0	0	3:20 PM	0	0	0	0	0
3:25 PM	1	1	0	0	2	3:25 PM	0	0	0	0	0	3:25 PM	0	0	0	0	0
3:30 PM	1	2	2	0	5	3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:35 PM	3	3	1	0	7	3:35 PM	1	0	0	0	1	3:35 PM	0	0	0	0	0
3:40 PM	2	1	1	0	4	3:40 PM	0	0	0	0	0	3:40 PM	0	0	0	0	0
3:45 PM	3	0	0	0	3	3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
3:50 PM	2	3	2	0	7	3:50 PM	0	0	0	0	0	3:50 PM	0	0	0	0	0
3:55 PM	1	4	2	0	7	3:55 PM	0	0	0	0	0	3:55 PM	0	0	0	0	0
4:00 PM	3	5	0	0	8	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	3	3	3	0	9	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	1	1	0	0	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	4	1	4	0	9	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	1	2	1	0	4	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	1	0	1	0	2	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	1	3	1	0	5	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	3	1	2	0	6	4:35 PM	0	0	1	0	1	4:35 PM	0	0	0	0	0
4:40 PM	5	1	1	0	7	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	1	1	0	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	3	2	1	0	6	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	2	3	0	5	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	3	3	2	0	8	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	1	0	0	1
5:10 PM	1	1	1	0	3	5:10 PM	0	0	1	0	1	5:10 PM	0	1	0	0	1
5:15 PM	2	2	3	0	7	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	1	0	0	0	1	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	1	0	0	0	1	5:25 PM	0	0	0	0	0	5:25 PM	0	1	0	0	1
5:30 PM	1	0	0	0	1	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	1	2	0	0	3	5:35 PM	0	0	1	0	1	5:35 PM	0	0	0	0	0
5:40 PM	0	1	1	0	2	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	1	1
5:45 PM	1	0	3	0	4	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	1	1	0	2	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	1	0	0	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	57	58	50	0	165	Count Total	1	0	3	0	4	Count Total	0	3	0	2	5
Peak Hour	21	16	14	0	51	Peak Hour	0	0	2	0	2	Peak Hour	0	3	0	0	3

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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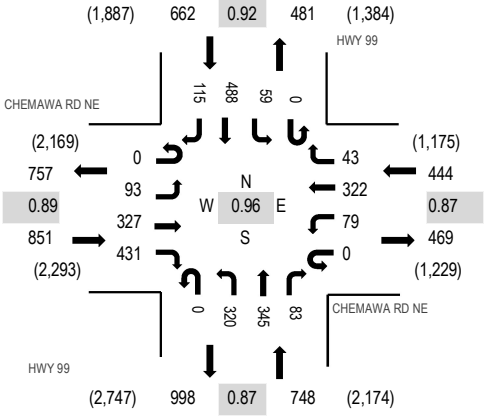
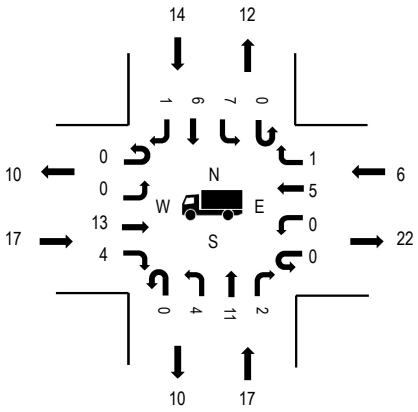
Location: 3 HWY 99 & CHEMAWA RD NE PM
Date: Tuesday, June 7, 2022
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:10 PM - 05:25 PM

Peak Hour

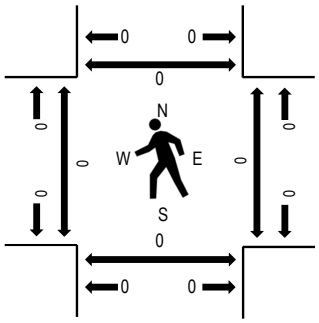
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.0%	0.89
WB	1.4%	0.87
NB	2.3%	0.87
SB	2.1%	0.92
All	2.0%	0.96

Traffic Counts - Motorized Vehicles

Interval Start Time	CHEMAWA RD NE Eastbound				CHEMAWA RD NE Westbound				HWY 99 Northbound				HWY 99 Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
3:00 PM	0	9	27	29	0	1	13	3	0	21	24	11	0	1	25	11	175	2,374
3:05 PM	0	8	19	17	0	1	23	5	0	36	25	8	0	5	33	4	184	2,406
3:10 PM	0	3	23	29	0	4	11	4	0	22	31	5	0	9	42	9	192	2,441
3:15 PM	0	6	22	31	0	4	24	4	0	30	22	3	0	1	26	11	184	2,467
3:20 PM	0	3	24	30	0	3	17	1	0	24	23	10	0	5	53	8	201	2,504
3:25 PM	0	9	34	31	0	6	28	3	0	14	18	5	0	4	16	7	175	2,521
3:30 PM	0	6	16	25	0	3	20	7	0	35	44	6	0	9	35	6	212	2,539
3:35 PM	0	3	20	34	0	4	29	5	0	33	46	3	0	2	27	10	216	2,542
3:40 PM	0	6	19	28	0	6	17	5	0	25	24	3	0	0	55	13	201	2,552
3:45 PM	0	9	35	31	0	6	38	1	0	23	25	7	0	5	34	10	224	2,557
3:50 PM	0	6	15	34	0	3	29	7	0	36	33	8	0	3	31	8	213	2,590
3:55 PM	0	12	16	44	0	8	21	3	0	17	24	9	0	0	34	9	197	2,602
4:00 PM	0	7	11	41	0	1	13	6	0	35	23	9	0	4	45	12	207	2,619
4:05 PM	0	9	31	31	0	10	31	6	0	23	37	7	0	4	22	8	219	2,633
4:10 PM	0	5	21	34	0	5	18	2	0	27	27	5	0	2	56	16	218	2,642
4:15 PM	0	13	22	32	0	9	27	7	0	26	25	6	0	5	41	8	221	2,666
4:20 PM	0	7	28	39	0	2	33	3	0	30	14	5	0	4	39	14	218	2,659
4:25 PM	0	6	16	25	0	7	14	4	0	27	28	6	0	1	49	10	193	2,688
4:30 PM	0	4	28	34	0	7	36	4	0	24	25	4	0	8	30	11	215	2,705
4:35 PM	0	3	17	30	0	3	19	3	0	24	41	12	0	7	55	12	226	2,682
4:40 PM	0	11	24	36	0	6	21	4	0	24	23	5	0	3	41	8	206	2,647
4:45 PM	0	10	35	44	0	4	34	4	0	25	33	5	0	5	51	7	257	2,654
4:50 PM	0	10	32	38	0	3	22	4	0	23	36	7	0	6	32	12	225	2,605
4:55 PM	0	3	27	25	0	4	26	4	0	31	20	7	0	7	49	11	214	2,586
5:00 PM	0	10	17	43	0	6	29	5	0	25	25	10	0	3	40	8	221	2,536
5:05 PM	0	13	32	34	0	20	24	4	0	22	25	8	0	3	33	10	228	
5:10 PM	0	11	29	32	0	4	33	2	0	28	31	7	0	9	45	11	242	
5:15 PM	0	7	29	30	0	7	24	1	0	37	33	5	0	3	30	8	214	

5:20 PM	0	5	33	50	0	8	37	3	0	25	24	7	0	3	41	11	247
5:25 PM	0	6	24	35	0	7	17	5	0	32	29	6	0	2	41	6	210
5:30 PM	0	8	11	29	0	7	16	2	0	26	26	5	0	4	50	8	192
5:35 PM	0	5	21	36	0	5	28	2	0	14	24	5	0	3	38	10	191
5:40 PM	0	11	14	40	0	3	19	0	0	23	39	7	0	3	44	10	213
5:45 PM	0	5	25	33	0	3	20	0	0	32	26	4	0	2	33	25	208
5:50 PM	0	9	31	20	0	6	32	8	0	26	22	4	0	10	25	13	206
5:55 PM	0	5	23	25	0	3	11	1	0	29	14	7	0	2	38	6	164
Count Total	0	263	851	1,179	0	189	854	132	0	954	989	231	0	147	1,379	361	7,529
Peak Hour	0	93	327	431	0	79	322	43	0	320	345	83	0	59	488	115	2,705

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

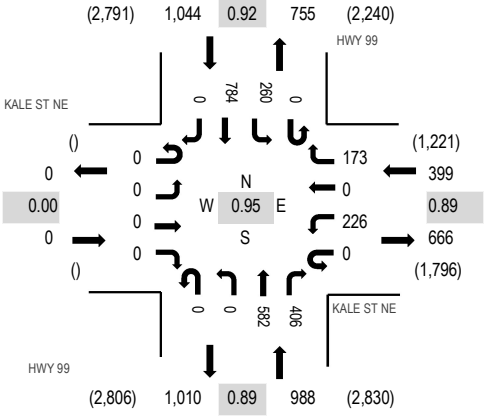
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	6	2	1	1	10	3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:05 PM	1	3	1	4	9	3:05 PM	0	0	0	0	0	3:05 PM	0	0	0	0	0
3:10 PM	2	1	1	3	7	3:10 PM	0	1	0	0	1	3:10 PM	0	0	0	0	0
3:15 PM	2	0	3	0	5	3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:20 PM	2	0	1	1	4	3:20 PM	0	0	0	0	0	3:20 PM	0	0	0	0	0
3:25 PM	4	0	2	2	8	3:25 PM	0	0	0	0	0	3:25 PM	0	0	0	0	0
3:30 PM	0	1	3	2	6	3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:35 PM	3	1	1	2	7	3:35 PM	0	0	0	0	0	3:35 PM	0	0	0	0	0
3:40 PM	2	1	1	0	4	3:40 PM	1	0	0	1	2	3:40 PM	0	1	0	0	1
3:45 PM	2	1	2	1	6	3:45 PM	0	0	0	0	0	3:45 PM	0	0	0	0	0
3:50 PM	3	3	2	0	8	3:50 PM	0	0	0	0	0	3:50 PM	0	0	0	0	0
3:55 PM	2	1	2	3	8	3:55 PM	0	0	0	0	0	3:55 PM	0	0	0	0	0
4:00 PM	3	1	3	4	11	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	2	0	0	1	3	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	2	1	2	1	6	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	1	2	2	3	8	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	2	1	2	1	6	4:20 PM	0	0	0	0	0	4:20 PM	0	0	1	0	1
4:25 PM	2	2	1	1	6	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	2	1	4	7	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	3	4	0	3	10	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	1	0	0	0	1	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	3	0	0	1	4	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	4	3	0	1	8	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	0	3	1	4	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	1	3	0	1	5	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	3	0	0	2	5	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	1	1	1	3	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	1	1	0	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	2	0	0	0	2	5:20 PM	0	0	0	0	0	5:20 PM	0	1	0	0	1
5:25 PM	0	3	0	0	3	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	1	2	0	2	5	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	2	0	1	1	4	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	1	2	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	1	0	0	3	4	5:45 PM	0	0	0	1	1	5:45 PM	0	0	2	0	2
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	3	0	3
Count Total	62	41	37	51	191	Count Total	1	1	0	2	4	Count Total	0	2	6	0	8
Peak Hour	17	17	6	14	54	Peak Hour	0	0	0	0	0	Peak Hour	0	1	0	0	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

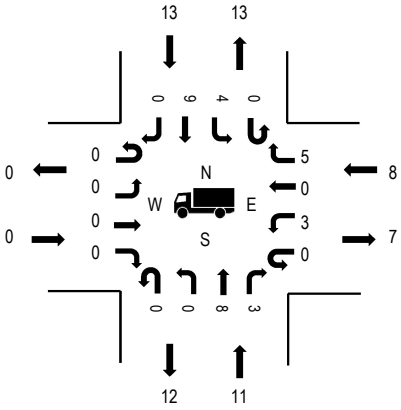
Location: 4 HWY 99 & KALE ST NE PM
Date: Tuesday, June 7, 2022
Peak Hour: 04:40 PM - 05:40 PM
Peak 15-Minutes: 04:40 PM - 04:55 PM

Peak Hour

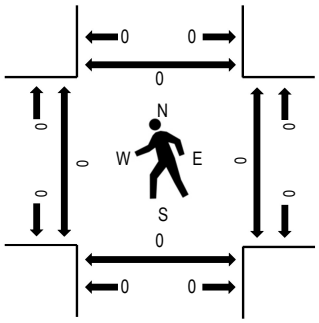
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.00
WB	2.0%	0.89
NB	1.1%	0.89
SB	1.2%	0.92
All	1.3%	0.95

Traffic Counts - Motorized Vehicles

Interval Start Time	KALE ST NE Eastbound				KALE ST NE Westbound				HWY 99 Northbound				HWY 99 Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
3:00 PM	0	0	0	0	0	25	0	13	0	0	65	16	0	11	43	0	173	2,186
3:05 PM	0	0	0	0	0	19	0	19	0	0	46	27	0	19	30	0	160	2,202
3:10 PM	0	0	0	0	0	23	0	10	0	0	52	20	0	14	42	0	161	2,242
3:15 PM	0	0	0	0	0	22	0	8	0	0	52	21	0	31	58	0	192	2,258
3:20 PM	0	0	0	0	0	21	0	8	0	0	45	25	0	19	54	0	172	2,276
3:25 PM	0	0	0	0	0	22	0	12	0	0	40	20	0	16	63	0	173	2,298
3:30 PM	0	0	0	0	0	21	0	13	0	0	59	32	0	10	53	0	188	2,320
3:35 PM	0	0	0	0	0	30	0	20	0	0	49	31	0	15	46	0	191	2,322
3:40 PM	0	0	0	0	0	11	0	10	0	0	56	33	0	36	57	0	203	2,305
3:45 PM	0	0	0	0	0	26	0	15	0	0	46	32	0	14	50	0	183	2,313
3:50 PM	0	0	0	0	0	24	0	13	0	0	55	31	0	14	66	0	203	2,349
3:55 PM	0	0	0	0	0	17	0	9	0	0	59	28	0	16	58	0	187	2,356
4:00 PM	0	0	0	0	0	23	0	7	0	0	41	33	0	24	61	0	189	2,359
4:05 PM	0	0	0	0	0	12	0	17	0	0	58	19	0	20	74	0	200	2,368
4:10 PM	0	0	0	0	0	23	0	15	0	0	41	25	0	17	56	0	177	2,384
4:15 PM	0	0	0	0	0	28	0	14	0	0	53	30	0	25	60	0	210	2,423
4:20 PM	0	0	0	0	0	27	0	8	0	0	34	38	0	21	66	0	194	2,375
4:25 PM	0	0	0	0	0	14	0	11	0	0	45	38	0	25	62	0	195	2,377
4:30 PM	0	0	0	0	0	25	0	13	0	0	42	33	0	17	60	0	190	2,399
4:35 PM	0	0	0	0	0	19	0	16	0	0	58	18	0	15	48	0	174	2,403
4:40 PM	0	0	0	0	0	23	0	17	0	0	46	31	0	24	70	0	211	2,431
4:45 PM	0	0	0	0	0	26	0	18	0	0	49	30	0	23	73	0	219	2,414
4:50 PM	0	0	0	0	0	11	0	17	0	0	55	33	0	21	73	0	210	2,367
4:55 PM	0	0	0	0	0	21	0	11	0	0	49	26	0	21	62	0	190	2,346
5:00 PM	0	0	0	0	0	18	0	12	0	0	43	43	0	18	64	0	198	2,297
5:05 PM	0	0	0	0	0	22	0	14	0	0	63	30	0	22	65	0	216	
5:10 PM	0	0	0	0	0	10	0	15	0	0	65	34	0	16	76	0	216	
5:15 PM	0	0	0	0	0	18	0	12	0	0	41	27	0	17	47	0	162	

5:20 PM	0	0	0	0	0	18	0	18	0	0	44	36	0	25	55	0	196
5:25 PM	0	0	0	0	0	8	0	13	0	0	38	50	0	32	76	0	217
5:30 PM	0	0	0	0	0	22	0	16	0	0	40	34	0	20	62	0	194
5:35 PM	0	0	0	0	0	29	0	10	0	0	49	32	0	21	61	0	202
5:40 PM	0	0	0	0	0	21	0	15	0	0	47	32	0	23	56	0	194
5:45 PM	0	0	0	0	0	14	0	17	0	0	39	23	0	31	48	0	172
5:50 PM	0	0	0	0	0	18	0	20	0	0	51	40	0	11	49	0	189
5:55 PM	0	0	0	0	0	19	0	15	0	0	34	30	0	11	32	0	141
Count Total	0	0	0	0	0	730	0	491	0	0	1,749	1,081	0	715	2,076	0	6,842
Peak Hour	0	0	0	0	0	226	0	173	0	0	582	406	0	260	784	0	2,431

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

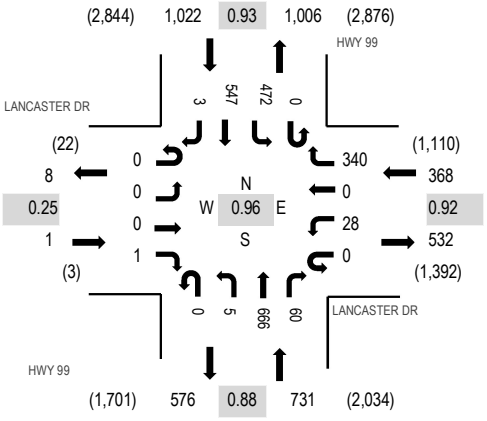
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	0	4	1	1	6	3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:05 PM	0	2	0	1	3	3:05 PM	0	0	0	0	0	3:05 PM	0	0	0	0	0
3:10 PM	0	0	3	1	4	3:10 PM	0	0	0	0	0	3:10 PM	0	0	0	0	0
3:15 PM	0	1	0	1	2	3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:20 PM	0	1	2	1	4	3:20 PM	0	0	0	0	0	3:20 PM	0	0	0	0	0
3:25 PM	0	0	2	0	2	3:25 PM	0	0	0	0	0	3:25 PM	0	0	0	0	0
3:30 PM	0	1	0	2	3	3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:35 PM	0	2	0	3	5	3:35 PM	0	0	0	0	0	3:35 PM	0	0	0	0	0
3:40 PM	0	4	2	1	7	3:40 PM	0	0	0	0	0	3:40 PM	0	0	0	0	0
3:45 PM	0	3	0	0	3	3:45 PM	0	0	0	1	1	3:45 PM	0	0	0	0	0
3:50 PM	0	3	1	4	8	3:50 PM	0	0	0	0	0	3:50 PM	0	0	0	0	0
3:55 PM	0	2	1	3	6	3:55 PM	0	0	0	0	0	3:55 PM	0	0	0	0	0
4:00 PM	0	0	0	3	3	4:00 PM	0	0	0	1	1	4:00 PM	0	0	0	1	1
4:05 PM	0	0	0	3	3	4:05 PM	0	0	0	0	0	4:05 PM	0	0	1	0	1
4:10 PM	0	0	1	1	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	3	2	0	5	4:15 PM	0	0	0	1	1	4:15 PM	0	1	0	0	1
4:20 PM	0	1	2	0	3	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	4	1	1	6	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	0	2	3	4:30 PM	0	0	0	0	0	4:30 PM	0	1	0	0	1
4:35 PM	0	3	1	2	6	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	2	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	1	1	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	1	3	4	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	1	1	1	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	2	0	0	2	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	2	1	0	3	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	1	3	1	5	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	1	0	0	1	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	2	0	0	2	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	1	1	3	5	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	3	3	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	0	1	5:40 PM	0	1	0	0	1	5:40 PM	0	0	0	0	0
5:45 PM	0	0	1	0	1	5:45 PM	0	0	0	1	1	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	1	0	1
Count Total	0	47	28	43	118	Count Total	0	1	0	4	5	Count Total	0	2	2	1	5
Peak Hour	0	11	8	13	32	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

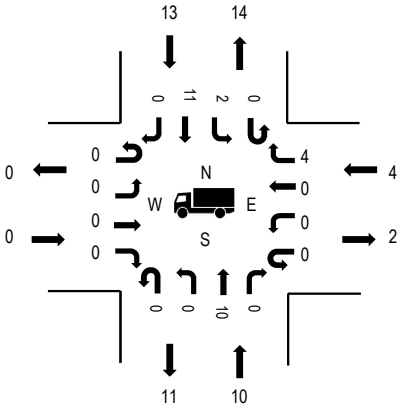
Location: 5 HWY 99 & LANCASTER DR PM
Date: Tuesday, June 7, 2022
Peak Hour: 04:40 PM - 05:40 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour

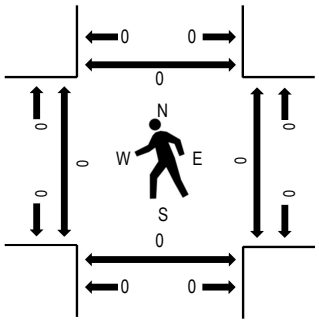
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.25
WB	1.1%	0.92
NB	1.4%	0.88
SB	1.3%	0.93
All	1.3%	0.96

Traffic Counts - Motorized Vehicles

Interval Start Time	LANCASTER DR Eastbound				LANCASTER DR Westbound				HWY 99 Northbound				HWY 99 Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
3:00 PM	0	0	0	0	0	1	0	35	0	0	42	4	0	30	43	0	155	1,925
3:05 PM	0	0	0	0	0	0	0	25	0	2	45	3	0	20	31	0	126	1,937
3:10 PM	0	0	0	0	0	0	0	25	0	0	45	1	0	28	38	0	137	1,975
3:15 PM	0	0	0	0	0	1	0	32	0	0	39	3	0	20	57	0	152	2,007
3:20 PM	0	0	0	0	0	2	1	24	0	0	48	9	0	30	46	1	161	2,036
3:25 PM	0	0	0	0	0	2	0	33	0	0	43	4	0	29	48	0	159	2,035
3:30 PM	0	0	0	1	0	4	0	28	0	1	55	5	0	29	46	0	169	2,051
3:35 PM	0	0	0	0	0	1	0	37	0	1	63	6	0	23	51	0	182	2,052
3:40 PM	0	0	0	1	0	0	0	34	0	0	45	9	0	34	47	0	170	2,023
3:45 PM	0	0	0	0	0	2	0	32	0	1	41	8	0	28	48	0	160	2,036
3:50 PM	0	0	0	0	0	1	0	36	0	0	59	6	0	33	54	0	189	2,055
3:55 PM	0	0	0	0	0	1	0	26	0	1	51	3	0	35	48	0	165	2,053
4:00 PM	0	0	0	0	0	2	0	32	0	0	41	4	0	33	55	0	167	2,054
4:05 PM	0	0	0	0	0	1	0	35	0	0	40	5	0	35	48	0	164	2,076
4:10 PM	0	0	0	0	0	3	0	20	0	1	59	5	0	34	47	0	169	2,095
4:15 PM	0	0	0	0	0	2	0	31	0	0	49	7	0	44	48	0	181	2,108
4:20 PM	0	0	0	0	0	1	0	23	0	0	51	3	0	28	54	0	160	2,079
4:25 PM	0	0	0	0	0	0	0	24	0	0	62	4	0	40	45	0	175	2,099
4:30 PM	0	0	0	0	0	4	0	33	0	0	44	2	0	37	50	0	170	2,083
4:35 PM	0	0	0	0	0	3	0	30	0	1	49	3	0	26	41	0	153	2,099
4:40 PM	0	0	0	0	0	2	0	24	0	0	58	7	0	35	56	1	183	2,122
4:45 PM	0	0	0	0	0	1	0	27	0	0	44	7	0	49	51	0	179	2,108
4:50 PM	0	0	0	0	0	2	0	39	0	0	59	2	0	45	39	1	187	2,075
4:55 PM	0	0	0	0	0	1	0	30	0	0	45	6	0	32	52	0	166	2,045
5:00 PM	0	0	0	0	0	4	0	29	0	0	69	3	0	37	47	0	189	2,012
5:05 PM	0	0	0	0	0	1	0	32	0	1	56	6	0	35	51	1	183	
5:10 PM	0	0	0	0	0	1	0	39	0	0	54	5	0	28	55	0	182	
5:15 PM	0	0	0	0	0	2	0	20	0	0	44	6	0	46	34	0	152	

5:20 PM	0	0	0	0	0	3	0	20	0	2	80	5	0	43	27	0	180
5:25 PM	0	0	0	0	0	4	0	18	0	1	57	4	0	40	35	0	159
5:30 PM	0	0	0	1	0	5	0	30	0	0	55	4	0	44	47	0	186
5:35 PM	0	0	0	0	0	2	0	32	0	1	45	5	0	38	53	0	176
5:40 PM	0	0	0	0	0	4	1	31	0	0	48	5	0	41	39	0	169
5:45 PM	0	0	0	0	0	4	0	21	0	1	50	7	0	30	33	0	146
5:50 PM	0	0	0	0	0	1	0	30	0	1	51	5	0	25	44	0	157
5:55 PM	0	0	0	0	0	1	0	22	0	1	51	10	0	27	21	0	133
Count Total	0	0	0	3	0	69	2	1,039	0	16	1,837	181	0	1,211	1,629	4	5,991
Peak Hour	0	0	0	1	0	28	0	340	0	5	666	60	0	472	547	3	2,122

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

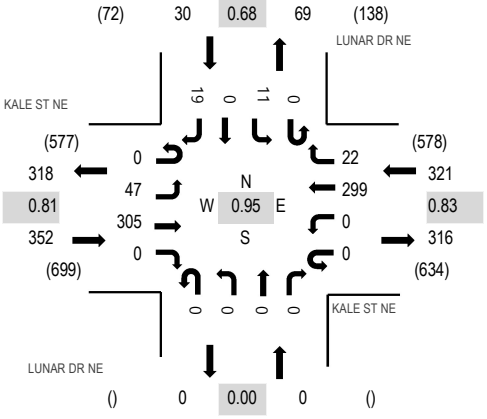
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
3:00 PM	0	3	1	3	7	3:00 PM	0	0	0	0	0	3:00 PM	0	0	0	0	0
3:05 PM	0	2	0	2	4	3:05 PM	0	0	0	0	0	3:05 PM	0	0	1	0	1
3:10 PM	0	0	0	2	2	3:10 PM	0	0	0	0	0	3:10 PM	0	0	0	0	0
3:15 PM	0	1	0	3	4	3:15 PM	0	0	0	0	0	3:15 PM	0	0	0	0	0
3:20 PM	0	2	0	2	4	3:20 PM	0	0	0	0	0	3:20 PM	0	0	0	0	0
3:25 PM	0	2	0	3	5	3:25 PM	0	0	0	0	0	3:25 PM	0	0	0	0	0
3:30 PM	0	0	0	2	2	3:30 PM	0	0	0	0	0	3:30 PM	0	0	0	0	0
3:35 PM	0	2	1	2	5	3:35 PM	0	0	0	0	0	3:35 PM	0	0	0	0	0
3:40 PM	0	1	3	4	8	3:40 PM	0	0	0	0	0	3:40 PM	0	0	0	0	0
3:45 PM	0	2	0	0	2	3:45 PM	0	0	0	1	1	3:45 PM	0	0	0	0	0
3:50 PM	0	2	1	4	7	3:50 PM	0	0	0	0	0	3:50 PM	0	0	0	0	0
3:55 PM	0	1	1	4	6	3:55 PM	0	0	0	0	0	3:55 PM	0	0	3	0	3
4:00 PM	0	1	0	3	4	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	1	1	4:05 PM	0	0	0	0	0	4:05 PM	1	0	1	0	2
4:10 PM	0	1	0	1	2	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	5	0	1	6	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	2	2	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	4	1	1	6	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	1	2	3	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	3	0	1	4	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	1	0	1	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	1	0	1	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	1	3	4	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	0	1	0	1	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	1	1	0	2	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	3	0	1	4	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	2	2	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	2	1	0	3	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	1	0	2	3	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	1	2	3	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	1	0	1	2	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	43	13	57	113	Count Total	0	0	0	1	1	Count Total	1	0	5	0	6
Peak Hour	0	10	4	13	27	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

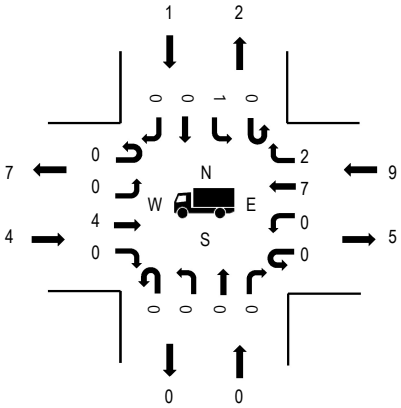
Location: 1 LUNAR DR NE & KALE ST NE PM
Date: Tuesday, June 7, 2022
Peak Hour: 04:05 PM - 05:05 PM
Peak 15-Minutes: 04:10 PM - 04:25 PM

Peak Hour

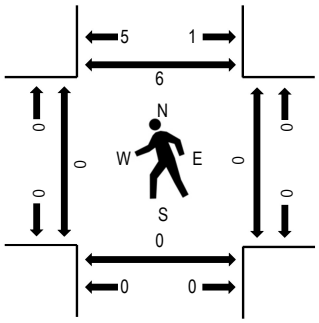
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	1.1%	0.81
WB	2.8%	0.83
NB	0.0%	0.00
SB	3.3%	0.68
All	2.0%	0.95

Traffic Counts - Motorized Vehicles

Interval Start Time	KALE ST NE Eastbound				KALE ST NE Westbound				LUNAR DR NE Northbound				LUNAR DR NE Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	1	33	0	0	0	13	1	0	0	0	0	0	1	0	1	50	684
4:05 PM	0	5	14	0	0	0	34	1	0	0	0	0	0	2	0	1	57	703
4:10 PM	0	0	26	0	0	0	29	2	0	0	0	0	0	3	0	1	61	689
4:15 PM	0	3	23	0	0	0	27	4	0	0	0	0	0	1	0	0	58	688
4:20 PM	0	4	36	0	0	0	23	1	0	0	0	0	0	0	0	2	66	673
4:25 PM	0	6	25	0	0	0	26	0	0	0	0	0	0	0	0	2	59	655
4:30 PM	0	4	24	0	0	0	27	0	0	0	0	0	0	0	0	0	55	671
4:35 PM	0	4	18	0	0	0	24	3	0	0	0	0	0	0	0	2	51	674
4:40 PM	0	6	25	0	0	0	27	5	0	0	0	0	0	0	0	1	64	689
4:45 PM	0	4	31	0	0	0	18	3	0	0	0	0	0	1	0	4	61	689
4:50 PM	0	3	33	0	0	0	17	1	0	0	0	0	0	0	0	3	57	683
4:55 PM	0	4	18	0	0	0	20	0	0	0	0	0	0	1	0	2	45	670
5:00 PM	0	4	32	0	0	0	27	2	0	0	0	0	0	3	0	1	69	665
5:05 PM	0	3	21	0	0	0	15	2	0	0	0	0	0	1	0	1	43	
5:10 PM	0	4	25	0	0	0	25	3	0	0	0	0	0	1	0	2	60	
5:15 PM	0	2	16	0	0	0	21	2	0	0	0	0	0	1	0	1	43	
5:20 PM	0	5	24	0	0	0	15	2	0	0	0	0	0	1	0	1	48	
5:25 PM	0	7	43	0	0	0	19	1	0	0	0	0	0	4	0	1	75	
5:30 PM	0	4	31	0	0	0	18	3	0	0	0	0	0	0	0	2	58	
5:35 PM	0	5	26	0	0	0	25	3	0	0	0	0	0	4	0	3	66	
5:40 PM	0	6	26	0	0	0	24	2	0	0	0	0	0	2	0	4	64	
5:45 PM	0	5	24	0	0	0	21	1	0	0	0	0	0	2	0	2	55	
5:50 PM	0	3	15	0	0	0	18	2	0	0	0	0	0	0	0	6	44	
5:55 PM	0	1	17	0	0	0	20	1	0	0	0	0	0	0	0	1	40	
Count Total	0	93	606	0	0	0	533	45	0	0	0	0	0	28	0	44	1,349	
Peak Hour	0	47	305	0	0	0	299	22	0	0	0	0	0	11	0	19	703	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	3	0	3	4:10 PM	1	0	1	0	2	4:10 PM	0	0	0	2	2
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	2	2
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	2	0	0	0	2	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	2	2
4:30 PM	0	0	1	0	1	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	3	0	3	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	2	0	1	0	3	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	1	1	2	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	1	0	1	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	1	0	1	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	1	1	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	1	0	0	0	1	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	1	0	1	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	1	0	1	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	1	1
5:50 PM	0	0	0	1	1	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	1	0	0	0	1	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	3	3
Count Total	6	0	14	3	23	Count Total	1	0	1	0	2	Count Total	0	0	0	10	10
Peak Hour	4	0	9	1	14	Peak Hour	1	0	1	0	2	Peak Hour	0	0	0	6	6

Appendix D

Crash History Data

Left-turn Lane Warrants

Preliminary Traffic Signal Warrants

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P / E / E / D	D R / A / L / C	M J / U / G / S	S / I / N / V	W / C / H / L	O / R / K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# FC / COMPNT / MLG TYP / MILEPNT	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / CONTL / TRAF-	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
02955	N	N	N	N	N	N	07/15/2016	MARION	1 11	5	INTER	CROSS	N	N	CLD	O-OTHER	01	NONE 0	TURN-L										001	02
STATE			FR					SALEM	CN 0	CHEMAWA RD NE	SE		TRF SIGNAL	N	DRY	TURN		PRVTE	E -SE									000		00
N			6P					SALEM-KZ UA	259.18	SB EF CHEMAWA RD C5	05	0		N	DAY	INJ		MTRCYCLE		01	DRVR	INJB	30	M	OR-Y		000	000	001	00
N			45 0 19.83					-122 59 53.68		0001PQ100S00																OR<25					
																	02	NONE 0	TURN-R											
																		PRVTE	W -SE									000		00
																		PSNGR CAR		01	DRVR	NONE	22	M	OR-Y		028	000		02
																									OR<25					
04916	N	N	N	N			12/21/2018	MARION	1 14	2	STRGHT		N	N	RAIN	S-1STOP	01	NONE 9	STRGHT											29
NONE			FR					KEIZER	CN 0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	WET	REAR		N/A	W -E									000		00
N			5P					SALEM-KZ UA	260.00	ULALI DR	00			N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N			45 0 20.54					-123 0 2.51		0001PN100S00		(04)														UNK					
																	02	NONE 9	STOP											
																		N/A	W -E									011		00
																		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																									UNK					
01974	N	N	N	N			05/11/2016	MARION	1 14	2	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			WE					KEIZER	CN 0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E									000		00
N			6P					SALEM-KZ UA	260.00	ULALI DR	04			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	61	F	OR-Y		026	000		29
N			45 0 20.54					-123 0 2.54		0001PN100S00		(04)														OR>25					
																	02	NONE 0	STOP											
																		PRVTE	W -E									011		00
																		PSNGR CAR		01	DRVR	NONE	57	M	OR-Y		000	000		00
																									OR<25					
01115	N	N	N	N			03/28/2019	MARION	1 14	2	STRGHT		N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
CITY			TH					KEIZER	CN 0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E									000		00
N			3P					SALEM-KZ UA	260.00	ULALI DR	04			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	19	M	OR-Y		026	000		29
N			45 0 20.54					-123 0 2.55		0001PN100S00		(04)														OR<25					
																	02	NONE 0	STOP											
																		PRVTE	W -E									011		00

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

PSNGR CAR 01 DRVR INJC 19 M OR-Y 000 000 00
OR<25

01636 N N N N N N 05/14/2018 MARION 1 14 2 STRGHT N N CLR S-1STOP 01 NONE 0 STRGHT 32,27,07
CITY MO KEIZER CN 0 CHEMAWA RD E (NONE) UNKNOWN N DRY REAR PRVTE W -E 000 00
N 3P SALEM-KZ UA 260.01 STADIUM DR 00 N DAY INJ PSNGR CAR 01 DRVR NONE 69 M OR-Y 052,043,026 038 32,27,07
N 45 0 20.48 -123 0 1.79 0001PN100S00 (04) OR<25
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 82 M OR-Y 000 000 00
OR<25
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 02 PSNG INJC 82 M 000 000 00

01656 N N N N N N 04/29/2017 MARION 1 14 2 STRGHT N N CLR S-1STOP 01 UNKN 0 STRGHT 013 07
CITY SA KEIZER CN 0 CHEMAWA RD E (NONE) UNKNOWN N DRY REAR UNKN W -E 000 00
N 3P SALEM-KZ UA 260.01 ULALI DR 04 N DAY INJ UNKNOWN 01 DRVR NONE 00 Unk UNK 043,026 000 07
N 45 0 20.48 -123 0 1.8 0001PN100S00 (04) UNK
02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 01 DRVR INJB 53 F OR-Y 000 022 00
OR<25
02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 02 PSNG INJB 10 M 000 000 00
03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR INJC 30 F OR-Y 000 000 00
OR<25
03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 02 PSNG INJB 01 F 000 000 00

05254 N N N N N N 12/05/2017 MARION 1 14 2 STRGHT N N CLR S-1STOP 01 NONE 0 STRGHT 013 27,07
CITY TU KEIZER CN 0 CHEMAWA RD E (NONE) UNKNOWN N DRY REAR PRVTE W -E 000 00

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

N		5P	SALEM-KZ UA	260.01	ULALI DR	04			N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	19	F	OR-Y	016,043,026	038		27,07
N		45 0 20.48	-123 0 1.8		0001PN100S00		(04)													OR<25					
												02	NONE	0		STOP										
													PRVTE			W -E						011	013	00	
													PSNGR CAR		01	DRVR	INJC	31	F	OR-Y	000	022		00
																				OR<25					
												03	NONE	0		STOP										
													PRVTE			W -E						011		00	
													PSNGR CAR		01	DRVR	NONE	60	M	OR-Y	000	000		00
																				OR<25					
03579	N N N N N N	11/24/2020	MARION	1	14	2	STRGHT		N	N	CLD	S-STRGHT	01	NONE	9	STRGHT									13	
CITY		TU	KEIZER	CN	0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	WET	SS-O		N/A		W -E						000		00	
N		6P	SALEM-KZ UA	260.01		ULALI DR	04			N	DUSK	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000		00
N		45 0 20.47	-123 0 1.82			0001PN100S00		(04)													UNK					
												02	NONE	9		STRGHT										
													N/A			W -E						000		00	
													PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000		00
																				UNK					
02599	N N N N N N	08/28/2020	MARION	1	14	2	STRGHT		N	N	CLR	O-STRGHT	01	NONE	0	STRGHT									32,16	
CITY		FR	KEIZER	CN	0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	SS-M		PRVTE		W -E						000		00	
Y		10P	SALEM-KZ UA	260.01		STADIUM DR	05			N	DLIT	INJ		PSNGR CAR		01	DRVR	INJB	24	F	SUSP	052,080	025		32,16
N		45 0 20.49	-123 0 1.81			0001PN100S00		(04)													OR<25					
												02	NONE	0		STRGHT										
													PRVTE			E -W						000		00	
													PSNGR CAR		01	DRVR	INJC	36	M	SUSP	000	000		00
																				OR<25					
03574	N N N N N N	08/20/2016	MARION	1	14	2	STRGHT		N	N	CLR	S-1STOP	01	NONE	0	STRGHT								093	27,07	
CITY		SA	KEIZER	CN	0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE		W -E						000		00	
N		1P	SALEM-KZ UA	260.02		ULALI DR	03			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	44	M	OR-Y	016,043,026	038	093	27,07
N		45 0 20.42	-123 0 1.06			0001PN100S00		(04)													OR<25					
												02	NONE	0		STOP										
													PRVTE			W -E						011		00	
													PSNGR CAR		01	DRVR	INJC	42	F	OR-Y	000	000		00
																				OR<25					
02511	N N N N	07/12/2018	MARION	1	14	2	STRGHT		Y	N	CLR	S-STRGHT	01	NONE	0	STRGHT									29	

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

NONE	TH	KEIZER	CN	0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E									000	00
N	12P	SALEM-KZ UA	260.02		ULALI DR	04			N	DAY	INJ	PSNGR CAR		01	DRVR	NONE	46	M	OR-Y	026		000	29
N	45 0 20.42	-123 0 1.05			0001PN100S00		(04)												OR<25				
													02 NONE 0 STRGHT										
												PRVTE	W -E									006	00
												PSNGR CAR		01	DRVR	INJC	36	F	OR-Y	000		000	00
																			OR<25				
													02 NONE 0 STRGHT										
												PRVTE	W -E									006	00
												PSNGR CAR		02	PSNG	INJC	09	F		000		000	00
													02 NONE 0 STRGHT										
												PRVTE	W -E									006	00
												PSNGR CAR		03	PSNG	INJC	04	F		000		000	00
00641 N N N N	02/23/2018	MARION	1	14	2	STRGHT		N	N	CLR	S-1STOP	01 NONE 9 STRGHT											29
NONE	FR	KEIZER	CN	0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	REAR	N/A	W -E									000	00
N	4P	SALEM-KZ UA	260.03		ULALI DR	00			N	DAY	PDO	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000		000	00
N	45 0 20.36	-123 0 .32			0001PN100S00		(04)												UNK				
													02 NONE 9 STOP										
												N/A	W -E									011	00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000		000	00
																			UNK				
03240 N N N N N N	08/01/2016	MARION	1	14	2	STRGHT		N	N	CLR	S-1STOP	01 NONE 0 STRGHT											07
CITY	MO	KEIZER	CN	0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E									000	00
N	4P	SALEM-KZ UA	260.03		ULALI DR	03			N	DAY	INJ	PSNGR CAR		01	DRVR	INJC	31	M	OR-Y	043,026		000	07
N	45 0 20.36	-123 0 .32			0001PN100S00		(04)												OR<25				
													02 NONE 0 STOP										
												PRVTE	W -E									011	00
												PSNGR CAR		01	DRVR	INJB	21	M	OR-Y	000		000	00
																			OR<25				
02420 N N N N	06/10/2016	MARION	1	14	2	STRGHT		N	N	CLR	S-1STOP	01 NONE 0 STRGHT											27,29
NONE	FR	KEIZER	CN	0	CHEMAWA RD	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E									000	00
N	12P	SALEM-KZ UA	260.04		ULALI DR	00			N	DAY	INJ	PSNGR CAR		01	DRVR	NONE	46	F	OR-Y	016,026		038	27,29
N	45 0 20.3	-122 59 59.59			0001PN100S00		(04)												OR<25				
													02 NONE 0 STOP										

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

PRVTE W -E 011 00
PSNGR CAR 01 DRVR INJC 28 F OR-Y 000 000 00
OR<25

00122 N N N N 01/09/2016 MARION 1 14 2 STRGHT N N CLR S-1STOP 01 NONE 0 STRGHT 29
NONE SA KEIZER CN 0 CHEMAWA RD E (NONE) UNKNOWN N DRY REAR PRVTE W -E 000 00
N 11A SALEM-KZ UA 260.05 ULALI DR 03 N DAY INJ PSNGR CAR 01 DRVR NONE 27 M OR-Y 026 000 29
N 45 0 20.24 -122 59 58.85 0001PN100S00 (04) OR<25
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR INJC 61 F OR-Y 000 000 00
OR<25

00341 N N N N N N 01/21/2020 MARION 1 14 2 STRGHT N N CLD S-STRGHT 01 NONE 9 STRGHT 07,27
CITY TU KEIZER CN 0 CHEMAWA RD E (NONE) UNKNOWN N DRY REAR N/A W -E 000 00
N 9A SALEM-KZ UA 260.06 ULALI DR 00 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 20.18 -122 59 58.12 0001PN100S00 (04) UNK
02 NONE 9 STRGHT
N/A W -E 000 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

05363 N N N N 12/11/2017 MARION 1 14 2 STRGHT N N RAIN S-1STOP 01 NONE 0 STRGHT 013 29
NONE MO KEIZER CN 0 CHEMAWA RD E (NONE) UNKNOWN N WET REAR PRVTE W -E 000 00
N 5P SALEM-KZ UA 260.09 ULALI DR 03 N DLIT INJ PSNGR CAR 01 DRVR NONE 61 M OR-Y 026 000 29
N 45 0 20.01 -122 59 55.9 0001PN100S00 (05) OR<25
02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 01 DRVR INJC 38 F OR-Y 000 022 00
OR<25
03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 25 F OR-Y 000 000 00
OR<25

02604 N N N N 07/11/2019 MARION 1 14 2 STRGHT N N CLR S-1STOP 01 NONE 0 STRGHT 013 29
NONE TH KEIZER CN 0 CHEMAWA RD E (NONE) R-GRN-SIG N DRY REAR PRVTE W -E 000 00
N 4P SALEM-KZ UA 260.09 ULALI DR 03 N DAY INJ PSNGR CAR 01 DRVR NONE 20 M OR-Y 026 000 29
N 45 0 20.01 -122 59 55.91 0001PN100S00 (05) OR<25

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 01 DRVR INJB 23 F OR-Y 000 022 00
OR<25
03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR INJC 54 M OR-Y 000 000 00
OR<25
03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 02 PSNG INJC 54 F 000 000 00

03543 N N N N N N 09/14/2019 MARION 1 14 2 STRGHT N N CLR S-1STOP 01 NONE 9 STRGHT 093 27,29
CITY SA KEIZER CN 0 CHEMAWA RD E (NONE) R-GRN-SIG N DRY REAR N/A W -E 000 00
N 3P SALEM-KZ UA 260.10 ULALI DR 03 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 19.94 -122 59 55.19 0001PN100S00 (05) UNK
02 NONE 9 STOP
N/A W -E 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

01649 N N N N 04/19/2016 MARION 1 14 2 INTER CROSS N N CLR S-1STOP 01 NONE 0 STRGHT 29
NONE TU SALEM CN 0 CHEMAWA RD NE E TRF SIGNAL N DRY REAR PRVTE E -W 000 00
N 6P SALEM-KZ UA 260.12 SB EX CHEMAWA RD C4 06 0 N DAY INJ PSNGR CAR 01 DRVR INJC 18 M OR-Y 026 026 29
N 45 0 19.83 -122 59 53.68 0001PN100S00 OR<25
02 NONE 0 STOP
PRVTE E -W 011 00
PSNGR CAR 01 DRVR NONE 57 F OR-Y 000 000 00
OR<25

03846 N N N N N N 09/05/2016 MARION 1 14 2 INTER CROSS N N CLR S-1STOP 01 NONE 0 STRGHT 07
CITY MO SALEM CN 0 CHEMAWA RD NE E TRF SIGNAL N DRY REAR PRVTE E -W 000 00
N 12P SALEM-KZ UA 260.12 SB EX CHEMAWA RD C4 06 0 N DAY INJ PSNGR CAR 01 DRVR INJC 35 F OR-Y 043,026 000 07
N 45 0 19.83 -122 59 53.68 0001PN100S00 OR<25
02 NONE 0 STOP
PRVTE E -W 011 00
PSNGR CAR 01 DRVR INJC 65 F OR-Y 000 000 00
OR<25

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

02231	N N N N	06/13/2019	MARION	1 14	2	INTER	CROSS	N	N	CLR	ANGL-STP	01	NONE	9	TURN-L							08
NONE		TH	SALEM	CN 0	CHEMAWA RD NE	E		TRF SIGNAL	N	DRY	TURN		N/A		NE-E						000	00
N		2P	SALEM-KZ UA	260.12	SB EX CHEMAWA RD C4	06	0		N	DAY	PDO		SEMI TOW			01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 19.83	-122 59 53.66		0001PN100S00														UNK			
												02	NONE	9	STOP							
													N/A		E -W						011	00
													PSNGR CAR			01 DRVR	NONE	00 Unk	UNK	000	000	00
																			UNK			
01690	N N N N N N	05/01/2018	MARION	1 14	2	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	0	STRGHT							32,27
STATE		TU	SALEM	CN 0	CHEMAWA RD NE	W		TRF SIGNAL	N	DRY	REAR		PRVTE		W -E						000	00
N		2P	SALEM-KZ UA	260.12	SB EF CHEMAWA RD C5	06	0		N	DAY	INJ		PSNGR CAR			01 DRVR	NONE	53 M	OR-Y	052,016,026	038	32,27
N		45 0 19.83	-122 59 53.68		0001PN100S00														OR<25			
												02	NONE	0	STOP							
													PRVTE		W -E						011	00
													PSNGR CAR			01 DRVR	INJC	58 M	OR-Y	000	000	00
																			OR<25			
01528	N N N N	05/23/2020	MARION	1 14	2	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	0	STRGHT							29
NO RPT		SA	SALEM	CN 0	CHEMAWA RD NE	W		TRF SIGNAL	N	DRY	REAR		PRVTE		W -E						000	00
N		1P	SALEM-KZ UA	260.12	SB EF CHEMAWA RD C5	06	0		N	DAY	INJ		PSNGR CAR			01 DRVR	NONE	29 M	OR-Y	026	000	29
N		45 0 19.83	-122 59 53.7		0001PN100S00														OR<25			
												02	NONE	0	STOP							
													PRVTE		W -E						011	00
													PSNGR CAR			01 DRVR	INJC	33 M	OR-Y	000	000	00
																			OR<25			
												02	NONE	0	STOP							
													PRVTE		W -E						011	00
													PSNGR CAR			02 PSNG	INJC	31 F		000	000	00
01381	N N N N N N	04/09/2017	MARION	1 11	2	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE	0	STRGHT							27,04
CITY		SU	SALEM	CN 0	CHEMAWA RD NE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE		E -W						000	00
N		12P	SALEM-KZ UA	260.12	SB EX CHEMAWA RD C4	01	0		N	DAY	INJ		PSNGR CAR			01 DRVR	NONE	24 M	SUSP	016,020	038	27,04
N		45 0 19.83	-122 59 53.68		0001PN100S00														OR<25			
												02	NONE	0	TURN-L							
													PRVTE		NE-E						000	00
													PSNGR CAR			01 DRVR	INJA	42 M	OTH-Y	000	000	00

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

																			N-RES			
												02 NONE	0	TURN-L								
												PRVTE		NE-E							000	00
												PSNGR CAR			02 PSNG	INJA	42	F		000	000	00
02063	N N N N	05/21/2017	MARION	1 11	2	INTER	CROSS	N	N	UNK	S-1TURN	01 NONE	9	STRGHT								14
NONE		SU	SALEM	CN 0	CHEMAWA RD NE	CN		R-GRN-SIG	N	UNK	REAR	N/A		NE-SW							000	00
N		4P	SALEM-KZ UA	260.12	SB EX CHEMAWA RD C4	01	0		N	DAY	PDO	PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
N		45 0 19.83	-122 59 53.68		0001PN100S00														UNK			
												02 NONE	9	TURN-R								
												N/A		NE-W							000	00
												PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
																			UNK			
01644	N N N N	04/18/2016	MARION	1 11	2	INTER	CROSS	N	N	CLR	S-OTHER	01 NONE	0	TURN-R								29
NO RPT		MO	SALEM	CN 0	CHEMAWA RD NE	CN		TRF SIGNAL	N	DRY	REAR	PRVTE		W -SE							000	00
N		2P	SALEM-KZ UA	260.12	SB EF CHEMAWA RD C5	03	0		N	DAY	INJ	PSNGR CAR			01 DRVR	INJC	26	M	OR-Y	026	000	29
N		45 0 19.83	-122 59 53.68		0001PN100S00														OR<25			
												01 NONE	0	TURN-R								
												PRVTE		W -SE							000	00
												PSNGR CAR			02 PSNG	NO<5	04	M		000	000	00
												02 NONE	0	STOP								
												PRVTE		W -SE							013	00
												PSNGR CAR			01 DRVR	NONE	62	F	OTH-Y	000	000	00
																			N-RES			
01364	N N N N	04/08/2017	MARION	1 11	2	INTER	CROSS	N	N	CLR	S-OTHER	01 NONE	9	TURN-R								08
NO RPT		SA	SALEM	CN 0	CHEMAWA RD NE	CN		TRF SIGNAL	N	DRY	TURN	N/A		W -SE							000	00
N		10A	SALEM-KZ UA	260.12	SB EF CHEMAWA RD C5	03	0		N	DAY	PDO	PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
N		45 0 19.83	-122 59 53.68		0001PN100S00														UNK			
												02 NONE	9	TURN-R								
												N/A		W -SE							000	00
												PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
																			UNK			
01317	N N N N	04/19/2018	MARION	1 11	4	INTER	CROSS	N	N	CLR	S-OTHER	01 NONE	0	TURN-R								08

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

NO RPT TH SALEM CN 0 CHEMAWA RD NE CN TRF SIGNAL N DRY TURN PRVTE NE-W 000 00
N 6P SALEM-KZ UA 260.12 SB EX CHEMAWA RD C4 01 0 N DAY INJ PSNGR CAR 01 DRVR NONE 59 F OR-Y 001 000 08
N 45 0 19.83 -122 59 53.69 0001PN100S00 OR<25
02 NONE 0 TURN-R
PRVTE NE-W 000 00
PSNGR CAR 01 DRVR INJC 25 F OR-Y 000 000 00
OR<25

05579 N N N N N N 12/16/2016 MARION 1 14 2 STRGHT Y N CLR S-1STOP 01 NONE 0 STRGHT 013 29
CITY FR SALEM CN 0 CHEMAWA RD NE E (NONE) UNKNOWN N ICE REAR PRVTE E -W 000 00
N 3P SALEM-KZ UA 260.14 SB EX CHEMAWA RD C4 05 N DAY INJ PSNGR CAR 01 DRVR NONE 43 M OR-Y 026 000 29
N 45 0 19.71 -122 59 52.21 0001PN100S00 (04) OR<25
02 NONE 0 STOP
PRVTE E -W 011 013 00
PSNGR CAR 01 DRVR NONE 42 F OR-Y 000 022 00
OR<25
03 NONE 0 STOP
PRVTE E -W 012 00
PSNGR CAR 01 DRVR INJC 22 F OR-Y 000 000 00
OR<25

04862 N N N N 11/11/2017 MARION 1 14 2 STRGHT Y N CLR S-1STOP 01 NONE 9 STRGHT 29
NONE SA SALEM CN 0 CHEMAWA RD NE E (NONE) UNKNOWN N DRY REAR N/A E -W 000 00
N 3P SALEM-KZ UA 260.14 SB EX CHEMAWA RD C4 06 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 19.71 -122 59 52.21 0001PN100S00 (04) UNK
02 NONE 9 STOP
N/A E -W 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

04810 N N N N 12/15/2018 MARION 1 14 2 STRGHT Y N CLR S-1STOP 01 NONE 0 STRGHT 29
CITY SA SALEM CN 0 CHEMAWA RD NE E (NONE) UNKNOWN N DRY REAR PRVTE E -W 000 00
N 11A SALEM-KZ UA 260.15 SB EX CHEMAWA RD C4 00 N DAY INJ PSNGR CAR 01 DRVR INJC 18 F OR-Y 026 000 29
N 45 0 19.66 -122 59 51.47 0001PN100S00 (04) OR<25
02 NONE 0 STOP
PRVTE E -W 011 00
PSNGR CAR 01 DRVR NONE 29 M OR-Y 000 000 00
OR<25
02 NONE 0 STOP

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

												PRVTE	E -W							011		00
												PSNGR CAR		02 PSNG	INJB	24	M		000	000		00
02568	N N N N	07/09/2019	MARION	1 14	2	STRGHT		Y	N	RAIN	S-1STOP	01 NONE 9	STRGHT									29
NONE		TU	SALEM	CN 0	CHEMAWA RD NE	E	(NONE)	UNKNOWN	N	WET	REAR	N/A	E -W							000		00
N		5P	SALEM-KZ UA	260.15	SB EX CHEMAWA RD C4	06			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00
N		45 0 19.65	-122 59 51.45		0001PN100S00		(04)											UNK				
												02 NONE 9	STOP									
												N/A	E -W							011		00
												PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00
																		UNK				
03547	N N N N N N	09/18/2018	MARION	1 14	2	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								013	07,40
CITY		TU	SALEM	CN 0	CHEMAWA RD NE	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	E -W							000		00
N		6P	SALEM-KZ UA	260.16	SB EX CHEMAWA RD C4	06			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	60	M	OR-Y	043,026	026		07,40
N		45 0 19.6	-122 59 50.74		0001PN100S00		(04)											OR<25				
												02 NONE 0	STOP									
												PRVTE	E -W							011	013	00
												PSNGR CAR		01 DRVR	INJB	63	M	OR-Y	000	022		00
																		OR<25				
												03 NONE 0	STOP									
												PRVTE	E -W							011		00
												PSNGR CAR		01 DRVR	INJC	55	M	OR-Y	000	000		00
																		OR<25				
03314	N N N N	11/02/2020	MARION	1 14	2	STRGHT		N	N	CLR	S-STRGHT	01 NONE 0	STRGHT									29
NONE		MO	SALEM	CN 0	CHEMAWA RD NE	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	E -W							000		00
N		9A	SALEM-KZ UA	260.18	SB EX CHEMAWA RD C4	05			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	44	M	OR-Y	042	000		29
N		45 0 19.49	-122 59 49.28		0001PN100S00		(04)											OR<25				
												02 UNKN 0	STRGHT									
												UNKN	E -W							006		00
												PSNGR CAR		01 DRVR	NONE	00	M	UNK	000	000		00
																		UNK				
03395	N N N N N N	09/04/2019	MARION	1 14	2	BRIDGE		N	N	CLR	S-1STOP	01 NONE 0	STRGHT								001	40,29
CITY		WE	SALEM	CN 0	CHEMAWA RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	E -W							000		00
N		6P	SALEM-KZ UA	260.22	NB EF CHEMAWA RD C3	05			N	DAY	INJ	MTRCYCLE		01 DRVR	INJC	58	M	OR-Y	026	026	001	40,29
N		45 0 19.26	-122 59 46.33		0001PN100S00		(04)											OR>25				

SB Ramp
NB Ramp
N/A

												02 NONE 0	STOP									
												PRVTE	E -W							011		00
												PSNGR CAR		01 DRVR	NONE	32	F	EXP	000	000		00
																		OR<25				
05209	N N N N N N	11/24/2016	MARION	1 11	3	INTER	CROSS	N	N	RAIN	S-1TURN	01 NONE 0	STRGHT									08
CITY		TH	SALEM	CN 0	CHEMAWA RD NE	CN		TRF SIGNAL	N	WET	REAR	PRVTE	E -W							000		00
N		6P	SALEM-KZ UA	260.23	NB EF CHEMAWA RD C3	02	0		N	DUSK	INJ	PSNGR CAR		01 DRVR	NONE	20	M	OR-Y	000	000		00
N		45 0 18.93	-122 59 41.92		0001PO100S00													OR<25				
												02 NONE 0	STRGHT									
												PRVTE	E -W							000		00
												PSNGR CAR		01 DRVR	INJC	32	F	OR-Y	038,006	000		08
																		OR>25				
												02 NONE 0	STRGHT									
												PRVTE	E -W							000		00
												PSNGR CAR		02 PSNG	NO<5	03	F		000	000		00
04038	N N N N N N	09/27/2017	MARION	1 14	2	STRGHT		N	N	CLR	S-1STOP	01 NONE 0	STRGHT								013	07
CITY		WE	SALEM	CN 0	CHEMAWA RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	E -W							000		00
N		6P	SALEM-KZ UA	260.24	NB EF CHEMAWA RD C3	05			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	29	F	OR-Y	043,026	000		07
N		45 0 19.16	-122 59 44.86		0001PN100S00		(04)											OR<25				
												01 NONE 0	STRGHT									
												PRVTE	E -W							000		00
												PSNGR CAR		02 PSNG	NO<5	04	F		000	000		00
												02 NONE 0	STOP									
												PRVTE	E -W							011	013	00
												PSNGR CAR		01 DRVR	NONE	22	M	OR-Y	000	022		00
																		OR<25				
												03 NONE 0	STOP									
												PRVTE	E -W							011		00
												PSNGR CAR		01 DRVR	NONE	23	F	OR-Y	000	000		00
																		OR<25				
05069	Y N N N N N	11/15/2016	MARION	1 14	2	STRGHT		N	N	CLD	S-1STOP	01 NONE 0	STRGHT								013	01,07
CITY		TU	SALEM	CN 0	CHEMAWA RD NE	W	(NONE)	UNKNOWN	N	WET	REAR	PRVTE	E -W							000		00
N		3P	SALEM-KZ UA	260.26	NB EF CHEMAWA RD C3	05			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	44	M	OR-Y	047,043,026	000		01,07
N		45 0 19.04	-122 59 43.39		0001PN100S00		(04)											OR<25				

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

02 NONE 0 STOP
PRVTE E -W 011 013 00
PSNGR CAR 01 DRVR NONE 25 M OR-Y 000 022 00
OR<25
03 NONE 0 STOP
PRVTE E -W 011 00
PSNGR CAR 01 DRVR INJB 28 F OR-Y 000 000 00
OR<25
03 NONE 0 STOP
PRVTE E -W 011 00
PSNGR CAR 02 PSNG NO<5 02 M 000 000 00

00958 N N N N 03/07/2020 MARION 1 14 2 STRGHT N N RAIN S-1STOP 01 NONE 9 STRGHT 29
NONE SA SALEM CN 0 CHEMAWA RD NE W (NONE) UNKNOWN N WET REAR N/A E -W 000 00
N 12P SALEM-KZ UA 260.26 NB EF CHEMAWA RD C3 06 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 19.03 -122 59 43.41 0001PN100S00 (04) UNK
02 NONE 9 STOP
N/A E -W 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

00766 Y N N N N N 02/22/2016 MARION 1 11 4 STRGHT N Y CLR S-1STOP 01 NONE 0 STRGHT 043 32,30
STATE MO SALEM CN 0 SB EX CHEMAWA RD C4 NE (NONE) ONE-WAY N DRY REAR PRVTE NE-SW 000 043 00
Y 4P SALEM-KZ UA 260.87 CHEMAWA RD NE 03 N DAY INJ PSNGR CAR 01 DRVR INJB 88 F OR-Y 052,050,026 026 32,30
N 45 0 23.9 -122 59 50.17 0001PP100S00 (01) OR<25
02 NONE 0 STOP
PRVTE NE-SW 011 00
PSNGR CAR 01 DRVR NONE 31 F OR-Y 000 000 00
OR<25

01405 N N N N 04/26/2018 MARION 1 11 4 STRGHT Y N CLR S-1STOP 01 NONE 9 STRGHT 29
STATE TH SALEM CN 0 SB EX CHEMAWA RD C4 NE (NONE) ONE-WAY N DRY REAR N/A NE-SW 000 00
N 8A SALEM-KZ UA 260.89 CHEMAWA RD NE 03 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 22.88 -122 59 51.05 0001PP100S00 (01) UNK
02 NONE 9 STOP
N/A NE-SW 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

05/08/2023 TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT

CONTINUOUS SYSTEM CRASH LISTING

001: PACIFIC **Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage**

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

																			UNK				
00504	N N N N N N	02/12/2018	MARION	1	11	4	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT									32,27,29
STATE		MO	SALEM	CN	0	SB EX CHEMAWA RD C4	NE	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	NE-SW							000		00
N		5P	SALEM-KZ UA	260.92		CHEMAWA RD NE	03			N	DUSK	INJ	PSNGR CAR		01 DRVR	NONE	21	F	OR-Y	052,016,026	038		32,27,29
N		45 0 21.35	-122 59 52.37			0001PP100S00		(01)											OR>25				
													02 NONE 0	STOP									
													PRVTE	NE-SW							011		00
													PSNGR CAR		01 DRVR	INJC	62	F	OR-Y	000	000		00
																			OR<25				
00298	N N N N	01/25/2019	MARION	1	11	4	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT									29
STATE		FR	SALEM	CN	0	SB EX CHEMAWA RD C4	NE	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	NE-SW							000		00
N		5P	SALEM-KZ UA	260.92		CHEMAWA RD NE	03			N	DLIT	INJ	PSNGR CAR		01 DRVR	INJC	33	F	OR-Y	026	000		29
N		45 0 21.36	-122 59 52.36			0001PP100S00		(02)											OR<25				
													02 UNKN 0	STOP									
													UNKN	NE-SW							011		00
													PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00
																			UNK				
02897	N N N N	07/19/2017	MARION	1	11	4	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT									27,29
NONE		WE	SALEM	CN	0	SB EX CHEMAWA RD C4	NE	(DIVMD)	ONE-WAY	N	DRY	REAR	PRVTE	NE-SW							000		00
N		12P	SALEM-KZ UA	260.93		CHEMAWA RD NE	03			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	19	F	OTH-Y	016,026	038		27,29
N		45 0 20.84	-122 59 52.81			0001PP100S00		(01)											N-RES				
													02 NONE 0	STOP									
													PRVTE	NE-SW							011		00
													PSNGR CAR		01 DRVR	INJC	51	M	OTH-Y	000	000		00
																			N-RES				
													02 NONE 0	STOP									
													PRVTE	NE-SW							011		00
													PSNGR CAR		02 PSNG	INJC	52	F		000	000		00
00129	N Y N N N N	01/12/2019	MARION	1	11	4	STRGHT		N	Y	CLR	FIX OBJ	01 NONE 0	STRGHT								043	16
STATE		SA	SALEM	CN	0	CHEMAWA RD NE	NE	(NONE)	ONE-WAY	N	DRY	FIX	PRVTE	NE-SW							000	043	00
Y		3A	SALEM-KZ UA	260.93		SB EX CHEMAWA RD C4	06			N	DLIT	INJ	PSNGR CAR		01 DRVR	INJC	22	M	OR-Y	081	025		16
N		45 0 20.85	-122 59 52.8			0001PP100S00		(02)											OR<25				

001: PACIFIC

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

04107	N N N N	09/19/2016	MARION	1 11	4	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT							29
NONE		MO	SALEM	CN 0	CHEMAWA RD NE	NE		TRF SIGNAL	N	DRY	REAR	N/A	NE-SW						000	00
N		12P	SALEM-KZ UA	260.95	SB EX CHEMAWA RD C4	06	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 19.83	-122 59 53.68		0001PP100S00												UNK			
												02 NONE 9	STOP							
												N/A	NE-SW						011	00
												PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																	UNK			
00195	N N N N	01/13/2017	MARION	1 11	4	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT							29
NONE		FR	SALEM	CN 0	CHEMAWA RD NE	NE		TRF SIGNAL	N	DRY	REAR	N/A	NE-SW						000	00
N		1P	SALEM-KZ UA	260.95	SB EX CHEMAWA RD C4	06	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 19.83	-122 59 53.68		0001PP100S00												UNK			
												02 NONE 9	STOP							
												N/A	NE-SW						011	00
												PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																	UNK			

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D C	D R E L S	M J U G V	S I N H L	W C O R K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# FC / COMPNT / MLG TYP / MILEPNT	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / (#LANES)	INT-REL / CONTL / TRAF-	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
05705	N	N	N	N		12/23/2016	MARION	1 11	1	STRGHT		N	N	CLR	S-STRGHT	01	NONE 9	STRGHT										29
NONE		FR	SALEM	CN 0		NB EX CHEMAWA RD C1	NE	(NONE)	ONE-WAY	N	DRY	REAR		N/A	SW-NE												000	00
N		11A	SALEM-KZ UA	260.10		SLM PKY EX CHEMW C1	03			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000		000	00
N		45 0 12.19	-122 59 46.67			0001PM100S00		(02)															UNK				
																02	NONE 9	STRGHT										
																	N/A	SW-NE								000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
																								UNK				
05697	N	N	N	N	N N	12/23/2016	MARION	1 11	1	STRGHT		N	N	CLD	S-STRGHT	01	NONE 9	STRGHT										29
NO RPT		FR	SALEM	CN 0		NB EX CHEMAWA RD C1	NE	(NONE)	ONE-WAY	N	DRY	REAR		N/A	SW-NE												000	00
N		11A	SALEM-KZ UA	260.11		SLM PKY EX CHEMW C1	03			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000		000	00
N		45 0 12.67	-122 59 46.32			0001PM100S00		(02)															UNK				
																02	NONE 9	STRGHT										
																	N/A	SW-NE								000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
																								UNK				
05294	N	N	N	N	N N	11/30/2016	MARION	1 11	1	GRADE		N	N	CLD	S-1STOP	01	NONE 0	STRGHT									013	07,29
STATE		WE	SALEM	CN 0		NB EX CHEMAWA RD C1	SW	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	SW-NE												000	00
N		5P	SALEM-KZ UA	260.13		CHEMAWA RD NE	03			N	DARK	INJ		PSNGR CAR			01	DRVR	NONE	30	F	OR-Y		043,026		000	07,29
N		45 0 13.63	-122 59 45.64			0001PM100S00		(02)															OR<25				
																02	NONE 0	STOP										
																	PRVTE	SW-NE								011	013	00
																	PSNGR CAR		01	DRVR	INJC	70	F	OR-Y	000	000		00
																								OR<25				
																03	NONE 0	STOP										
																	PRVTE	SW-NE								022		00
																	PSNGR CAR		01	DRVR	NONE	35	F	OR-Y	000	000		00
																								OR<25				

CONTINUOUS SYSTEM CRASH LISTING

001: PACIFIC **Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage**

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

01612	N N N N	05/01/2019	MARION	1 14	2	STRGHT		N	N	CLR	S-STRGHT	01 NONE 9		STRGHT								13
NONE		WE	SALEM	CN 0	CHEMAWA RD NE	E	(NONE)	UNKNOWN	N	DRY	SS-O		N/A	W -E						000		00
N		2P	SALEM-KZ UA	260.14	SB EF CHEMAWA RD C5	04			N	DAY	PDO		PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000		00
N		45 0 19.72	-122 59 52.23		0001PN100S00		(04)											UNK				
												02 NONE 9		STRGHT								
													N/A	W -E						000		00
													PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000		00
																		UNK				
03249	N N N N	08/31/2018	MARION	1 14	2	STRGHT		N	N	CLR	S-1STOP	01 NONE 0		STRGHT							013	29
NONE		FR	SALEM	CN 0	CHEMAWA RD NE	E	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	W -E						000		00
N		3P	SALEM-KZ UA	260.16	SB EF CHEMAWA RD C5	00			N	DAY	INJ		PSNGR CAR		01 DRVR	NONE	20 F	OR-Y	026	000		29
N		45 0 19.61	-122 59 50.75		0001PN100S00		(04)											OR<25				
												02 NONE 0		STOP								
													PRVTE	W -E						011	013	00
													PSNGR CAR		01 DRVR	INJB	72 M	OR-Y	000	022		00
																		OR<25				
												03 NONE 0		STOP								
													PRVTE	W -E						011		00
													PSNGR CAR		01 DRVR	NONE	20 F	OR-Y	000	000		00
																		OR<25				
05164	N N N N N N	12/21/2019	MARION	1 11	1	STRGHT		Y	N	RAIN	S-1STOP	01 NONE 0		STRGHT								29
STATE		SA	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	WET	REAR		PRVTE	SW-NE						000		00
N		1P	SALEM-KZ UA	260.17	CHEMAWA RD NE	00			N	DAY	INJ		PSNGR CAR		01 DRVR	INJB	75 F	OR-Y	026	000		29
N		45 0 15.53	-122 59 44.26		0001PM100S00		(02)											OR<25				
												02 NONE 0		STOP								
													PRVTE	SW-NE						011		00
													PSNGR CAR		01 DRVR	INJC	22 F	OR-Y	000	000		00
																		OR<25				
												02 NONE 0		STOP								
													PRVTE	SW-NE						011		00
													PSNGR CAR		02 PSNG	INJC	10 F		000	000		00
												02 NONE 0		STOP								
													PRVTE	SW-NE						011		00
													PSNGR CAR		03 PSNG	INJC	13 F		000	000		00

001: PACIFIC

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

05703	N N N N N N	12/23/2016	MARION	1 11	1	STRGHT		Y	N	CLD	S-1STOP	01 NONE 0	STRGHT									29
STATE		FR	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE							000		00
N		11A	SALEM-KZ UA	260.18	CHEMAWA RD NE	03			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	46	M	OR-Y	026	000		29
N		45 0 16.03	-122 59 43.92		0001PM100S00		(02)											OR>25				
												02 NONE 0	STOP									
												PRVTE	SW-NE							011		00
												PSNGR CAR		01 DRVR	INJC	38	F	OR-Y	000	000		00
																		OR<25				
												02 NONE 0	STOP									
												PRVTE	SW-NE							011		00
												PSNGR CAR		02 PSNG	INJC	45	M		000	000		00
00545	N N N N N N	02/09/2020	MARION	1 11	1	STRGHT		Y	N	CLR	S-STRGHT	01 NONE 0	STRGHT								013	07
STATE		SU	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE							022		00
N		3P	SALEM-KZ UA	260.18	CHEMAWA RD NE	03			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	31	M	OR-Y	043,026	022		07
N		45 0 16.03	-122 59 43.92		0001PM100S00		(01)											OR<25				
												01 NONE 0	STRGHT									
												PRVTE	SW-NE							022		00
												PSNGR CAR		02 PSNG	INJC	48	F		000	000		00
												02 NONE 0	STRGHT									
												PRVTE	SW-NE							000		00
												PSNGR CAR		01 DRVR	NONE	18	M	OR-Y	000	000		00
																		OR<25				
												03 NONE 0	STRGHT									
												PRVTE	SW-NE							022		00
												PSNGR CAR		01 DRVR	INJC	48	F	OR-Y	026	022		29
																		OR<25				
05432	N N N N N N	12/14/2017	MARION	1 14	2	BRIDGE		N	N	CLR	S-1STOP	01 NONE 0	STRGHT									07
CITY		TH	SALEM	CN 0	CHEMAWA RD NE	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E							000		00
N		6P	SALEM-KZ UA	260.18	SB EF CHEMAWA RD C5	03			N	DLIT	INJ	PSNGR CAR		01 DRVR	NONE	25	M	OR-Y	043,026	000		07
N		45 0 19.49	-122 59 49.27		0001PN100S00		(04)											OR<25				
												02 NONE 0	STOP									
												PRVTE	W -E							011		00
												PSNGR CAR		01 DRVR	INJC	20	M	OR-Y	000	000		00
																		OR<25				

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

													02 NONE 0	STOP								
													PRVTE	W -E						011		00
													PSNGR CAR		02 PSNG	INJC	19 F		000	000		00
03966	N N N N N N	10/10/2019	MARION	1	11	1	STRGHT		N	N	CLR	S-1STOP	01 NONE 0	STRGHT							093	27,29
STATE		TH	SALEM	CN	0	NB EX CHEMAWA RD C1	S	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE						000		00
N		5P	SALEM-KZ UA	260.20		CHEMAWA RD NE	03			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	45 M	OR-Y	016,026	038	093	27,29
N		45 0 16.99	-122 59 43.23			0001PM100S00		(01)										OR<25				
													02 NONE 0	STOP								
													PRVTE	SW-NE						011		00
													PSNGR CAR		01 DRVR	INJC	29 F	OR-Y	000	000		00
																		OR<25				
05380	N N N N	12/11/2017	MARION	1	11	2	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								29
NONE		MO	SALEM	CN	0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE						000		00
N		2P	SALEM-KZ UA	260.20		CHEMAWA RD NE	03			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	18 M	OR-Y	026	000		29
N		45 0 16.99	-122 59 43.23			0001PM100S00		(01)										OR<25				
													02 NONE 0	STOP								
													PRVTE	SW-NE						011		00
													PSNGR CAR		01 DRVR	INJC	37 F	OR-Y	000	000		00
																		OR<25				
03405	N N N N	09/05/2019	MARION	1	11	1	STRGHT		N	N	CLR	S-1STOP	01 NONE 0	STRGHT								29
NONE		TH	SALEM	CN	0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE						000		00
N		3P	SALEM-KZ UA	260.21		CHEMAWA RD NE	00			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	62 F	OR-Y	026	000		29
N		45 0 17.49	-122 59 42.93			0001PM100S00		(02)										OR<25				
													02 NONE 0	STOP								
													PRVTE	SW-NE						011		00
													PSNGR CAR		01 DRVR	INJC	78 M	OR-Y	000	000		00
																		OR>25				
													02 NONE 0	STOP								
													PRVTE	SW-NE						011		00
													PSNGR CAR		02 PSNG	INJC	76 F		000	000		00
02996	N N N N	07/24/2017	MARION	1	11	1	STRGHT		Y	N	CLR	S-1STOP	01 NONE 9	STRGHT								29
NONE		MO	SALEM	CN	0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	N/A	SW-NE						000		00

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

N		6P	SALEM-KZ UA	260.21	CHEMAWA RD NE	03			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000		00
N		45 0 17.47	-122 59 42.89		0001PM100S00		(01)										UNK				
												02 NONE 9	STOP								
												N/A	SW-NE						011		00
												PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000		00
																	UNK				
01705	N N N N N N	05/19/2018	MARION	1 11	1	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT							013	29
STATE		SA	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE						000		00
N		1A	SALEM-KZ UA	260.21	CHEMAWA RD NE	03			N	DARK	INJ	PSNGR CAR		01 DRVR	NONE	67 M	OR-Y	026	000		29
N		45 0 17.42	-122 59 42.92		0001PM100S00		(01)										OR>25				
												02 NONE 0	STOP								
												PRVTE	SW-NE						011	013	00
												PSNGR CAR		01 DRVR	NONE	59 F	OR-Y	000	022		00
																	OR<25				
												03 NONE 0	STOP								
												PRVTE	SW-NE						011	013	00
												PSNGR CAR		01 DRVR	NONE	47 M	OR-Y	000	022		00
																	OR<25				
												04 NONE 0	STOP								
												PRVTE	SW-NE						011		00
												PSNGR CAR		01 DRVR	INJC	19 F	OR-Y	000	000		00
																	OR<25				
03764	N N N N	08/31/2016	MARION	1 11	1	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT							013	29
NONE		WE	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE						000		00
N		12P	SALEM-KZ UA	260.22	CHEMAWA RD NE	03			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	64 F	OR-Y	026	000		29
N		45 0 17.96	-122 59 42.57		0001PM100S00		(02)										OR<25				
												02 NONE 0	STOP								
												PRVTE	SW-NE						011	013	00
												PSNGR CAR		01 DRVR	INJC	25 F	OR-Y	000	022		00
																	OR<25				
												03 NONE 0	STOP								
												PRVTE	SW-NE						011		00
												PSNGR CAR		01 DRVR	NONE	52 F	OR-Y	000	000		00
																	OR<25				
04760	N N N N	10/27/2016	MARION	1 11	1	STRGHT		Y	N	CLR	S-1STOP	01 NONE 9	STRGHT								29

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

NONE		TH	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	N/A	SW-NE							000		00
N		5P	SALEM-KZ UA	260.22	CHEMAWA RD NE	03			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00
N		45 0 17.96	-122 59 42.57		0001PM100S00		(01)											UNK				
												02 NONE 9	STOP									
												N/A	SW-NE							011		00
												PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00
																		UNK				
03554	N N N N	09/21/2018	MARION	1 11	1	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT									29
NONE		FR	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE							000		00
N		10A	SALEM-KZ UA	260.22	CHEMAWA RD NE	03			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	19	F	OR-Y	026	000		29
N		45 0 17.95	-122 59 42.57		0001PM100S00		(01)											OR<25				
												02 NONE 0	STOP									
												PRVTE	SW-NE							011		00
												PSNGR CAR		01 DRVR	NONE	67	F	OR-Y	000	000		00
																		OR<25				
03810	N Y N N N N	12/18/2020	MARION	1 11	1	STRGHT		Y	N	RAIN	S-1STOP	01 NONE 0	STRGHT									29
STATE		FR	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	WET	REAR	PRVTE	SW-NE							000		00
N		5P	SALEM-KZ UA	260.22	CHEMAWA RD NE	03			N	DARK	INJ	PSNGR CAR		01 DRVR	INJC	74	M	OR-Y	026	000		29
N		45 0 17.96	-122 59 42.57		0001PM100S00		(01)											OR>25				
												02 NONE 0	STOP									
												PRVTE	SW-NE							011		00
												PSNGR CAR		01 DRVR	INJC	54	F	OR-Y	000	000		00
																		OR<25				
01738	N Y N N N N	06/18/2020	MARION	1 11	1	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								001	40,29
STATE		TH	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	DRY	REAR	PRVTE	SW-NE							000		00
N		9P	SALEM-KZ UA	260.22	CHEMAWA RD NE	03			N	DARK	INJ	MTRCYCLE		01 DRVR	INJB	44	M	OR-Y	026	026	001	40,29
N		45 0 17.96	-122 59 42.58		0001PM100S00		(02)											OR<25				
												02 NONE 0	STOP									
												PRVTE	SW-NE							011		00
												PSNGR CAR		01 DRVR	NONE	30	M	OR-Y	000	000		00
																		OR<25				
04748	N N N N	12/11/2018	MARION	1 11	1	STRGHT		Y	N	CLD	S-1STOP	01 NONE 9	STRGHT									29
NONE		TU	SALEM	CN 0	NB EX CHEMAWA RD C1	SW	(NONE)	ONE-WAY	N	WET	REAR	N/A	SW-NE							000		00

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

N	9A	SALEM-KZ UA	260.22	CHEMAWA RD NE	04			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK	000	000	00
N	45 0 17.96	-122 59 42.56		0001PM100S00		(02)													UNK			
											02	NONE	9	STOP								
												N/A		SW-NE							011	00
												PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
																				UNK			
05719 N N N N	11/28/2016	MARION	1	11	1	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE	0	STRGHT								29
NO RPT	MO	SALEM	CN	0	CHEMAWA RD NE	SW		TRF SIGNAL	N	WET	REAR		PRVTE		SW-NE							000	00
N	8A	SALEM-KZ UA	260.24		NB EX CHEMAWA RD C1	06	0		N	DAWN	INJ		PSNGR CAR			01	DRVR	NONE	33	F	OR-Y	026	000	29
N	45 0 18.93	-122 59 41.92			0001PM100S00															OR<25			
											02	NONE	0	STOP								
												PRVTE		SW-NE							011	00
												PSNGR CAR			01	DRVR	INJC	37	F	OR-Y	000	000	00
																				OR<25			
											02	NONE	0	STOP								
												PRVTE		SW-NE							011	00
												PSNGR CAR			02	PSNG	INJC	00	M		000	000	00
												PRVTE		SW-NE							011	00
												PSNGR CAR			03	PSNG	INJC	38	M		000	000	00
04157 N N N N	09/21/2016	MARION	1	11	1	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	9	STRGHT								29
NONE	WE	SALEM	CN	0	CHEMAWA RD NE	SW		TRF SIGNAL	N	DRY	REAR		N/A		SW-NE							000	00
N	3P	SALEM-KZ UA	260.24		NB EX CHEMAWA RD C1	06	0		N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
N	45 0 18.93	-122 59 41.92			0001PM100S00															UNK			
											02	NONE	9	STOP								
												N/A		SW-NE							011	00
												PSNGR CAR			01	DRVR	NONE	00	Unk	UNK	000	000	00
																				UNK			
86659 N N N N	09/12/2017	MARION	1	11	1	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	0	STRGHT								29
NONE	TU	SALEM	CN	0	CHEMAWA RD NE	SW		TRF SIGNAL	N	DRY	REAR		PRVTE		SW-NE							000	00
N	12P	SALEM-KZ UA	260.24		NB EX CHEMAWA RD C1	06	0		N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	00	M	UNK	026	000	29
N	45 0 18.93	-122 59 41.92			0001PM100S00															OR<25			
											02	NONE	0	STOP								
												PRVTE		SW-NE							011	00

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

												PSNGR CAR		01 DRVR INJB 46 F	OR-Y	000	000	00
															OR<25			
												02 NONE 0	STOP					
												PRVTE	SW-NE				011	00
												PSNGR CAR		02 PSNG INJB 23 M		000	000	00
01400	N N N N	04/10/2017	MARION	1 11	1	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT					27,29
NONE		MO	SALEM	CN 0	CHEMAWA RD NE	SW		UNKNOWN	N	DRY	REAR	N/A	SW-NE				000	00
N		2P	SALEM-KZ UA	260.24	NB EX CHEMAWA RD C1	06	0		N	DAY	PDO	PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
N		45 0 18.93	-122 59 41.92		0001PM100S00										UNK			
												02 NONE 9	STOP					
												N/A	SW-NE				011	00
												PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
															UNK			
03207	N N N N N N	10/25/2020	MARION	1 11	1	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT					29
STATE		SU	SALEM	CN 0	CHEMAWA RD NE	SW		TRF SIGNAL	N	DRY	REAR	N/A	SW-NE				000	00
N		12P	SALEM-KZ UA	260.24	NB EX CHEMAWA RD C1	06	0		N	DAY	PDO	PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
N		45 0 18.95	-122 59 41.93		0001PM100S00										UNK			
												02 NONE 9	STOP					
												N/A	SW-NE				011	00
												PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
															UNK			
01742	N N N N	05/05/2017	MARION	1 14	2	STRGHT		N	N	CLR	S-1STOP	01 NONE 0	STRGHT					29
NONE		FR	SALEM	CN 0	CHEMAWA RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E				000	00
N		11P	SALEM-KZ UA	260.24	NB EX CHEMAWA RD C1	03			N	DLIT	INJ	PSNGR CAR		01 DRVR NONE 61 M	OR-Y	026	000	29
N		45 0 19.16	-122 59 44.86		0001PN100S00		(04)								OR<25			
												02 NONE 0	STOP					
												PRVTE	W -E				011	00
												PSNGR CAR		01 DRVR NONE 19 F	OR-Y	000	000	00
															OR<25			
												02 NONE 0	STOP					
												PRVTE	W -E				011	00
												PSNGR CAR		02 PSNG INJC 04 F		000	000	00
00362	N N N N	01/25/2017	MARION	1 11	3	INTER	CROSS	N	N	UNK	S-1STOP	01 NONE 9	STRGHT					29

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

NONE WE SALEM CN 0 PACIFIC HY I-5 S TRF SIGNAL N UNK REAR N/A S -N 000 00
N 1P SALEM-KZ UA 260.24 SB EXTO MARKET C3 06 0 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 18.93 -122 59 41.92 0001PM100S00 UNK
02 NONE 9 STOP
N/A S -N 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

04216 N N N N 10/26/2019 MARION 1 14 2 STRGHT Y N CLR S-1STOP 01 NONE 0 STRGHT 29
NONE SA SALEM CN 0 CHEMAWA RD NE W (NONE) UNKNOWN N DRY REAR PRVTE W -E 000 00
N 1P SALEM-KZ UA 260.26 NB EX CHEMAWA RD C1 00 N DAY INJ PSNGR CAR 01 DRVR NONE 21 F OR-Y 026 000 29
N 45 0 19.03 -122 59 43.38 0001PN100S00 (04) OR>25
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 31 F OR-Y 000 000 00
OR<25
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 02 PSNG INJC 75 F 000 000 00
PRVTE W -E 011 00
PSNGR CAR 02 PSNG INJC 75 F 000 000 00
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 03 PSNG INJC 43 M 000 000 00

04753 N N N N 11/05/2017 MARION 1 14 2 STRGHT Y N CLR S-1STOP 01 NONE 9 STRGHT 29
NONE SU SALEM CN 0 CHEMAWA RD NE W (NONE) UNKNOWN N DRY REAR N/A W -E 000 00
N 5P SALEM-KZ UA 260.26 NB EX CHEMAWA RD C1 03 N DUSK PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 19.04 -122 59 43.39 0001PN100S00 (04) UNK
02 NONE 9 STOP
N/A W -E 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

02343 N N N N 06/13/2017 MARION 1 14 2 STRGHT Y N CLR S-1STOP 01 NONE 0 STRGHT 29
NONE TU SALEM CN 0 CHEMAWA RD NE W (NONE) L-GRN-SIG N DRY REAR PRVTE W -E 000 00
N 7A SALEM-KZ UA 260.26 NB EX CHEMAWA RD C1 05 N DAY INJ PSNGR CAR 01 DRVR NONE 39 M OR-Y 026 000 29
N 45 0 19.04 -122 59 43.39 0001PN100S00 (05) OR<25
02 NONE 0 STOP

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

													PRVTE	W -E							012		00
													PSNGR CAR		01 DRVR	INJC	33	M	OR-Y	000	000		00
																			OR<25				
03816	N N N N N N	10/09/2018	MARION	1 14	2	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0		STRGHT								093	32,27,29
STATE		TU	SALEM	CN 0	CHEMAWA RD NE	W	(NONE)	L-GRN-SIG	N	DRY	REAR		PRVTE	W -E							000		00
N		6A	SALEM-KZ UA	260.26	NB EX CHEMAWA RD C1	05			N	DLIT	INJ		PSNGR CAR		01 DRVR	NONE	26	F	OR-Y	052,016,026	038	093	32,27,29
N		45 0 19.05	-122 59 43.41		0001PN100S00		(05)												OR<25				
												02 NONE 0		STOP									
													PRVTE	W -E							011		00
													PSNGR CAR		01 DRVR	INJC	36	F	OTH-Y	000	000		00
																			N-RES				
01037	N N N N N N	03/28/2018	MARION	1 11	1	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE 0		TURN-L									04
STATE		WE	SALEM	CN 0	CHEMAWA RD NE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	SW-W							000		00
N		10P	SALEM-KZ UA	260.28	NB EX CHEMAWA RD C1	04	0		N	DLIT	INJ		PSNGR CAR		01 DRVR	INJB	20	F	OR-Y	020	000		04
N		45 0 18.94	-122 59 41.91		0001PN100S00														OR<25				
												01 NONE 0		TURN-L									
													PRVTE	SW-W							000		00
													PSNGR CAR		02 PSNG	INJC	16	F		000	000		00
												02 NONE 0		STRGHT									
													PRVTE	W -E							000		00
													PSNGR CAR		01 DRVR	INJC	31	M	OR-Y	000	000		00
																			OR<25				
04264	N N N N	09/28/2016	MARION	1 14	2	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 0		STRGHT									29
NONE		WE	SALEM	CN 0	CHEMAWA RD NE	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W							000		00
N		6P	SALEM-KZ UA	260.28	NB EF CHEMAWA RD C3	06	0		N	DAY	INJ		PSNGR CAR		01 DRVR	NONE	61	M	OR-Y	026	000		29
N		45 0 18.93	-122 59 41.92		0001PN100S00														OR<25				
												02 NONE 0		STOP									
													PRVTE	E -W							011		00
													PSNGR CAR		01 DRVR	INJC	62	M	OR-Y	000	000		00
																			OR<25				
												02 NONE 0		STOP									
													PRVTE	E -W							011		00
													PSNGR CAR		02 PSNG	INJC	40	M		000	000		00

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

05257	N	N	N	N	12/05/2017	MARION	1	14	2		INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	0	STRGHT											29
NONE					TU	SALEM	CN	0	CHEMAWA RD NE		E		TRF SIGNAL	N	DRY	REAR		PRVTE		E -W									000		00
N					9A	SALEM-KZ UA	260.28		NB EF CHEMAWA RD C3		06	0		N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	43	M	OR-Y		026	000		29
N					45 0 18.93	-122 59 41.92			0001PN100S00																	OR<25					
																	02	NONE	0	STOP											
																		PRVTE		E -W									011		00
																		PSNGR CAR			01	DRVR	INJC	39	F	OR-Y		000	000		00
																										OR<25					
																	02	NONE	0	STOP											
																		PRVTE		E -W									011		00
																		PSNGR CAR			02	PSNG	INJC	20	F			000	000		00
																	02	NONE	0	STOP											
																		PRVTE		E -W									011		00
																		PSNGR CAR			03	PSNG	INJC	07	F			000	000		00
00081	N	N	N	N	01/09/2018	MARION	1	14	2		INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE	9	STRGHT											29
NONE					TU	SALEM	CN	0	CHEMAWA RD NE		E		TRF SIGNAL	N	WET	REAR		N/A		E -W									000		00
N					7A	SALEM-KZ UA	260.28		NB EF CHEMAWA RD C3		06	0		N	DLIT	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
N					45 0 18.93	-122 59 41.92			0001PN100S00																	UNK					
																	02	NONE	9	STOP											
																		N/A		E -W									011		00
																		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000	000		00
																										UNK					
00850	Y	N	N	N	N	N	03/08/2019	MARION	1	14	2		INTER	CROSS	N	Y	RAIN	FIX OBJ	01	NONE	0	TURN-L									043	08,01
CITY					FR	SALEM	CN	0	CHEMAWA RD NE		W		TRF SIGNAL	N	WET	FIX		PRVTE		SE-W									022	043	00
N					1P	SALEM-KZ UA	260.28		NB EF CHEMAWA RD C3		05	0		N	DAY	INJ		PSNGR CAR			01	DRVR	INJB	17	F	OR-Y		001,047,081	022		08,01
N					45 0 18.93	-122 59 41.92			0001PN100S00																	OR<25					
																	02	NONE	0	TURN-L											
																		PRVTE		SE-W									000		00
																		PSNGR CAR			01	DRVR	NONE	20	M	OR-Y		000	000		00
																										OR<25					
																	03	NONE	0	STOP											
																		PRVTE		W -E									012		00
																		PSNGR CAR			01	DRVR	NONE	58	M	OR-Y		000	022		00
																										OR<25					

SB Ramp
NB Ramp
N/A

1 - 159 of 159 Crash records shown.

03584	Y N N N N N	09/17/2019	MARION	1	14	2	INTER	CROSS	N	Y	UNK	FIX OBJ	01	NONE	9	TURN-L												043	01
NO RPT		TU	SALEM	CN	0	CHEMAWA RD NE	W		TRF SIGNAL	N	DRY	FIX		N/A		SE-W												000	00
N		1P	SALEM-KZ UA	260.28		NB EF CHEMAWA RD C3	05	0		N	DAY	PDO		SEMI TOW			01	DRVR	NONE	00	Unk	UNK		000		000	00
N		45 0 18.94	-122 59 41.92			0001PN100S00																UNK					
04000	N N N N	09/25/2017	MARION	1	14	2	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE	0	STRGHT													29
NONE		MO	SALEM	CN	0	CHEMAWA RD NE	W		TRF SIGNAL	N	WET	REAR		PRVTE		W -E												000	00
N		8A	SALEM-KZ UA	260.28		NB EF CHEMAWA RD C3	06	0		N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	38	M	OR-Y		026		000	29
N		45 0 18.93	-122 59 41.92			0001PN100S00																OR<25					
													02	NONE	0	STOP													
														PRVTE		W -E												011	00
														PSNGR CAR			01	DRVR	INJC	57	F	OR-Y		000		000	00
																						OR<25					
01402	N N N N	04/25/2018	MARION	1	14	2	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	9	STRGHT													29
NONE		WE	SALEM	CN	0	CHEMAWA RD NE	W		TRF SIGNAL	N	DRY	REAR		N/A		W -E												000	00
N		5P	SALEM-KZ UA	260.28		NB EX CHEMAWA RD C1	06	0		N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000		000	00
N		45 0 18.93	-122 59 41.92			0001PN100S00																UNK					
													02	NONE	9	STOP													
														N/A		W -E												011	00
														PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000		000	00
																						UNK					
02898	N N N N	09/24/2020	MARION	1	11	2	INTER	CROSS	N	N	CLR	S-OTHER	01	NONE	9	TURN-L													08
NONE		TH	SALEM	CN	0	CHEMAWA RD NE	CN		TRF SIGNAL	N	WET	TURN		N/A		SE-W												000	00
N		5A	SALEM-KZ UA	260.28		NB EF CHEMAWA RD C3	01	0		N	UNK	PDO		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000		000	00
N		45 0 18.93	-122 59 41.92			0001PN100S00																UNK					
													02	NONE	9	TURN-L													
														N/A		SE-W												000	00
														PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		000		000	00
																						UNK					
04549	N N N N N N	10/27/2017	MARION	1	11	2	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE	0	STRGHT												087	27,04
COUNTY		FR	SALEM	CN	0	CHEMAWA RD NE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE		E -W												000	087	00
N		9P	SALEM-KZ UA	260.28		NB EF CHEMAWA RD C3	02	0		N	DLIT	INJ		PSNGR CAR			01	DRVR	NONE	18	M	OR-Y		016,020		038		27,04
N		45 0 18.93	-122 59 41.92			0001PN100S00																OR<25					
													02	NONE	0	TURN-L													
														PRVTE		W -NW												000	087	00

001: PACIFIC

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

												PSNGR CAR		01 DRVR	INJC	29 M	OR-Y	000	000	00
																	OR<25			
												02 NONE 0	TURN-L							
												PRVTE	W -NW						000 087	00
												PSNGR CAR		02 PSNG	INJC	26 M		000	000	00
03524	N N N N N N	08/28/2017	MARION	1 11	2	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE 0	STRGHT							04
CITY		MO	SALEM	CN 0	CHEMAWA RD NE	CN		TRF SIGNAL	N	DRY	TURN	PRVTE	W -E						000	00
N		8P	SALEM-KZ UA	260.28	NB EX CHEMAWA RD C1	04	0		N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	21 F	NONE	020	000	04
N		45 0 18.93	-122 59 41.92		0001PN100S00												OR<25			
												02 NONE 0	TURN-L							
												PRVTE	S -W						000	00
												PSNGR CAR		01 DRVR	INJC	22 F	OR-Y	000	000	00
																	OR<25			
												02 NONE 0	TURN-L							
												PRVTE	S -W						000	00
												PSNGR CAR		02 PSNG	INJC	16 F		000	000	00
												02 NONE 0	TURN-L							
												PRVTE	S -W						000	00
												PSNGR CAR		03 PSNG	INJC	15 M		000	000	00
02280	N N N N N N	06/25/2018	MARION	1 11	2	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE 0	STRGHT							04
CITY		MO	SALEM	CN 0	CHEMAWA RD NE	CN		TRF SIGNAL	N	DRY	TURN	PRVTE	W -E						000	00
N		7P	SALEM-KZ UA	260.28	NB EX CHEMAWA RD C1	04	0		N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	70 F	OR-Y	020	000	04
N		45 0 18.93	-122 59 41.92		0001PN100S00												OR<25			
												02 NONE 0	TURN-L							
												PRVTE	SW-W						000	00
												PSNGR CAR		01 DRVR	INJC	23 F	OR-Y	000	000	00
																	OR<25			
01604	N N N N	04/25/2017	MARION	1 14	2	STRGHT		N	N	RAIN	S-STRGHT	01 NONE 9	STRGHT							22
NONE		TU	SALEM	CN 0	CHEMAWA RD NE	W	(NONE)	UNKNOWN	N	WET	SS-O	N/A	E -W						000	00
N		5P	SALEM-KZ UA	260.35	INDIAN SCHOOL RD NE	05			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 18.52	-122 59 36.5		0001PN100S00		(04)										UNK			
												02 NONE 9	STRGHT							
												N/A	E -W						000	00

Highway 001 CONNECTIONS, MP 259.18 to 260.95 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 159 of 159 Crash records shown.

SB Ramp
NB Ramp
N/A

PSNGR CAR	01 DRVR	NONE	00	Unk	UNK	000	000	00	
					UNK				

081: PACIFIC HIGHWAY EAST

Highway 081 ALL ROAD TYPES, MP 44.37 to 44.53 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 26 of 26 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P / E / E / D	D R / A / L / C	M J / U / G / S	S / I / N / V	W / C / H / L	O / R / K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# FC / COMPNT / MLG TYP / MILEPNT	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	TYPE	SVRTY	A / G / E	S / E / X	LICNS / RES	PED / LOC	ERROR	ACT	EVENT	CAUSE
03549	N	N	N	N	N	N	09/14/2019	MARION	1 16		INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 0	STRGHT											27,29
STATE			SA						MN 0		N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -S									000		00
N			8P					SALEM-KZ UA	44.46		06	2		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	30	F	OR-Y		016,026	038		27,29
N			45 0 16.5					-122 58 35.35		008100100S00																OR<25				
																	02	NONE 0	STOP											
																		PRVTE	N -S									011		00
																		PSNGR CAR		01	DRVR	INJC	58	F	OR-Y		000	000		00
																									OR>25					
																	02	NONE 0	STOP											
																		PRVTE	N -S									011		00
																		PSNGR CAR		02	PSNG	INJC	11	F			000	000		00
03706	N	N	N	N			09/23/2019	MARION	1 16		INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NO RPT			MO						MN 0		N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -S									000		00
N			10A					SALEM-KZ UA	44.46		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	18	F	OR-Y		026	000		29
N			45 0 16.52					-122 58 35.37		008100100S00																OR>25				
																	02	NONE 0	STOP											
																		PRVTE	N -S									011		00
																		PSNGR CAR		01	DRVR	INJC	30	F	OR-Y		000	000		00
																									OR<25					

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF SALEM, MARION COUNTY

CHEMAWA RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 36 of 36 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S D M / P R J S W / E A U I C O / E L G N H R / D C S V L K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
03731	N N N N	09/09/2017	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	S-STRGHT	01	NONE 9	STRGHT											13
NONE		SA		PORTLAND RD NE	UN		TRF SIGNAL	N	DRY	SS-O		N/A	UN-UN									000		00
N		9A			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N		45 0 16.49	-122 58 35.34	008100100S00		(04)													UNK					
											02	NONE 9	STRGHT											
												N/A	UN-UN									000		00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																			UNK					
02696	Y N N N N N	07/18/2019	14	CHEMAWA RD NE	INTER	CROSS	N	Y	CLR	FIX OBJ	01	NONE 0	TURN-L										055	30,08
CITY		TH		PORTLAND RD NE	N		TRF SIGNAL	N	DRY	FIX		PRVTE	SW-W									000	055	00
N		9A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	33	M	OR-Y		050,001,081	000		30,08
N		45 0 16.53	-122 58 35.34	008100100S00															OR<25					
00739	N Y N N N N	03/03/2018	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
CITY		SA		PORTLAND RD NE	NE		TRF SIGNAL	N	DRY	REAR		PRVTE	NE-SW									000		00
N		1P			06	6		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	28	M	SUSP		026	000		29
N		45 0 16.49	-122 58 35.34	008100100S00															OR<25					
											02	NONE 0	STOP											
												PRVTE	NE-SW									011		00
												PSNGR CAR		01	DRVR	INJC	55	F	OR-Y		000	000		00
																			OR<25					
02652	N N N N	06/24/2016	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NO RPT		FR	0	PORTLAND RD NE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000		00
N		1P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	78	F	OR-Y		043,026	000		07
N		45 0 16.41	-122 58 35.34																OR<25					
											02	NONE 0	STOP											
												PRVTE	W -E									011		00
												PSNGR CAR		01	DRVR	INJC	21	M	OR-Y		000	000		00
																			OR<25					

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF SALEM, MARION COUNTY

CHEMAWA RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 36 of 36 Crash records shown.

00493	N N N N	02/10/2018	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT			004	29
NO RPT		SA	0	PORTLAND RD NE	W		TRF SIGNAL	N	DRY	REAR	N/A	W -E			000	00
N		12P			06	0		N	DAY	PDO	PSNGR CAR		01 DRVR NONE 00 Unk UNK	000	000	00
N		45 0 16.49	-122 58 35.34										UNK			
											02 NONE 9	STOP				
											N/A	W -E			011	00
											PSNGR CAR		01 DRVR NONE 00 Unk UNK	000	000	00
													UNK			
00004	N N N N N N	01/01/2019	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 0	STRGHT				27,13
CITY		TU	0	PORTLAND RD NE	W		TRF SIGNAL	N	DRY	SS-O	PRVTE	W -E			000	00
N		1P			06	0		N	DAY	INJ	PSNGR CAR		01 DRVR NONE 81 M OR-Y	016,045	038	27,13
N		45 0 16.5	-122 58 35.35										OR<25			
											02 NONE 0	STOP				
											PRVTE	W -E			011	00
											PSNGR CAR		01 DRVR INJC 41 M OR-Y	000	000	00
													OR<25			
00498	N N N N	02/03/2016	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE 9	STRGHT				04
NONE		WE		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	ANGL	N/A	W -E			000	00
N		6P			03	0		N	DUSK	PDO	PSNGR CAR		01 DRVR NONE 00 Unk UNK	000	000	00
N		45 0 16.49	-122 58 35.34	008100100S00									UNK			
											02 NONE 9	STRGHT				
											N/A	N -S			000	00
											PSNGR CAR		01 DRVR NONE 00 Unk UNK	000	000	00
													UNK			
04718	N N N N	10/25/2016	14	CHEMAWA RD NE	INTER	CROSS	N	N	RAIN	ANGL-OTH	01 NONE 9	STRGHT				04
NO RPT		TU		PORTLAND RD NE	CN		TRF SIGNAL	N	WET	ANGL	N/A	NE-SW			000	00
N		10P			03	0		N	DARK	PDO	PSNGR CAR		01 DRVR NONE 00 Unk UNK	000	000	00
N		45 0 16.49	-122 58 35.34	008100100S00									UNK			
											02 NONE 9	STRGHT				
											N/A	W -E			000	00
											PSNGR CAR		01 DRVR NONE 00 Unk UNK	000	000	00
													UNK			

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF SALEM, MARION COUNTY

CHEMAWA RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 36 of 36 Crash records shown.

01407	N N N N N N	04/11/2017	14	CHEMAWA RD NE	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01 NONE 0	STRGHT									02
CITY		TU		PORTLAND RD NE	CN		TRF SIGNAL	N	WET	TURN	PRVTE	W -E							000		00
N		8P			03	0		N	DLIT	INJ	PSNGR CAR		01 DRVR	INJC	45	F	OR-Y	000	000		00
N		45 0 16.49	-122 58 35.34	008100100S00													OR<25				
											02 NONE 0	TURN-L									
											PRVTE	E -S							000		00
											PSNGR CAR		01 DRVR	NONE	86	M	OR-Y	028,004	000		02
																	OR<25				
01971	N N Y N N N	05/20/2017	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE 0	STRGHT								013	04
CITY		SA		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	ANGL	PRVTE	E -W							000		00
N		7A			02	0		N	DAY	FAT	PSNGR CAR		01 DRVR	INJC	49	M	OR-Y	000	000		00
N		45 0 16.49	-122 58 35.34	008100100S00													OR<25				
											01 NONE 0	STRGHT									
											PRVTE	E -W							000		00
											PSNGR CAR		02 PSNG	INJC	49	F		000	000		00
											02 NONE 0	STRGHT									
											PRVTE	S -N							000	013	00
											PSNGR CAR		01 DRVR	INJC	51	M	OR-Y	020	000		04
																	OR>25				
											02 NONE 0	STRGHT									
											PRVTE	S -N							000	013	00
											PSNGR CAR		02 PSNG	KILL	32	M		000	000		00
											03 NONE 0	TURN-R									
											PRVTE	N -W							022		00
											PSNGR CAR		01 DRVR	INJC	74	M	OR-Y	000	000		00
																	OR<25				
											03 NONE 0	TURN-R									
											PRVTE	N -W							022		00
											PSNGR CAR		02 PSNG	INJC	73	F		000	000		00
03485	N N N N	09/16/2018	14	CHEMAWA RD NE	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE 9	TURN-R									33,02
CITY		SU		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	TURN	N/A	W -S							000		00
N		3P			03	2		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00

N 45 0 16.48 -122 58 35.34 008100100S00 UNK

02 NONE 9 STRGHT

N/A N -S 000 00

PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

UNK

04004 Y Y N N 10/13/2019 14 CHEMAWA RD NE INTER CROSS N N CLD S-OTHER 01 NONE 0 TURN-L 087 33,01,29

CITY SU PORTLAND RD NE CN TRF SIGNAL N WET TURN PRVTE SW-W 000 00

N 1A 01 2 N DLIT INJ PSNGR CAR 01 DRVR NONE 22 F OR-Y 051,047,042 000 33,01,29

N 45 0 16.49 -122 58 35.34 008100100S00 OR<25

01 NONE 0 TURN-L

PRVTE SW-W 000 00

PSNGR CAR 02 PSNG INJB 24 M 000 000 00

02 NONE 0 TURN-L

PRVTE SW-W 000 087 00

PSNGR CAR 01 DRVR NONE 44 F OR-Y 000 000 00

OR<25

02992 N N N N 10/02/2020 14 CHEMAWA RD NE INTER CROSS N N CLR S-1TURN 01 NONE 0 STRGHT 001 29

NONE FR PORTLAND RD NE CN TRF SIGNAL N DRY REAR PRVTE W -E 000 00

N 4P 03 2 N DAY INJ PSNGR CAR 01 DRVR NONE 46 M OR-Y 042 000 29

N 45 0 16.49 -122 58 35.33 008100100S00 OR<25

02 NONE 0 TURN-R

PRVTE W -S 000 00

MTRCYCLE 01 DRVR INJC 18 M OR-Y 000 000 001 00

OR<25

00245 N N N N 01/16/2016 14 PORTLAND RD NE STRGHT Y N RAIN S-1STOP 01 NONE 9 STRGHT 29

NONE SA CHEMAWA RD NE SW (NONE) UNKNOWN N WET REAR N/A SW-NE 000 00

N 12P 05 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

N 45 0 15.39 -122 58 35.7 008100100S00 (04) UNK

02 NONE 9 STOP

N/A SW-NE 011 00

PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00

UNK

CITY OF SALEM, MARION COUNTY

CHEMAWA RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 36 of 36 Crash records shown.

01896 N N N N N N 05/03/2016 14 PORTLAND RD NE STRGHT N N CLD S-STRGHT 01 NONE 9 STRGHT 29
STATE TU CHEMAWA RD NE SW (NONE) UNKNOWN N DRY REAR N/A UN-UN 000 00
N 7A 00 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 14.29 -122 58 36.05 008100100S00 (04) UNK
02 NONE 9 STRGHT
N/A UN-UN 000 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

03669 N N N N N N 12/05/2020 14 PORTLAND RD NE STRGHT Y N CLD S-1STOP 01 NONE 0 STRGHT 013 29
CITY SA CHEMAWA RD NE SW (NONE) UNKNOWN N DRY REAR PRVTE UN-UN 000 00
N 5P 00 N DLIT INJ PSNGR CAR 01 DRVR INJC 35 M NONE 026 000 29
N 45 0 15.4 -122 58 35.7 008100100S00 (04) OR<25
02 NONE 0 STOP
PRVTE UN-UN 011 013 00
PSNGR CAR 01 DRVR NONE 39 M OR-Y 000 022 00
OR<25
03 NONE 0 STOP
PRVTE UN-UN 011 00
PSNGR CAR 01 DRVR NONE 18 F OR-Y 000 000 00
OR<25

03528 N Y N N N N 11/18/2020 14 CHEMAWA RD NE STRGHT Y N RAIN S-1STOP 01 NONE 0 STRGHT 07
CITY WE PORTLAND RD NE W (NONE) L-GRN-SIG N WET REAR PRVTE W -E 000 00
N 8P 08 N DLIT INJ PSNGR CAR 01 DRVR NONE 38 F OR-Y 043,026 000 07
N 45 0 16.48 -122 58 37.37 (03) OR<25
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 32 M OR-Y 000 000 00
OR<25
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 02 PSNG INJC 30 F 000 000 00
02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 03 PSNG INJC 03 M 000 000 00

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANAYLYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF SALEM, MARION COUNTY

CHEMAWA RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 36 of 36 Crash records shown.

01399	N N N N	04/15/2019	14	CHEMAWA RD NE	STRGHT		Y	N	RAIN	S-STRGHT	01 NONE 0	STRGHT						29
NONE		MO	63	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	WET	REAR	PRVTE	W -E				000		00
N		UNK			08			N	DAY	INJ	PSNGR CAR		01 DRVR NONE 18 F	OR-Y	042	000		29
N		45 0 16.47	-122 58 37.23			(02)								OR<25				
											02 NONE 0	STRGHT						
											PRVTE	W -E				006		00
											PSNGR CAR		01 DRVR INJC 33 F	OR-Y	000	000		00
														OR<25				
00676	N N N N	02/16/2016	14	CHEMAWA RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 9	STRGHT						29
NONE		TU	74	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	N/A	W -E				000		00
N		11A			08			N	DAY	PDO	PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000		00
N		45 0 16.37	-122 58 37.42			(02)								UNK				
											02 NONE 9	STOP						
											N/A	W -E				011		00
											PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000		00
														UNK				
02869	N N N N	09/23/2020	14	CHEMAWA RD NE	STRGHT		Y	N	RAIN	S-1STOP	01 NONE 0	STRGHT						29
NONE		WE	112	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	WET	REAR	PRVTE	W -E				000		00
N		5P			08			N	DAY	INJ	PSNGR CAR		01 DRVR NONE 17 F	OR-Y	026	000		29
N		45 0 16.48	-122 58 37.98			(02)								OR<25				
											02 NONE 0	STOP						
											PRVTE	W -E				011		00
											PSNGR CAR		01 DRVR INJC 71 F	OR-Y	000	000		00
														OR<25				
02281	N N N N N N	06/02/2016	14	CHEMAWA RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT					013	27,07
CITY		TH	124	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E				000		00
N		4P			08			N	DAY	INJ	PSNGR CAR		01 DRVR NONE 22 F	OR-Y	016,043,026	038		27,07
N		45 0 16.36	-122 58 38.08			(02)								OR<25				
											02 NONE 0	STOP						
											PRVTE	W -E				011	013	00
											PSNGR CAR		01 DRVR INJB 63 F	OR-Y	000	022		00
														OR<25				

02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 02 PSNG INJB 66 M 000 000 00

03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 21 M OR-Y 000 000 00
OR<25

03397 N N N N 08/21/2017 14 CHEMAWA RD NE STRGHT Y N CLR S-1STOP 01 NONE 0 STRGHT 013 29
NO RPT MO 126 PORTLAND RD NE W (NONE) UNKNOWN N DRY REAR PRVTE W -E 000 00
N 4P 08 N DAY INJ PSNGR CAR 01 DRVR NONE 71 M OR-Y 026 000 29
N 45 0 16.47 -122 58 38.07 (02) OR>25

02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 01 DRVR INJC 30 M OTH-Y 000 022 00
N-RES

03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 17 M OR-Y 000 000 00
OR<25

00983 N N N N N N 03/13/2017 14 CHEMAWA RD NE STRGHT N N CLD S-1STOP 01 UNKN 0 STRGHT 29
CITY MO 130 PORTLAND RD NE W (NONE) UNKNOWN N WET REAR UNKN W -E 000 00
N 10P 08 N DARK INJ PSNGR CAR 01 DRVR NONE 00 Unk UNK 026 000 29
N 45 0 16.46 -122 58 38.16 (02) UNK

02 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR INJC 19 F OR-Y 000 000 00
OR<25

04155 N N N N 09/21/2016 14 CHEMAWA RD NE STRGHT Y N CLR S-1STOP 01 NONE 9 STRGHT 29
NONE WE 136 PORTLAND RD NE W (NONE) UNKNOWN N DRY REAR N/A W -E 000 00
N 5P 08 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 16.36 -122 58 38.22 (02) UNK

02 NONE 9 STOP
N/A W -E 011 00

											PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
														UNK			
02521	N N N N	07/12/2018	14	CHEMAWA RD NE	STRGHT		Y	N	CLR	S-STRGHT	01 NONE 9	STRGHT					29
NONE		TH	160	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	UNK	REAR	N/A	W -E				000	00
N		4P			08			N	DAY	PDO	PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
N		45 0 16.48	-122 58 38.6			(02)								UNK			
											02 NONE 9	STRGHT					
											N/A	W -E				006	00
											PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
														UNK			
03953	N N N N	10/18/2018	14	CHEMAWA RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT					29
CITY		TH	265	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E				000	00
N		4P			08			N	DAY	INJ	PSNGR CAR		01 DRVR INJB 25 F	OR-Y	026	000	29
N		45 0 16.45	-122 58 40.01			(02)								OR<25			
											02 NONE 0	STOP					
											PRVTE	W -E				011	00
											PSNGR CAR		01 DRVR NONE 40 F	OR-Y	000	000	00
														OR<25			
03719	N N N N	09/26/2019	14	CHEMAWA RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 9	STRGHT					29
NONE		TH	396	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	N/A	W -E				000	00
N		8A			08			N	DAY	PDO	PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
N		45 0 16.44	-122 58 41.89			(02)								UNK			
											02 NONE 9	STOP					
											N/A	W -E				011	00
											PSNGR CAR		01 DRVR NONE 00 Unk	UNK	000	000	00
														UNK			
04257	N N N N N N	10/28/2019	14	CHEMAWA RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT				013	07,27
CITY		MO	424	PORTLAND RD NE	W	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	W -E				000	00
N		4P			08			N	DAY	INJ	PSNGR CAR		01 DRVR INJB 68 F	OR-Y	043,016,026	038	07,27
N		45 0 16.43	-122 58 42.25			(02)								OR<25			
											02 NONE 0	STOP					
											PRVTE	W -E				011 013	00
											PSNGR CAR		01 DRVR INJC 61 F	OR-Y	000	022	00

OR<25

03 NONE 0 STOP

PRVTE W -E 011 00
PSNGR CAR 01 DRVR INJC 56 M OR-Y 000 000 00

OR<25

03155 N N N N N N 07/27/2016 14 CHEMAWA RD NE STRGHT Y N CLR S-1STOP 01 NONE 0 STRGHT 013 07

CITY WE 700 PORTLAND RD NE W (NONE) UNKNOWN N DRY REAR PRVTE W -E 000 00
N 4P 08 N DAY INJ PSNGR CAR 01 DRVR INJB 23 F OR-Y 043,026 000 07

N 45 0 16.22 -122 58 46.1 (02) OR<25

01 NONE 0 STRGHT

PRVTE W -E 000 00
PSNGR CAR 02 PSNG INJB 28 M 000 000 00

01 NONE 0 STRGHT

PRVTE W -E 000 00
PSNGR CAR 03 PSNG NO<5 01 M 000 000 00

02 NONE 0 STOP

PRVTE W -E 011 013 00
PSNGR CAR 01 DRVR INJC 36 M OR-Y 000 022 00

OR<25

03 NONE 0 STOP

PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 29 F OR-Y 000 000 00

OR<25

03 NONE 0 STOP

PRVTE W -E 011 00
PSNGR CAR 02 PSNG NO<5 04 F 000 000 00

03 NONE 0 STOP

PRVTE W -E 011 00
PSNGR CAR 03 PSNG NO<5 02 F 000 000 00

03 NONE 0 STOP

PRVTE W -E 011 00
PSNGR CAR 04 PSNG NO<5 01 M 000 000 00

01743 N N N N 05/10/2019 14 CHEMAWA RD NE STRGHT Y N CLR S-1STOP 01 NONE 9 STRGHT 29
NO RPT FR 745 PORTLAND RD NE W (NONE) UNKNOWN N DRY REAR N/A W -E 000 00
N 5P 08 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 16.39 -122 58 46.64 (02) UNK
02 NONE 9 STOP
N/A W -E 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

04058 N N N N 10/25/2018 14 CHEMAWA RD NE STRGHT N N CLR S-1STOP 01 NONE 9 STRGHT 29
NONE TH 1268 PORTLAND RD NE W (NONE) UNKNOWN N DRY REAR N/A E -W 000 00
N 7A 07 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 45 0 16.33 -122 58 53.93 (02) UNK
02 NONE 9 STOP
N/A E -W 011 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

02637 N N N N 07/20/2018 14 CHEMAWA RD NE STRGHT N N CLR S-1STOP 01 NONE 0 STRGHT 013 07
COUNTY FR 1924 PORTLAND RD NE W (NONE) UNKNOWN N DRY REAR PRVTE W -E 000 00
N 3P 08 N DAY INJ PSNGR CAR 01 DRVR INJC 16 M OR-Y 043,026 000 07
N 45 0 16.21 -122 59 3.16 (02) OR<25
02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 01 DRVR INJC 60 F OR-Y 000 022 00
OR<25
02 NONE 0 STOP
PRVTE W -E 011 013 00
PSNGR CAR 02 PSNG INJC 38 F 000 000 00
03 NONE 0 STOP
PRVTE W -E 011 00
PSNGR CAR 01 DRVR NONE 30 F OR-Y 000 000 00
OR<25

CITY OF SALEM, MARION COUNTY

HAZELGREEN RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 25 of 25 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E N	D R A L	M J U G	S W I H	C O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	INT-TYPE / RD CHAR / DIRECT / LOCTN	(MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
01043	N	Y	N	N		03/29/2018	14	HAZELGREEN RD NE	INTER	CROSS	N	N	CLR	ANGL-STP	01	NONE 9	TURN-R											08
STATE						TH		PORTLAND RD NE	E		TRF SIGNAL	N	DRY	TURN		N/A	SW-E									000		00
N						12P			06	2		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N						45 0 16.49	-122 58 35.34	008100100S00															UNK					
															02	NONE 9	STOP											
																N/A	E -W									012		00
																PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																							UNK					
00942	N	N	N	N		03/14/2019	14	HAZELGREEN RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										013	29
NO RPT						TH	0	PORTLAND RD NE	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W								000		00
N						7A			06	2		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	18	M	OR-Y		026	000		29
N						45 0 16.5	-122 58 35.36																OR<25					
															02	NONE 0	STOP											
																PRVTE	E -W									011	013	00
																PSNGR CAR		01	DRVR	INJC	37	M	OR-Y		000	022		00
																							OR<25					
															03	NONE 0	STOP											
																PRVTE	E -W									011		00
																PSNGR CAR		01	DRVR	NONE	19	F	OR-Y		000	000		00
																							OR<25					
01295	N	N	N	N	N	04/08/2019	14	HAZELGREEN RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											27,29
NO RPT						MO	0	PORTLAND RD NE	E		TRF SIGNAL	N	DRY	REAR		N/A	E -W									000		00
N						6P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N						45 0 16.5	-122 58 35.35																UNK					
															02	NONE 9	STOP											
																N/A	E -W									011		00
																PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																							UNK					

HAZELGREEN RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 25 of 25 Crash records shown.

02783	N N N N	07/12/2017	14	HAZELGREEN RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT							40,29
NONE		WE		PORTLAND RD NE	SW		TRF SIGNAL	N	DRY	REAR	N/A	SW-NE						000	00
N		7A			06	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 16.49	-122 58 35.34	008100100S00												UNK			
											02 NONE 9	STOP							
											N/A	SW-NE						011	00
											PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																UNK			
00806	N N N N	02/23/2018	14	HAZELGREEN RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT							29
NONE		FR		PORTLAND RD NE	SW		TRF SIGNAL	N	DRY	REAR	N/A	SW-NE						000	00
N		7A			06	2		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 16.49	-122 58 35.34	008100100S00												UNK			
											02 NONE 9	STOP							
											N/A	SW-NE						011	00
											PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																UNK			
00915	N N N N	03/06/2020	14	HAZELGREEN RD NE	INTER	3-LEG	N	N	RAIN	S-1STOP	01 NONE 0	STRGHT							29
NONE		FR		PORTLAND RD NE	SW		TRF SIGNAL	N	WET	REAR	PRVTE	SW-NE						000	00
N		6A			06	0		N	DAWN	INJ	PSNGR CAR		01 DRVR	NONE	29 F	OR-Y	026	000	29
N		45 0 16.49	-122 58 35.36	008100100S00												OR>25			
											02 NONE 0	STOP							
											PRVTE	SW-NE						011	00
											PSNGR CAR		01 DRVR	INJC	47 F	OR-Y	000	000	00
																OR<25			
02254	N N N N	08/01/2020	14	HAZELGREEN RD NE	INTER	CROSS	N	N	CLR	S-1STOP	01 NONE 9	STRGHT							29
CITY		SA		PORTLAND RD NE	SW		TRF SIGNAL	N	DRY	REAR	N/A	SW-NE						000	00
N		1A			06	0		N	DLIT	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 16.48	-122 58 35.34	008100100S00												UNK			
											02 NONE 9	STOP							
											N/A	SW-NE						011	00
											PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																UNK			
05016	N N N N	11/21/2017	14	HAZELGREEN RD NE	INTER	CROSS	N	N	RAIN	ANGL-OTH	01 NONE 0	STRGHT							04

HAZELGREEN RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 25 of 25 Crash records shown.

NO RPT		TU		PORTLAND RD NE	CN		TRF SIGNAL	N	WET	ANGL	PRVTE	E -W							000	00
N		7A			02	2		N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	71	F	OR-Y	097	000	00
N		45 0 16.49	-122 58 35.34	008100100S00													OR<25			
											02 NONE 0	STRGHT								
											PRVTE	SW-NE							000	00
											PSNGR CAR		01 DRVR	NONE	19	M	OR-Y	097	000	00
																	OR<25			
02057	N Y N N N N	06/10/2018	14	HAZELGREEN RD NE	INTER	CROSS	N	N	RAIN	ANGL-OTH	01 NONE 9	STRGHT								04
CITY		SU		PORTLAND RD NE	CN		TRF SIGNAL	N	WET	ANGL	N/A	SW-NE							000	00
N		8A			04	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000	00
N		45 0 16.5	-122 58 35.34	008100100S00													UNK			
											02 NONE 9	STRGHT								
											N/A	W -E							000	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000	00
																	UNK			
02566	N N N N	07/16/2018	14	HAZELGREEN RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								29
NONE		MO	55	PORTLAND RD NE	E	(NONE)	TRF SIGNAL	N	DRY	REAR	PRVTE	E -W							000	00
N		1P			08			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	33	F	OR-Y	026	000	29
N		45 0 16.5	-122 58 33.73			(02)											OR<25			
											02 NONE 0	STOP								
											PRVTE	E -W							011	00
											PSNGR CAR		01 DRVR	INJC	53	F	OR-Y	000	000	00
																	OR<25			
01746	N N N N	05/21/2018	14	HAZELGREEN RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								29
NO RPT		MO	125	PORTLAND RD NE	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	E -W							000	00
N		8A			08			N	DAY	INJ	PSNGR CAR		01 DRVR	INJB	37	F	OR-Y	026	000	29
N		45 0 16.52	-122 58 32.77			(02)											OR<25			
											01 NONE 0	STRGHT								
											PRVTE	E -W							000	00
											PSNGR CAR		02 PSNG	INJB	03	M		000	000	00
											02 NONE 0	STOP								
											PRVTE	E -W							011	00

											PSNGR CAR		01 DRVR	NONE	60 F	OR-Y	000	000	00
																OR<25			
00523	N N N N	02/14/2018	14	HAZELGREEN RD NE	STRGHT		Y	N	RAIN	S-STRGHT	01 NONE 0	STRGHT							29
NONE		WE	138	PORTLAND RD NE	E	(NONE)	UNKNOWN	N	WET	REAR	PRVTE	E -W						000	00
N		7A			08			N	DLIT	INJ	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	042	000	29
N		45 0 16.51	-122 58 32.56			(02)										UNK			
											02 NONE 0	STRGHT							
											PRVTE	E -W						000	00
											PSNGR CAR		01 DRVR	INJC	30 M	OR-Y	000	000	00
																OR<25			
03049	N N N N	08/17/2018	14	HAZELGREEN RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT							29
NO RPT		FR	138	PORTLAND RD NE	E	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	E -W						000	00
N		3P			08			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	18 M	OR-Y	026	000	29
N		45 0 16.51	-122 58 32.57			(02)										OR<25			
											01 NONE 0	STRGHT							
											PRVTE	E -W						000	00
											PSNGR CAR		02 PSNG	INJC	18 M		000	000	00
											01 NONE 0	STRGHT							
											PRVTE	E -W						000	00
											PSNGR CAR		03 PSNG	INJC	20 F		000	000	00
											02 NONE 0	STOP							
											PRVTE	E -W						011	00
											PSNGR CAR		01 DRVR	NONE	46 F	OR-Y	000	000	00
																OR<25			
03486	N N N N	09/10/2019	14	HAZELGREEN RD NE	STRGHT		Y	N	CLD	S-1STOP	01 NONE 9	STRGHT							29
NONE		TU	416	PORTLAND RD NE	E	(NONE)	UNKNOWN	N	WET	REAR	N/A	E -W						000	00
N		8A			08			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		45 0 16.51	-122 58 28.75			(02)										UNK			
											02 NONE 9	STOP							
											N/A	E -W						011	00
											PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																UNK			

CITY OF SALEM, MARION COUNTY

HAZELGREEN RD and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 25 of 25 Crash records shown.

03880	N N N N	09/07/2016		14	PORTLAND RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT									29
NONE		WE			HAZELGREEN RD NE	SW	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	SW-NE							000		00
N		7P				06			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	18	M	OR-Y	026	000		29
N		45 0 14.84	-122 58 35.87		008100100S00		(04)											OR<25				
												02 NONE 0	STOP									
												PRVTE	SW-NE							011		00
												PSNGR CAR		01 DRVR	INJC	18	M	OR-Y	000	000		00
																		OR<25				
04081	N N N N	10/17/2019		14	PORTLAND RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								030	29
NO RPT		TH			HAZELGREEN RD NE	SW	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	SW-NE							000		00
N		12P				05			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	87	M	OR-Y	026	000		29
N		45 0 13.2	-122 58 36.42		008100100S00		(04)											OR<25				
												02 NONE 0	STOP									
												PRVTE	SW-NE							011	030	00
												PSNGR CAR		01 DRVR	INJC	25	F	OR-Y	000	000		00
																		OR<25				
02403	N N N N	08/12/2020		14	PORTLAND RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 9	STRGHT									29
NONE		WE			HAZELGREEN RD NE	SW	(NONE)	UNKNOWN	N	DRY	REAR	N/A	SW-NE							000		00
N		4P				00			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00
N		45 0 14.32	-122 58 36.05		008100100S00		(04)											UNK				
												02 NONE 9	STOP									
												N/A	SW-NE							011		00
												PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000		00
																		UNK				

CITY OF SALEM, MARION COUNTY

KALE ST and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 26 of 26 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E E D / D R A L C / M J U G S / S I N V / W C H L / O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED / LOC	ERROR	ACT	EVENT	CAUSE
03287	N N N N N N	08/03/2016	14	KALE ST NE	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
CITY		WE		PORTLAND RD NE	NE		TRF SIGNAL	N	DRY	REAR		PRVTE	NE-SW									000		00
N		10P			06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	51	M	OR-Y		043,026	000		07
N		44 59 50.89	-122 58 48.52	008100100S00															OR<25					
											02	NONE 0	STOP											
												PRVTE	NE-SW									011		00
												PSNGR CAR		01	DRVR	INJC	22	F	OR-Y		000	000		00
																			OR<25					
01325	N N N N N N	03/30/2016	14	KALE ST NE	INTER	3-LEG	N	N	CLR	ANGL-STP	01	NONE 9	TURN-R										089,087	08
CITY		WE		PORTLAND RD NE	E		L-GRN-SIG	N	DRY	TURN		N/A	SW-E									000		00
N		3P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N		44 59 50.89	-122 58 48.52	008100100S00															UNK					
											02	NONE 9	STOP											
												N/A	E -W									012		00
												PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																			UNK					
01284	N N N N	04/07/2019	14	KALE ST NE	INTER	3-LEG	N	Y	RAIN	FIX OBJ	01	NONE 0	TURN-L										040	08
NONE		SU		PORTLAND RD NE	E		TRF SIGNAL	N	WET	FIX		PRVTE	NE-E									000	040	00
N		7P			05	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	INJC	33	F	OR-Y		001,081	000		08
N		44 59 50.89	-122 58 48.52	008100100S00															OR<25					
02303	Y N N N	08/04/2020	14	KALE ST NE	INTER	3-LEG	N	N	CLR	ANGL-STP	01	NONE 0	TURN-R										087	32,01,08
CITY		TU		PORTLAND RD NE	E		TRF SIGNAL	N	DRY	TURN		PRVTE	SW-E									000		00
N		5P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	22	M	OR-Y		052,047,001	000		32,01,08
N		44 59 50.89	-122 58 48.52	008100100S00															OR<25					
											02	NONE 0	STOP											
												PRVTE	E -W									012	087	00
												PSNGR CAR		01	DRVR	INJC	48	F	OR-Y		000	000		00
																			OR<25					

URBAN NON-SYSTEM CRASH LISTING

CITY OF SALEM, MARION COUNTY

KALE ST and PORTLAND RD, City of Salem, Marion County, 01/01/2016 to 12/31/2020

1 - 26 of 26 Crash records shown.

04397	N N N N N N	10/06/2016	14	KALE ST NE	INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE 0	STRGHT							04
CITY		TH		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	TURN	PRVTE	SW-NE						000	00
N		9A			02	0		N	DAY	INJ	PSNGR CAR		01 DRVR	INJB	42 F	OR-Y	000	000	00
N		44 59 50.89	-122 58 48.52	008100100S00												OR<25			
											02 NONE 0	TURN-L							
											PRVTE	E -SW						000	00
											PSNGR CAR		01 DRVR	INJC	25 M	OR-Y	020	000	04
																OR<25			
05509	N N N N	12/19/2017	14	KALE ST NE	INTER	3-LEG	N	N	RAIN	O-1 L-TURN	01 NONE 9	STRGHT							04
NO RPT		TU		PORTLAND RD NE	CN		TRF SIGNAL	N	WET	TURN	N/A	SW-NE						000	00
N		5P			04	0		N	DLIT	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		44 59 50.89	-122 58 48.52	008100100S00												UNK			
											02 NONE 9	TURN-L							
											N/A	NE-E						000	00
											PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																UNK			
01699	N N N N N N	05/18/2018	14	KALE ST NE	INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE 0	STRGHT							04,27
CITY		FR		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	TURN	PRVTE	SW-NE						000	00
N		2P			02	0		N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	42 M	SUSP	016,020	038	04,27
N		44 59 50.9	-122 58 48.53	008100100S00												OR>25			
											02 NONE 0	TURN-L							
											PRVTE	E -SW						000	00
											PSNGR CAR		01 DRVR	INJB	31 F	OR-Y	000	000	00
																OR<25			
02929	N N N N N N	08/02/2019	14	KALE ST NE	INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE 0	STRGHT							04,27
CITY		FR		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	TURN	PRVTE	SW-NE						000	00
N		10A			02	0		N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	33 M	SUSP	020,016	038	04,27
N		44 59 50.88	-122 58 48.54	008100100S00												OR<25			
											02 NONE 0	TURN-L							
											PRVTE	E -SW						000	00
											PSNGR CAR		01 DRVR	INJC	30 F	OR-Y	000	000	00
																OR<25			
											02 NONE 0	TURN-L							

														PRVTE	E -SW									000		00
														PSNGR CAR		02 PSNG	INJC	83	F			000		000		00
03904	N N N N N N	10/08/2019	14	KALE ST NE	INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	0	STRGHT											087	04,27
CITY		TU		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE		SW-NE										000	087	00
N		11A			04	0		N	DAY	INJ		PSNGR CAR				01 DRVR	INJC	34	F	OR-Y		020,016		038		04,27
N		44 59 50.91	-122 58 48.54	008100100S00																OR<25						
											02	NONE	0	TURN-L												
												PRVTE		NE-E										000	087	00
												PSNGR CAR				01 DRVR	INJC	20	M	OR-Y		000		000		00
																				OR<25						
00123	N N N N N N	01/10/2020	14	KALE ST NE	INTER	3-LEG	N	N	RAIN	O-1 L-TURN	01	NONE	0	STRGHT												02
CITY		FR		PORTLAND RD NE	CN		TRF SIGNAL	N	WET	TURN		PRVTE		SW-NE										000		00
N		6P			04	0		N	DLIT	INJ		PSNGR CAR				01 DRVR	INJB	37	M	OR-Y		000		000		00
N		44 59 50.89	-122 58 48.52	008100100S00																OR<25						
											02	NONE	0	TURN-L												
												PRVTE		NE-E										000		00
												PSNGR CAR				01 DRVR	NONE	59	M	OR-Y		028,004		000		02
																				OR<25						
02139	N N N N	07/23/2020	14	KALE ST NE	INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	0	STRGHT												02
NO RPT		TH		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE		SW-NE										000		00
N		5P			04	0		N	DAY	INJ		PSNGR CAR				01 DRVR	INJC	58	M	OR-Y		000		000		00
N		44 59 50.89	-122 58 48.52	008100100S00																OR<25						
											02	NONE	0	TURN-L												
												PRVTE		NE-E										000		00
												PSNGR CAR				01 DRVR	NONE	21	M	OR-Y		028,004		000		02
																				OR<25						
02948	N N N N	09/28/2020	14	KALE ST NE	INTER	3-LEG	N	N	CLR	S-STRGHT	01	UNKN	0	STRGHT												29
NONE		MO		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	REAR		UNKN		SW-NE										000		00
N		2P			04	0		N	DAY	INJ		PSNGR CAR				01 DRVR	NONE	00	F	UNK		042		000		29
N		44 59 50.9	-122 58 48.54	008100100S00																UNK						
											02	NONE	0	STRGHT												
												PRVTE		SW-NE										000		00

											PSNGR CAR		01 DRVR	INJC	41	F	OR-Y	000	000	00
																	OR<25			
											02 NONE 0	STRGHT								
											PRVTE	SW-NE							000	00
											PSNGR CAR		02 PSNG	INJC	11	M		000	000	00
02352	N N N N N N	08/01/2020	14	KALE ST NE	INTER	3-LEG	N	N	CLR	O-1 L-TURN	01 NONE 9	STRGHT								04,27
CITY		SA		PORTLAND RD NE	CN		TRF SIGNAL	N	DRY	TURN	N/A	SW-NE							000	00
N		1P			04	0		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000	00
N		44 59 50.89	-122 58 48.52	008100100S00													UNK			
											02 NONE 9	TURN-L								
											N/A	NE-E							000	00
											PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000	00
																	UNK			
83153	N N N N	08/23/2016	14	PORTLAND RD NE	STRGHT		N	N	CLR	S-STRGHT	01 NONE 9	STRGHT								29
NO RPT		TU		KALE ST NE	NE	(NONE)	UNKNOWN	N	DRY	REAR	N/A	NE-SW							000	00
N		4P			03			N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00	Unk	UNK	000	000	00
N		44 59 54.01	-122 58 45.3	008100100S00		(04)											UNK			
											02 NONE 9	STRGHT								
											N/A	NE-SW							000	00
											SEMI TOW		01 DRVR	NONE	00	Unk	UNK	000	000	00
																	UNK			
04564	N N Y N N N	10/26/2017	14	PORTLAND RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								10
STATE		TH		KALE ST NE	NE	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	NE-SW							000	00
N		1P			04			N	DAY	INJ	PSNGR CAR		01 DRVR	INJC	65	M	OR-Y	026	000	00
N		44 59 51.66	-122 58 47.69	008100100S00		(04)											OR<25			
											01 NONE 0	STRGHT								
											PRVTE	NE-SW							000	00
											PSNGR CAR		02 PSNG	INJC	63	F		000	000	00
											02 NONE 0	STOP								
											PRVTE	NE-SW							011	00
											PSNGR CAR		01 DRVR	NONE	64	M	OR-Y	009	000	10
																	OR<25			

00757	Y N N N N N 03/05/2018	14	PORTLAND RD NE	STRGHT		Y	N	CLR	S-1STOP	01 NONE 0	STRGHT								30,07
CITY	MO		KALE ST NE	NE	(NONE)	UNKNOWN	N	DRY	REAR	PRVTE	NE-SW							000	00
N	10A			04			N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	21	M	OR-Y	050,043,026	000	30,07
N	44 59 52.44	-122 58 46.86	008100100S00		(04)											OR<25			
										02 NONE 0	STOP								
										PRVTE	NE-SW							011	00
										PSNGR CAR		01 DRVR	NONE	25	F	OR-Y	000	000	00
																OR<25			
										02 NONE 0	STOP								
										PRVTE	NE-SW							011	00
										PSNGR CAR		02 PSNG	INJB	23	F		000	000	00
02640	Y N N N N N 07/14/2019	14	PORTLAND RD NE	STRGHT		N	N	CLR	O-STRGHT	01 NONE 0	STRGHT								30,27
CITY	SU		KALE ST NE	NE	(NONE)	UNKNOWN	N	DRY	SS-M	PRVTE	NE-SW							000	00
Y	9P			00			N	DLIT	INJ	PSNGR CAR		01 DRVR	INJB	19	M	OR-Y	050,016,080	038	30,27
N	44 59 52.06	-122 58 47.27	008100100S00		(04)											OR<25			
										02 NONE 0	STRGHT								
										PRVTE	SW-NE							000	00
										PSNGR CAR		01 DRVR	INJC	51	F	SUSP	000	000	00
																OR<25			
04708	N N N N N N 12/09/2018	14	PORTLAND RD NE	STRGHT		N	N	RAIN	S-STRGHT	01 NONE 0	STRGHT								07
CITY	SU		KALE ST NE	SW	(NONE)	UNKNOWN	N	WET	REAR	PRVTE	SW-NE							000	00
N	5P			00			N	DLIT	INJ	PSNGR CAR		01 DRVR	INJC	18	M	OR-Y	043,042	000	07
N	44 59 45.08	-122 58 55.36	008100100S00		(04)											OR<25			
										02 NONE 0	STRGHT								
										PRVTE	SW-NE							000	00
										PSNGR CAR		01 DRVR	NONE	26	M	OR-Y	000	000	00
																OR<25			
										02 NONE 0	STRGHT								
										PRVTE	SW-NE							000	00
										PSNGR CAR		02 PSNG	INJC	30	F		000	000	00

081: PACIFIC HIGHWAY EAST

Highway 081 ALL ROAD TYPES, MP 45.18 to 45.34 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 34 of 34 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P / E / E / D	D R / A / L / C	M J / U / G / S	S / I / N / V	W / C / H / L	O / R / K	DATE / DAY / TIME / LAT	COUNTY / CITY / URBAN AREA / LONG	RD# / COMPNT / MLG / MILEPNT	FC / TYP	CONN# / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G	S E X	LICNS	PED LOC	ERROR	ACT	EVENT	CAUSE
01880	N	N	N	N			05/30/2018	MARION	1	14		STRGHT		N	N	CLR	S-STRGHT	01	NONE 0	STRGHT											29
NONE							WE		MN	0		UN	(NONE)	UNKNOWN	N	DRY	REAR		PRVTE	S -N									000		00
N							4P	SALEM-KZ UA	45.22			05			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	58	M	OR-Y		042	000		29
N							44 59 41.38	-122 58 59.31			008100100S00		(04)														OR<25				
																		01	NONE 0	STRGHT											
																			PRVTE	S -N									000		00
																			PSNGR CAR		02	PSNG	INJC	58	F			000	000		00
																		02	NONE 0	STRGHT											
																			PRVTE	S -N									006		00
																			PSNGR CAR		01	DRVR	NONE	00	M	UNK		000	000		00
03219	N	N	N	N	N	N	08/28/2018	MARION	1	14		STRGHT		N	N	CLR	S-1TURN	01	NONE 0	U-TURN											001	08,02
STATE							TU		MN	0		UN	(NONE)	UNKNOWN	N	DRY	TURN		PRVTE	S -S									000		00
N							5P	SALEM-KZ UA	45.22			05			N	DAY	INJ		MTRCYCLE		01	DRVR	INJB	66	M	OR-Y		008,028	000	001	08,02
N							44 59 41.37	-122 58 59.32			008100100S00		(04)														OR<25				
																		02	NONE 0	STRGHT											
																			PRVTE	S -N									000		00
																			PSNGR CAR		01	DRVR	NONE	66	M	OTH-Y		000	000		00
																										N-RES					
04050	N	N	N	N	N	N	10/16/2019	MARION	1	14		STRGHT		N	N	RAIN	S-1STOP	01	NONE 0	STRGHT												10
STATE							WE		MN	0		UN	(NONE)	UNKNOWN	N	WET	REAR		PRVTE	N -S									022		00
N							3P	SALEM-KZ UA	45.23			04			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	26	F	OR-Y		026	022		00
N							44 59 40.88	-122 58 59.8			008100100S00		(04)														OR<25				
																		02	NONE 0	STOP											
																			PRVTE	N -S									011		00
																			PSNGR CAR		01	DRVR	INJC	19	F	OR-Y		009	000		10
																										OR<25				
																		03	NONE 0	STRGHT											
																			PRVTE	N -S									000		00
																			PSNGR CAR		01	DRVR	NONE	35	M	NONE		000	022		00

1 - 34 of 34 Crash records shown.

																		OR<25				
03256	N N Y N N N	08/11/2017	MARION	1 14		STRGHT		N	N	CLR	S-STRGHT	01 NONE 0	STRGHT									27,29
STATE		FR		MN 0		UN	(NONE)	L-TURN REF	N	DRY	REAR	PRVTE	N -S								000	00
Y		7P	SALEM-KZ UA	45.23		05			N	DAY	INJ	PSNGR CAR		01 DRVR	INJB	39	F	OR-Y		016,080,042	038	27,29
N		44 59 40.89	-122 58 59.8		008100100S00		(05)											OR<25				
												02 NONE 0	STRGHT									
												PRVTE	N -S								000	00
												PSNGR CAR		01 DRVR	INJC	46	M	OR-Y		000	000	00
																		OR<25				
04429	N Y N N N N	10/20/2017	MARION	1 14		INTER	3-LEG	N	N	CLD	O-1STOP	01 NONE 0	STRGHT									27
CITY		FR		MN 0		N		STOP SIGN	N	WET	HEAD	PRVTE	S -N								000	00
N		6P	SALEM-KZ UA	45.24		06	0		N	DLIT	INJ	PSNGR CAR		01 DRVR	INJC	84	F	OR-Y		016,080	038	27
N		44 59 40.42	-122 59 .27		008100100S00													OR<25				
												02 NONE 0	STOP									
												PRVTE	N -S								012	00
												PSNGR CAR		01 DRVR	INJC	22	M	OR-Y		000	000	00
																		OR<25				
												02 NONE 0	STOP									
												PRVTE	N -S								012	00
												PSNGR CAR		02 PSNG	INJC	23	F			000	000	00
04954	N N N N N N	12/11/2019	MARION	1 14		INTER	3-LEG	N	N	RAIN	PED	01 NONE 0	TURN-L									02
COUNTY		WE		MN 0		E		STOP SIGN	N	WET	PED	PRVTE	N -E								000	00
N		5P	SALEM-KZ UA	45.24		05	0		N	DARK	INJ	PSNGR CAR		01 DRVR	NONE	41	M	OTH-Y		029	000	02
N		44 59 39.97	-122 59 .71		008100100S00													N-RES				
													-									
													STRGHT	01 PED	INJC	37	F		I XWLK	000	000	00
													UN UN									
00516	N Y N N N N	02/05/2016	MARION	1 14		INTER	3-LEG	N	N	RAIN	ANGL-OTH	01 NONE 0	TURN-L									33,02
STATE		FR		MN 0		CN		STOP SIGN	N	WET	TURN	PRVTE	E -S								000	00
N		5P	SALEM-KZ UA	45.24		02	1		N	DLIT	INJ	PSNGR CAR		01 DRVR	NONE	41	M	SUSP		051,028	000	33,02
N		44 59 40.42	-122 59 .27		008100100S00													OR<25				
												02 NONE 0	STRGHT									
												PRVTE	S -N								000	00

1 - 34 of 34 Crash records shown.

														PSNGR CAR		01 DRVR	NONE	20	M	OR-Y		000		000	00
																				OR<25					
													02 NONE	0	STRGHT										
														PRVTE		S -N								000	00
														PSNGR CAR		02 PSNG	INJB	19	F			000		000	00
01137	N N N N N N	03/18/2016	MARION	1	14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE	0	TURN-L										02
COUNTY		FR		MN	0		CN		STOP SIGN	N	DRY	TURN		PRVTE		E -S								000	00
N		12P	SALEM-KZ UA	45.24			02	1		N	DAY	INJ		PSNGR CAR		01 DRVR	INJB	76	M	OR-Y		028		000	02
N		44 59 40.42	-122 59 .27			008100100S00														OR<25					
													01 NONE	0	TURN-L										
														PRVTE		E -S								000	00
														PSNGR CAR		02 PSNG	INJB	68	F			000		000	00
													02 NONE	0	STRGHT										
														PRVTE		S -N								000	00
														PSNGR CAR		01 DRVR	INJB	47	F	OR-Y		000		000	00
																				OR<25					
													02 NONE	0	STRGHT										
														PRVTE		S -N								000	00
														PSNGR CAR		02 PSNG	INJB	20	F			000		000	00
01258	N Y N N N N	03/26/2016	MARION	1	14		INTER	3-LEG	N	N	CLD	ANGL-OTH	01 NONE	0	TURN-L										02
STATE		SA		MN	0		CN		STOP SIGN	N	WET	TURN		PRVTE		E -S								000	00
N		6P	SALEM-KZ UA	45.24			02	1		N	DUSK	INJ		PSNGR CAR		01 DRVR	NONE	54	F	OR-Y		028		000	02
N		44 59 40.42	-122 59 .27			008100100S00														OR<25					
													02 NONE	0	STRGHT										
														PRVTE		S -N								000	00
														PSNGR CAR		01 DRVR	INJC	39	M	OR-Y		000		000	00
																				OR<25					
													02 NONE	0	STRGHT										
														PRVTE		S -N								000	00
														PSNGR CAR		02 PSNG	INJC	40	F			000		000	00
02663	N N N N N N	06/25/2016	MARION	1	14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE	0	TURN-L									001	03
STATE		SA		MN	0		CN		FLASHBCN-R	N	DRY	TURN		PRVTE		E -S								000	00

1 - 34 of 34 Crash records shown.

N		12P	SALEM-KZ UA	45.24			02	1		N	DAY	INJ	PSNGR CAR		01	DRVR	NONE	72	F	OR-Y		021	000		03
N		44 59 40.42	-122 59 .27		008100100S00															OR<25					
													02 NONE	0	STRGHT										
													PRVTE		S -N								000		00
													MTRCYCLE			01	DRVR	INJA	25	M	N-VAL	000	000	001	00
																					OR<25				
03814	N N N N N N	09/03/2016	MARION	1	14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE	0	STRGHT									013	02
STATE		SA		MN	0		CN		STOP SIGN	N	DRY	TURN	PRVTE		S -N								022	013	00
N		11A	SALEM-KZ UA	45.24			02	1		N	DAY	INJ	PSNGR CAR		01	DRVR	NONE	28	M	SUSP		000	022		00
N		44 59 40.42	-122 59 .27		008100100S00															OR<25					
													01 NONE	0	STRGHT										
													PRVTE		S -N								022	013	00
													PSNGR CAR			02	PSNG	INJC	32	F		000	000		00
													01 NONE	0	STRGHT										
													PRVTE		S -N								022	013	00
													PSNGR CAR			03	PSNG	INJB	37	M		000	000		00
													02 NONE	0	TURN-L										
													PRVTE		E -S								015		00
													PSNGR CAR			01	DRVR	INJB	92	M	OR-Y	028	000		02
																					OR<25				
													03 NONE	0	STOP										
													PRVTE		N -S								012		00
													PSNGR CAR			01	DRVR	NONE	20	M	OR-Y	000	022		00
																					OR<25				
00710	N N N N N N	02/23/2017	MARION	1	14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01 NONE	0	TURN-L										02
STATE		TH		MN	0		CN		STOP SIGN	N	DRY	TURN	PRVTE		E -S								015		00
N		3P	SALEM-KZ UA	45.24			02	1		N	DAY	INJ	PSNGR CAR		01	DRVR	INJB	66	M	OR-Y	028	000		02
N		44 59 40.42	-122 59 .27		008100100S00															OR<25					
													01 NONE	0	TURN-L										
													PRVTE		E -S								015		00
													PSNGR CAR			02	PSNG	INJB	64	M		000	000		00
													02 NONE	0	STRGHT										
													PRVTE		S -N								000		00
													PSNGR CAR			01	DRVR	NONE	37	F	OR-Y	000	000		00

1 - 34 of 34 Crash records shown.

																								OR<25		
02053	N N N N N N	05/25/2017	MARION	1	14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE	0	TURN-L										02
COUNTY		TH		MN	0		CN		STOP SIGN	N	DRY	TURN		PRVTE		E -S									000	00
N		12P	SALEM-KZ UA	45.24			02	1		N	DAY	INJ		PSNGR CAR			01	DRVR	NONE	00	Unk	UNK		028	000	02
N		44 59 40.42	-122 59 .27			008100100S00																UNK				
													02	NONE	0	STRGHT										
														PRVTE		S -N									000	00
														PSNGR CAR			01	DRVR	INJC	79	F	OR-Y	000	000	00
																						OR<25				
02649	N N N N	07/20/2018	MARION	1	14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE	0	STRGHT										02
NONE		FR		MN	0		CN		STOP SIGN	N	DRY	TURN		PRVTE		S -N									000	00
N		4P	SALEM-KZ UA	45.24			02	0		N	DAY	INJ		PSNGR CAR			01	DRVR	INJC	42	F	OR-Y	000	000	00
N		44 59 39.96	-122 59 .7			008100100S00																OR<25				
													02	NONE	1	TURN-L										
														PRVTE		E -S									000	00
														PSNGR CAR			01	DRVR	NONE	84	M	OR-Y	028	000	02
																						OR<25				
00276	N N N N N N	01/24/2019	MARION	1	14		INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE	0	STRGHT										02
STATE		TH		MN	0		CN		STOP SIGN	N	DRY	TURN		PRVTE		S -N									000	00
N		8P	SALEM-KZ UA	45.24			02	1		N	DLIT	INJ		PSNGR CAR			01	DRVR	INJB	50	M	OR-Y	000	000	00
N		44 59 39.95	-122 59 .68			008100100S00																OR<25				
													02	NONE	0	TURN-L										
														PRVTE		E -S									000	00
														PSNGR CAR			01	DRVR	INJC	23	F	OR-Y	028	000	02
																						OR<25				
													02	NONE	0	TURN-L										
														PRVTE		E -S									000	00
														PSNGR CAR			02	PSNG	INJC	03	M		000	000	00
													02	NONE	0	TURN-L										
														PRVTE		E -S									000	00
														PSNGR CAR			03	PSNG	INJC	02	F		000	000	00
													02	NONE	0	TURN-L										
														PRVTE		E -S									000	00
														PSNGR CAR			04	PSNG	INJC	04	M		000	000	00

1 - 34 of 34 Crash records shown.

04738 N N N N N N 11/27/2019 MARION 1 14 INTER 3-LEG N N CLR ANGL-OTH 01 NONE 0 STRGHT 02
STATE WE MN 0 CN STOP SIGN N DRY TURN PRVTE S -N 000 00
N 7P SALEM-KZ UA 45.24 02 0 N DLIT INJ PSNGR CAR 01 DRVR INJB 78 M OR-Y 000 000 00
N 44 59 39.99 -122 59 .67 008100100S00 OR<25
01 NONE 0 STRGHT
PRVTE S -N 000 00
PSNGR CAR 02 PSNG INJB 78 F 000 000 00
02 NONE 0 TURN-L
PRVTE E -S 000 00
PSNGR CAR 01 DRVR NONE 19 F OR-Y 028 000 02
OR>25

04045 N N N N 10/07/2019 MARION 1 14 INTER 3-LEG N N CLR ANGL-OTH 01 NONE 9 TURN-R 02
NO RPT MO MN 0 CN STOP SIGN N DRY TURN N/A E -N 000 00
N 4P SALEM-KZ UA 45.24 02 1 N DAY PDO PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
N 44 59 39.94 -122 59 .71 008100100S00 UNK
02 NONE 9 STRGHT
N/A S -N 000 00
PSNGR CAR 01 DRVR NONE 00 Unk UNK 000 000 00
UNK

03199 N Y N N N N 08/07/2017 MARION 1 14 INTER 3-LEG N N CLR O-1 L-TURN 01 NONE 0 TURN-L 02
COUNTY MO MN 0 CN STOP SIGN N DRY TURN PRVTE N -E 000 00
N 9P SALEM-KZ UA 45.24 03 1 N DLIT INJ PSNGR CAR 01 DRVR NONE 40 M NONE 028,004 000 02
N 44 59 40.42 -122 59 .27 008100100S00 OR<25
02 NONE 0 STRGHT
PRVTE S -N 000 00
PSNGR CAR 01 DRVR INJB 17 M OR-Y 000 000 00
OR<25
02 NONE 0 STRGHT
PRVTE S -N 000 00
PSNGR CAR 02 PSNG INJB 17 M 000 000 00
02 NONE 0 STRGHT
PRVTE S -N 000 00

1 - 34 of 34 Crash records shown.

													PSNGR CAR		03 PSNG	INJB	17	F			000	000	00
												02	NONE	0	STRGHT										
													PRVTE		S -N							000	00
													PSNGR CAR		04 PSNG	INJB	17	M			000	000	00
00115	N N N N	01/08/2016	MARION	1	14		INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE	0	TURN-L									02
STATE		FR		MN	0		CN		STOP SIGN	N	DRY	TURN		PRVTE		E -S							000	00
N		3P	SALEM-KZ UA	45.24			04	1		N	DAY	INJ		PSNGR CAR		01 DRVR	INJB	81	F	OR-Y		028	000	02
N		44 59 40.42	-122 59 .27			008100100S00														OR<25				
												02	NONE	0	STRGHT										
													PRVTE		S -N							000	00
													PSNGR CAR		01 DRVR	NONE	27	M	OR-Y		000	000	00
																				OR<25				
00271	N N N N N N	01/19/2016	MARION	1	14		INTER	3-LEG	N	N	RAIN	O-1 L-TURN	01	NONE	0	TURN-L									02
STATE		TU		MN	0		CN		TRF SIGNAL	N	WET	TURN		PRVTE		N -E							000	00
N		9P	SALEM-KZ UA	45.24			04	1		N	DLIT	INJ		PSNGR CAR		01 DRVR	INJC	32	F	OR-Y		028,004	000	02
N		44 59 40.42	-122 59 .27			008100100S00														OR<25				
												02	NONE	0	STRGHT										
													PRVTE		S -N							000	00
													PSNGR CAR		01 DRVR	INJB	40	F	OR-Y		000	000	00
																				OR<25				
01993	N N N N	05/12/2016	MARION	1	14		INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	9	STRGHT									02
NONE		TH		MN	0		CN		STOP SIGN	N	DRY	TURN		N/A		S -N							000	00
N		9P	SALEM-KZ UA	45.24			04	1		N	DLIT	PDO		PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		44 59 40.42	-122 59 .27			008100100S00														UNK				
												02	NONE	9	TURN-L										
													N/A		N -E							000	00
													PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
																				UNK				
03334	N N N N	07/28/2016	MARION	1	14		INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	9	TURN-L									02
NONE		TH		MN	0		CN		STOP SIGN	N	DRY	TURN		N/A		N -E							000	00
N		4P	SALEM-KZ UA	45.24			04	1		N	DAY	PDO		PSNGR CAR		01 DRVR	NONE	00	Unk	UNK		000	000	00
N		44 59 40.42	-122 59 .27			008100100S00														UNK				
												02	NONE	9	STRGHT										

1 - 34 of 34 Crash records shown.

													N/A		S -N							000	00
													PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
																				UNK			
03862	N N N N N N	09/16/2017	MARION	1 14		INTER	3-LEG	N	N	CLD	O-1 L-TURN	01	NONE	0	STRGHT								02
STATE		SA		MN 0		CN		STOP SIGN	N	DRY	TURN		PRVTE		S -N							000	00
N		5P	SALEM-KZ UA	45.24		04	1		N	DAY	INJ		PSNGR CAR			01 DRVR	NONE	28	F	OR-Y	000	000	00
N		44 59 40.42	-122 59 .27		008100100S00															OR<25			
												02	NONE	0	TURN-L								
													PRVTE		N -E							000	00
													PSNGR CAR			01 DRVR	NONE	27	F	OR-Y	028,004	000	02
																				OR<25			
												02	NONE	0	TURN-L								
													PRVTE		N -E							000	00
													PSNGR CAR			02 PSNG	NO<5	03	M		000	000	00
												02	NONE	0	TURN-L								
													PRVTE		N -E							000	00
													PSNGR CAR			03 PSNG	INJC	09	M		000	000	00
04584	N N N N	10/24/2017	MARION	1 14		INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	0	STRGHT								02
NONE		TU		MN 0		CN		STOP SIGN	N	DRY	TURN		PRVTE		S -N							000	00
N		9A	SALEM-KZ UA	45.24		04	1		N	DAY	INJ		PSNGR CAR			01 DRVR	INJA	35	M	OTH-Y	000	000	00
N		44 59 40.42	-122 59 .27		008100100S00															OR<25			
												02	NONE	0	TURN-L								
													PRVTE		N -E							000	00
													PSNGR CAR			01 DRVR	NONE	87	M	OR-Y	028,004	000	02
																				OR<25			
05127	N N N N N N	11/28/2017	MARION	1 14		INTER	3-LEG	N	N	CLD	O-1 L-TURN	01	NONE	0	STRGHT								02
COUNTY		TU		MN 0		CN		STOP SIGN	N	WET	TURN		PRVTE		S -N							000	00
N		3P	SALEM-KZ UA	45.24		04	0		N	DAY	INJ		PSNGR CAR			01 DRVR	INJC	47	F	OR-Y	000	000	00
N		44 59 40.42	-122 59 .27		008100100S00															OR<25			
												02	NONE	0	TURN-L								
													PRVTE		N -E							000	00
													PSNGR CAR			01 DRVR	NONE	82	F	OR-Y	028,004	000	02
																				OR<25			

081: PACIFIC HIGHWAY EAST **Highway 081 ALL ROAD TYPES, MP 45.18 to 45.34 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage**

1 - 34 of 34 Crash records shown.

00594 N N N N	02/16/2017	MARION	1 14		INTER	3-LEG	N	N	UNK	O-1 L-TURN	01	NONE	9	STRGHT								02
NONE	TH		MN 0		CN		STOP SIGN	N	DRY	TURN		N/A		S -N							000	00
N	3P	SALEM-KZ UA	45.24		04	1		N	DAY	PDO		PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
N	44 59 40.42	-122 59 .27		008100100S00															UNK			
											02	NONE	9	TURN-L								
												N/A		N -E							000	00
												PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
																			UNK			

03018 N N N N N N	10/05/2020	MARION	1 14		INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	0	TURN-L								02
STATE	MO		MN 0		CN		STOP SIGN	N	DRY	TURN		PRVTE		N -E							000	00
N	12P	SALEM-KZ UA	45.24		04	1		N	DAY	INJ		PSNGR CAR			01 DRVR	INJB	26	F	OR-Y	028,004	000	02
N	44 59 39.96	-122 59 .72		008100100S00															OR<25			
											01	NONE	0	TURN-L								
												PRVTE		N -E							000	00
												PSNGR CAR			02 PSNG	INJC	56	F		000	000	00
											02	NONE	0	STRGHT								
												PRVTE		S -N							000	00
												PSNGR CAR			01 DRVR	INJC	18	M	OR-Y	000	000	00
																			OR<25			

03639 N N N N N N	12/02/2020	MARION	1 14		INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	0	TURN-L								02
STATE	WE		MN 0		CN		STOP SIGN	N	DRY	TURN		PRVTE		N -E							000	00
N	8P	SALEM-KZ UA	45.24		04	0		N	DLIT	INJ		PSNGR CAR			01 DRVR	INJC	24	F	NONE	028,004	000	02
N	44 59 39.96	-122 59 .72		008100100S00															OR<25			
											02	NONE	0	STRGHT								
												PRVTE		S -N							000	00
												PSNGR CAR			01 DRVR	INJC	29	M	OTH-Y	000	000	00
																			OR<25			

03863 N N N N N N	12/02/2020	MARION	1 14		INTER	3-LEG	N	N	CLD	O-1 L-TURN	01	NONE	9	TURN-L								02
COUNTY	WE		MN 0		CN		STOP SIGN	N	DRY	TURN		N/A		N -E							000	00
N	7A	SALEM-KZ UA	45.24		04	0		N	DAY	PDO		UNKNOWN			01 DRVR	NONE	00	Unk	UNK	000	000	00
N	44 59 39.97	-122 59 .69		008100100S00															UNK			
											02	NONE	9	STRGHT								
												N/A		S -N							000	00
												PSNGR CAR			01 DRVR	NONE	00	Unk	UNK	000	000	00
																			UNK			

081: PACIFIC HIGHWAY EAST

Highway 081 ALL ROAD TYPES, MP 45.18 to 45.34 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 34 of 34 Crash records shown.

04892	N N N N	10/15/2016	MARION	1 14		INTER	3-LEG	N	N	RAIN	S-1STOP	01 NONE 0	STRGHT							29
NONE		SA		MN 0		E		STOP SIGN	N	WET	REAR	PRVTE	E -W						000	00
N		4P	SALEM-KZ UA	45.25		06	0		N	DAY	INJ	PSNGR CAR		01 DRVR	NONE	45 M	OTH-Y	026	000	29
N		44 59 39.96	-122 59 .7		008100100S00												N-RES			
												02 NONE 0	STOP							
												PRVTE	E -W						011	00
												PSNGR CAR		01 DRVR	INJC	29 F	OR-Y	000	000	00
																	OR<25			
												02 NONE 0	STOP							
												PRVTE	E -W						011	00
												PSNGR CAR		02 PSNG	INJC	62 F		000	000	00
												02 NONE 0	STOP							
												PRVTE	E -W						011	00
												PSNGR CAR		03 PSNG	NO<5	02 M		000	000	00
05381	N N N N N N	12/04/2016	MARION	1 14		INTER	3-LEG	N	N	RAIN	ANGL-OTH	01 NONE 9	STRGHT							02
STATE		SU		MN 0		CN		FLASHBCN-R	N	WET	TURN	N/A	S -N						000	00
N		4P	SALEM-KZ UA	45.25		02	1		N	DAY	PDO	PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		44 59 39.96	-122 59 .7		008100100S00												UNK			
												02 NONE 9	TURN-L							
												N/A	E -S						000	00
												PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																	UNK			
01633	N N N N	05/02/2019	MARION	1 14		STRGHT		N	N	CLR	O-STRGHT	01 NONE 9	STRGHT						028,080	24
NO RPT		TH		MN 0		UN	(NONE)	UNKNOWN	N	DRY	OTH	N/A	N -S						000	00
N		3P	SALEM-KZ UA	45.27		00			N	DAY	PDO	UNKNOWN		01 DRVR	NONE	00 Unk	UNK	000	000	00
N		44 59 39.07	-122 59 1.57		008100100S00		(04)										UNK			
												02 NONE 9	STRGHT							
												N/A	S -N						000	00
												PSNGR CAR		01 DRVR	NONE	00 Unk	UNK	000	000	00
																	UNK			
01853	N N N N	05/12/2017	MARION	1 14		STRGHT		N	N	RAIN	S-STRGHT	01 NONE 9	STRGHT							13
NONE		FR		MN 0		UN	(NONE)	UNKNOWN	N	WET	SS-O	N/A	S -N						000	00
N		2P	SALEM-KZ UA	45.32		06			N	DAY	PDO	SEMI TOW		01 DRVR	NONE	00 Unk	UNK	000	000	00

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is

Highway 081 ALL ROAD TYPES, MP 45.18 to 45.34 01/01/2016 to 12/31/2020, Both Add and Non-Add mileage

1 - 34 of 34 Crash records shown.

N	44 59 36.93	-122 59 3.49	008100100S00	(05)								UNK					
					02 NONE	9	STRGHT										
					N/A		S -N								000	00	
					PSNGR CAR			01 DRVR	NONE	00	Unk	UNK		000	000	00	
												UNK					

Left-Turn Lane Warrant Analysis

Project: Northstar Apartments
Intersection: Lunar Drive at Hazelgreen Road NE
Date: 5/11/2023
Scenario: 2026 Buildout Conditions - AM Peak Hour (WB)

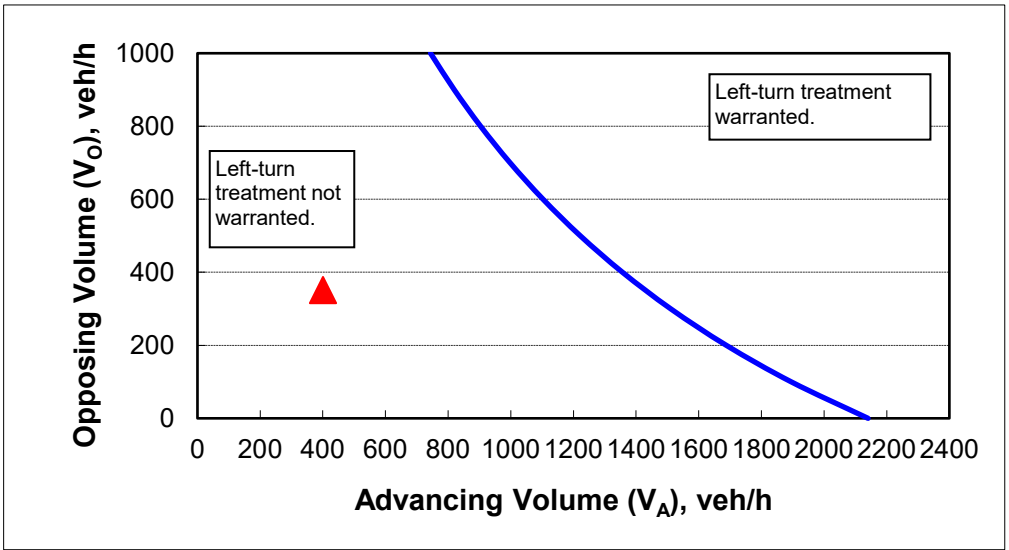
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	50
Percent of left-turns in advancing volume (V_A), %:	0%
Advancing volume (V_A), veh/h:	401
Opposing volume (V_O), veh/h:	351

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1429
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

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

Left-Turn Lane Warrant Analysis

Project: Northstar Apartments
Intersection: Lunar Drive at Hazelgreen Road NE
Date: 5/11/2023
Scenario: 2026 Buildout Conditions - PM Peak Hour (WB)

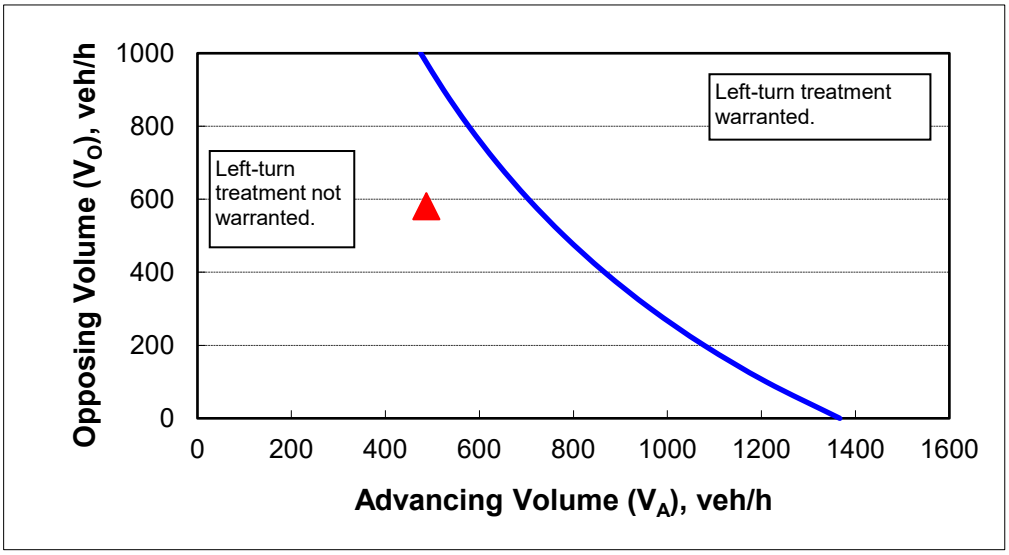
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	50
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	487
Opposing volume (V_O), veh/h:	581

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	718
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

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

Traffic Signal Warrant Analysis

Project: Northstar Apartments
Date: 5/11/2023
Scenario: Year 2026 Buildout Conditions

Major Street:	Hazelgreen Road NE	Minor Street:	Lunar Drive NE (Access)
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	1068	PM Peak Hour Volumes:	46

Warrant Used:

_____ 100 percent of standard warrants used
X 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

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

Note: ADT volumes assume 8th highest hour is 5.65% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	10,680	6,200	
Minor Street*	460	1,850	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	10,680	9,300	
Minor Street*	460	950	**No**
Combination Warrant			
Major Street	10,680	7,440	
Minor Street*	460	1,480	**No**

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

Traffic Signal Warrant Analysis

Project: Northstar Apartments
Date: 5/11/2023
Scenario: Year 2026 Buildout Conditions

Major Street:	Kale Street NE	Minor Street:	Lunar Drive NE (Access)
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	771	PM Peak Hour Volumes:	48

Warrant Used:

x 100 percent of standard warrants used

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

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

Note: ADT volumes assume 8th highest hour is 5.65% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	7,710	8,850	
Minor Street*	480	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	7,710	13,300	
Minor Street*	480	1,350	**No**
Combination Warrant			
Major Street	7,710	10,640	
Minor Street*	480	2,120	**No**

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

Traffic Signal Warrant Analysis

Project: Northstar Apartments
Date: 5/11/2023
Scenario: Year 2026 Buildout Conditions

Major Street:	Portland Road NE (99E)	Minor Street:	Lancaster Drive
Number of Lanes:	2	Number of Lanes:	1
PM Peak Hour Volumes:	1878	PM Peak Hour Volumes:	31

Warrant Used:

_____ 100 percent of standard warrants used
X 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

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

Note: ADT volumes assume 8th highest hour is 5.65% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	18,780	7,400	
Minor Street*	310	1,850	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	18,780	11,100	
Minor Street*	310	950	**No**
Combination Warrant			
Major Street	18,780	8,880	
Minor Street*	310	1,480	**No**

Note: Minor street right-turning traffic volumes reduced by 85% of the right-turn capacity per APM.

Appendix E

Level of Service Descriptions

HCM Capacity Reports

Level of Service Definitions

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

- *Level of service A:* Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.
- *Level of service B:* Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.
- *Level of service C:* Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.
- *Level of service D:* Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.
- *Level of service E:* Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.
- *Level of service F:* Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

Level of Service Criteria
For Signalized Intersections

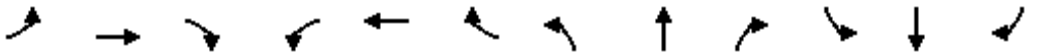
Level of Service (LOS)	Control Delay per Vehicle (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80

Level of Service Criteria
For Unsignalized Intersections

Level of Service (LOS)	Control Delay per Vehicle (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

HCM 6th Signalized Intersection Summary
1: I-5 SB & Chemawa Road

05/23/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	543	844	216	893	0	0	0	0	62	4	149
Future Volume (veh/h)	0	543	844	216	893	0	0	0	0	62	4	149
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1709	1723	1600	1709	0				1586	1409	1641
Adj Flow Rate, veh/h	0	543	526	216	893	0				62	4	36
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	3	2	11	3	0				12	25	8
Cap, veh/h	0	1366	614	577	2740	0				85	5	164
Arrive On Green	0.00	0.42	0.42	0.38	0.84	0.00				0.07	0.07	0.07
Sat Flow, veh/h	0	3333	1460	1524	3333	0				1264	82	2447
Grp Volume(v), veh/h	0	543	526	216	893	0				66	0	36
Grp Sat Flow(s),veh/h/ln	0	1624	1460	1524	1624	0				1346	0	1224
Q Serve(g_s), s	0.0	10.5	29.4	9.2	5.3	0.0				4.3	0.0	1.3
Cycle Q Clear(g_c), s	0.0	10.5	29.4	9.2	5.3	0.0				4.3	0.0	1.3
Prop In Lane	0.00		1.00	1.00		0.00				0.94		1.00
Lane Grp Cap(c), veh/h	0	1366	614	577	2740	0				90	0	164
V/C Ratio(X)	0.00	0.40	0.86	0.37	0.33	0.00				0.73	0.00	0.22
Avail Cap(c_a), veh/h	0	1551	698	577	2740	0				269	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.74	0.74	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.1	23.6	20.2	1.5	0.0				41.2	0.0	39.7
Incr Delay (d2), s/veh	0.0	0.1	9.0	0.2	0.2	0.0				8.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.6	10.5	3.0	0.3	0.0				1.6	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.3	32.6	20.4	1.7	0.0				49.3	0.0	40.2
LnGrp LOS	A	B	C	C	A	A				D	A	D
Approach Vol, veh/h		1069			1109						102	
Approach Delay, s/veh		25.3			5.4						46.1	
Approach LOS		C			A						D	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		80.0		10.0	38.1	41.9						
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0						
Max Green Setting (Gmax), s		64.0		18.0	17.0	43.0						
Max Q Clear Time (g_c+I1), s		7.3		6.3	11.2	31.4						
Green Ext Time (p_c), s		12.7		0.2	0.4	6.5						

Intersection Summary												
HCM 6th Ctrl Delay			16.6									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	372	0	0	464	141	567	1	215	0	0	0
Future Volume (veh/h)	255	372	0	0	464	141	567	1	215	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1695	1668	0	0	1668	1668	1682	1750	1654			
Adj Flow Rate, veh/h	255	372	0	0	464	98	568	0	79			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	4	6	0	0	6	6	5	0	7			
Cap, veh/h	529	2006	0	0	621	130	749	0	328			
Arrive On Green	0.33	0.63	0.00	0.00	0.24	0.24	0.23	0.00	0.23			
Sat Flow, veh/h	1615	3253	0	0	2691	547	3203	0	1402			
Grp Volume(v), veh/h	255	372	0	0	281	281	568	0	79			
Grp Sat Flow(s),veh/h/ln	1615	1585	0	0	1585	1570	1602	0	1402			
Q Serve(g_s), s	7.6	2.9	0.0	0.0	9.8	10.0	9.9	0.0	2.7			
Cycle Q Clear(g_c), s	7.6	2.9	0.0	0.0	9.8	10.0	9.9	0.0	2.7			
Prop In Lane	1.00		0.00	0.00		0.35	1.00		1.00			
Lane Grp Cap(c), veh/h	529	2006	0	0	378	374	749	0	328			
V/C Ratio(X)	0.48	0.19	0.00	0.00	0.74	0.75	0.76	0.00	0.24			
Avail Cap(c_a), veh/h	529	2006	0	0	475	471	961	0	421			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.1	4.6	0.0	0.0	21.2	21.2	21.4	0.0	18.7			
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	12.5	13.0	2.3	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	0.6	0.0	0.0	4.4	4.5	3.4	0.0	0.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	4.6	0.0	0.0	33.6	34.2	23.7	0.0	18.9			
LnGrp LOS	B	A	A	A	C	C	C	A	B			
Approach Vol, veh/h		627			562			647				
Approach Delay, s/veh		9.5			33.9			23.1				
Approach LOS		A			C			C				

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	23.7	18.3				42.0		18.0				
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0				
Max Green Setting (Gmax), s	12.0	18.0				34.0		18.0				
Max Q Clear Time (g_c+I1), s	9.6	12.0				4.9		11.9				
Green Ext Time (p_c), s	0.2	2.3				3.8		2.1				

Intersection Summary		
HCM 6th Ctrl Delay	21.8	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	219	191	64	258	54	248	347	61	30	268	72
Future Volume (veh/h)	79	219	191	64	258	54	248	347	61	30	268	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1586	1654	1695	1709	1654	1436	1695	1668	1654	1518	1682	1532
Adj Flow Rate, veh/h	79	219	57	64	258	45	248	347	0	30	268	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	12	7	4	3	7	23	4	6	7	17	5	16
Cap, veh/h	93	404	351	79	318	55	311	1036	459	40	518	210
Arrive On Green	0.06	0.24	0.24	0.05	0.23	0.23	0.19	0.33	0.00	0.03	0.16	0.00
Sat Flow, veh/h	1511	1654	1437	1628	1372	239	1615	3169	1402	1446	3195	1298
Grp Volume(v), veh/h	79	219	57	64	0	303	248	347	0	30	268	0
Grp Sat Flow(s),veh/h/ln	1511	1654	1437	1628	0	1611	1615	1585	1402	1446	1598	1298
Q Serve(g_s), s	2.4	5.2	1.4	1.8	0.0	8.1	6.7	3.8	0.0	0.9	3.5	0.0
Cycle Q Clear(g_c), s	2.4	5.2	1.4	1.8	0.0	8.1	6.7	3.8	0.0	0.9	3.5	0.0
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	93	404	351	79	0	373	311	1036	459	40	518	210
V/C Ratio(X)	0.85	0.54	0.16	0.81	0.00	0.81	0.80	0.33	0.00	0.75	0.52	0.00
Avail Cap(c_a), veh/h	299	729	633	323	0	710	569	1815	803	287	1337	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.1	15.0	13.5	21.4	0.0	16.5	17.5	11.5	0.0	21.9	17.4	0.0
Incr Delay (d2), s/veh	14.7	0.8	0.2	13.1	0.0	3.2	3.5	0.1	0.0	18.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.6	0.4	0.8	0.0	2.5	2.2	1.0	0.0	0.5	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.8	15.8	13.7	34.5	0.0	19.7	21.0	11.7	0.0	40.3	18.0	0.0
LnGrp LOS	D	B	B	C	A	B	C	B	A	D	B	A
Approach Vol, veh/h		355			367			595			298	
Approach Delay, s/veh		19.9			22.3			15.6			20.2	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	11.4	6.8	14.5	5.3	18.8	6.2	15.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	19.0	9.0	20.0	9.0	26.0	9.0	20.0
Max Q Clear Time (g_c+I1), s	10.7	5.5	4.4	10.1	2.9	5.8	3.8	7.2
Green Ext Time (p_c), s	0.5	1.9	0.1	0.4	0.0	3.1	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	377	219	471	151	102	451
Future Volume (veh/h)	377	219	471	151	102	451
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1695	1709	1682	1682	1695	1682
Adj Flow Rate, veh/h	401	88	501	111	109	480
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	3	5	5	4	5
Cap, veh/h	506	453	803	177	413	1540
Arrive On Green	0.31	0.31	0.31	0.31	0.07	0.48
Sat Flow, veh/h	1615	1448	2687	574	1615	3279
Grp Volume(v), veh/h	401	88	307	305	109	480
Grp Sat Flow(s),veh/h/ln	1615	1448	1598	1578	1615	1598
Q Serve(g_s), s	8.9	1.7	6.4	6.5	1.6	3.6
Cycle Q Clear(g_c), s	8.9	1.7	6.4	6.5	1.6	3.6
Prop In Lane	1.00	1.00		0.36	1.00	
Lane Grp Cap(c), veh/h	506	453	493	487	413	1540
V/C Ratio(X)	0.79	0.19	0.62	0.63	0.26	0.31
Avail Cap(c_a), veh/h	868	779	737	728	670	2537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	9.8	11.5	11.6	7.8	6.2
Incr Delay (d2), s/veh	2.1	0.2	1.0	1.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	1.6	1.6	0.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.4	10.0	12.5	12.6	8.1	6.2
LnGrp LOS	B	A	B	B	A	A
Approach Vol, veh/h	489		612			589
Approach Delay, s/veh	13.6		12.5			6.6
Approach LOS	B		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		22.8		16.2	6.8	16.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0		21.0	9.0	18.0
Max Q Clear Time (g_c+I1), s		5.6		10.9	3.6	8.5
Green Ext Time (p_c), s		4.9		1.4	0.1	3.6

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	249	246	11	28	18
Future Vol, veh/h	14	249	246	11	28	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	72	72	72	72
Heavy Vehicles, %	7	5	3	18	0	0
Mvmt Flow	19	346	342	15	39	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	357	0	-	0	734	350
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	384	-
Critical Hdwy	4.17	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1174	-	-	-	390	698
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	693	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1174	-	-	-	384	698
Mov Cap-2 Maneuver	-	-	-	-	384	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	693	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1174	-	-	-	466
HCM Lane V/C Ratio	0.017	-	-	-	0.137
HCM Control Delay (s)	8.1	-	-	-	13.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

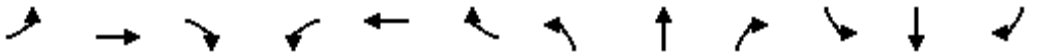
Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	19	1	230	2	394	26	252	572	1
Future Vol, veh/h	0	0	2	19	1	230	2	394	26	252	572	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	180	-	130	270	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	5	0	6	0	6	16	2	7	0
Mvmt Flow	0	0	2	20	1	245	2	419	28	268	609	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1360	1569	305	1264	1569	210	610	0	-	419	0	0
Stage 1	1146	1146	-	423	423	-	-	-	-	-	-	-
Stage 2	214	423	-	841	1146	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.6	6.5	7.02	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.55	4	3.36	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	109	112	697	123	112	783	979	-	0	1137	-	-
Stage 1	215	276	-	571	591	-	-	-	0	-	-	-
Stage 2	774	591	-	319	276	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	61	85	697	100	85	783	979	-	-	1137	-	-
Mov Cap-2 Maneuver	61	85	-	100	85	-	-	-	-	-	-	-
Stage 1	215	211	-	570	590	-	-	-	-	-	-	-
Stage 2	530	590	-	243	211	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	14.9	0	2.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	979	-	697	99	783	1137	-	-
HCM Lane V/C Ratio	0.002	-	0.003	0.215	0.312	0.236	-	-
HCM Control Delay (s)	8.7	-	10.2	51.1	11.7	9.1	-	-
HCM Lane LOS	A	-	B	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.8	1.3	0.9	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	691	947	264	1719	0	0	0	0	177	6	575
Future Volume (veh/h)	0	691	947	264	1719	0	0	0	0	177	6	575
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1723	1723	1723	1736	0				1695	1750	1736
Adj Flow Rate, veh/h	0	691	655	264	1719	0				177	6	515
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	1	0				4	0	1
Cap, veh/h	0	1594	711	336	2392	0				336	11	540
Arrive On Green	0.00	0.49	0.49	0.20	0.73	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	3359	1460	1641	3386	0				1615	55	2590
Grp Volume(v), veh/h	0	691	655	264	1719	0				183	0	515
Grp Sat Flow(s),veh/h/ln	0	1637	1460	1641	1650	0				1669	0	1295
Q Serve(g_s), s	0.0	16.5	50.1	18.3	35.9	0.0				11.7	0.0	23.6
Cycle Q Clear(g_c), s	0.0	16.5	50.1	18.3	35.9	0.0				11.7	0.0	23.6
Prop In Lane	0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h	0	1594	711	336	2392	0				348	0	540
V/C Ratio(X)	0.00	0.43	0.92	0.79	0.72	0.00				0.53	0.00	0.95
Avail Cap(c_a), veh/h	0	1664	742	336	2392	0				348	0	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.38	0.38	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.0	28.6	45.2	9.5	0.0				42.2	0.0	46.9
Incr Delay (d2), s/veh	0.0	0.1	16.3	4.6	0.7	0.0				1.2	0.0	27.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	19.3	7.6	10.3	0.0				4.8	0.0	17.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	20.1	44.9	49.8	10.2	0.0				43.4	0.0	74.5
LnGrp LOS	A	C	D	D	B	A				D	A	E
Approach Vol, veh/h		1346			1983						698	
Approach Delay, s/veh		32.2			15.5						66.3	
Approach LOS		C			B						E	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		91.0		29.0	28.5	62.5						
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0						
Max Green Setting (Gmax), s		87.0		25.0	22.0	61.0						
Max Q Clear Time (g_c+I1), s		37.9		25.6	20.3	52.1						
Green Ext Time (p_c), s		32.2		0.0	0.2	6.4						

Intersection Summary												
HCM 6th Ctrl Delay			29.9									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	661	0	0	836	65	1144	1	235	0	0	0
Future Volume (veh/h)	188	661	0	0	836	65	1144	1	235	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1723	0	0	1736	1668	1736	1750	1695			
Adj Flow Rate, veh/h	188	661	0	0	836	59	1145	0	130			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	3	2	0	0	1	6	1	0	4			
Cap, veh/h	282	1710	0	0	953	67	1286	0	558			
Arrive On Green	0.17	0.52	0.00	0.00	0.30	0.30	0.39	0.00	0.39			
Sat Flow, veh/h	1628	3359	0	0	3212	221	3307	0	1437			
Grp Volume(v), veh/h	188	661	0	0	441	454	1145	0	130			
Grp Sat Flow(s),veh/h/ln	1628	1637	0	0	1650	1697	1654	0	1437			
Q Serve(g_s), s	9.7	10.9	0.0	0.0	22.8	22.8	29.1	0.0	5.5			
Cycle Q Clear(g_c), s	9.7	10.9	0.0	0.0	22.8	22.8	29.1	0.0	5.5			
Prop In Lane	1.00		0.00	0.00		0.13	1.00		1.00			
Lane Grp Cap(c), veh/h	282	1710	0	0	503	517	1286	0	558			
V/C Ratio(X)	0.67	0.39	0.00	0.00	0.88	0.88	0.89	0.00	0.23			
Avail Cap(c_a), veh/h	282	1710	0	0	532	547	1360	0	591			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.8	12.9	0.0	0.0	29.7	29.7	25.7	0.0	18.5			
Incr Delay (d2), s/veh	5.0	0.1	0.0	0.0	19.0	18.6	7.3	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.0	3.5	0.0	0.0	11.0	11.2	11.6	0.0	1.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	13.0	0.0	0.0	48.7	48.3	33.0	0.0	18.6			
LnGrp LOS	D	B	A	A	D	D	C	A	B			
Approach Vol, veh/h		849			895			1275				
Approach Delay, s/veh		18.9			48.5			31.6				
Approach LOS		B			D			C				

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	19.6	31.4				51.0		39.0				
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0				
Max Green Setting (Gmax), s	12.6	29.0				45.0		37.0				
Max Q Clear Time (g_c+I1), s	11.7	24.8				12.9		31.1				
Green Ext Time (p_c), s	0.0	2.6				7.6		3.8				

Intersection Summary		
HCM 6th Ctrl Delay	33.0	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	334	440	81	328	44	326	352	85	60	498	117
Future Volume (veh/h)	95	334	440	81	328	44	326	352	85	60	498	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1695	1736	1750	1723	1723	1736	1709	1723	1586	1736	1736
Adj Flow Rate, veh/h	95	334	132	81	328	39	326	352	20	60	498	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	4	1	0	2	2	1	3	2	12	1	1
Cap, veh/h	120	435	378	102	372	44	379	1282	577	71	701	313
Arrive On Green	0.07	0.26	0.26	0.06	0.25	0.25	0.23	0.39	0.39	0.05	0.21	0.21
Sat Flow, veh/h	1667	1695	1471	1667	1511	180	1654	3247	1460	1511	3299	1471
Grp Volume(v), veh/h	95	334	132	81	0	367	326	352	20	60	498	1
Grp Sat Flow(s),veh/h/ln	1667	1695	1471	1667	0	1690	1654	1624	1460	1511	1650	1471
Q Serve(g_s), s	3.7	12.2	4.9	3.2	0.0	13.9	12.6	4.9	0.6	2.6	9.3	0.0
Cycle Q Clear(g_c), s	3.7	12.2	4.9	3.2	0.0	13.9	12.6	4.9	0.6	2.6	9.3	0.0
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	435	378	102	0	416	379	1282	577	71	701	313
V/C Ratio(X)	0.79	0.77	0.35	0.79	0.00	0.88	0.86	0.27	0.03	0.84	0.71	0.00
Avail Cap(c_a), veh/h	225	585	508	225	0	583	546	1559	701	227	990	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	22.9	20.2	30.9	0.0	24.2	24.6	13.7	12.4	31.5	24.3	20.7
Incr Delay (d2), s/veh	8.4	3.7	0.4	9.9	0.0	10.3	8.3	0.1	0.0	17.6	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.7	1.5	1.4	0.0	6.0	5.2	1.5	0.2	1.2	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	26.6	20.6	40.7	0.0	34.5	32.9	13.8	12.4	49.1	25.4	20.7
LnGrp LOS	D	C	C	D	A	C	C	B	B	D	C	C
Approach Vol, veh/h		561			448			698			559	
Approach Delay, s/veh		27.3			35.6			22.7			27.9	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	18.2	8.8	20.4	7.1	30.3	8.1	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	20.0	9.0	23.0	10.0	32.0	9.0	23.0
Max Q Clear Time (g_c+I1), s	14.6	11.3	5.7	15.9	4.6	6.9	5.2	14.2
Green Ext Time (p_c), s	0.7	2.8	0.1	0.5	0.0	3.6	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	231	176	593	414	265	799
Future Volume (veh/h)	231	176	593	414	265	799
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1736	1709	1736	1736	1723	1736
Adj Flow Rate, veh/h	243	62	624	236	279	841
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	3	1	1	2	1
Cap, veh/h	327	287	890	336	498	2025
Arrive On Green	0.20	0.20	0.38	0.38	0.14	0.61
Sat Flow, veh/h	1654	1448	2429	885	1641	3386
Grp Volume(v), veh/h	243	62	439	421	279	841
Grp Sat Flow(s),veh/h/ln	1654	1448	1650	1577	1641	1650
Q Serve(g_s), s	5.9	1.5	9.6	9.6	3.8	5.6
Cycle Q Clear(g_c), s	5.9	1.5	9.6	9.6	3.8	5.6
Prop In Lane	1.00	1.00		0.56	1.00	
Lane Grp Cap(c), veh/h	327	287	627	599	498	2025
V/C Ratio(X)	0.74	0.22	0.70	0.70	0.56	0.42
Avail Cap(c_a), veh/h	700	613	776	742	655	2639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	14.3	11.1	11.1	7.5	4.3
Incr Delay (d2), s/veh	2.5	0.3	1.8	1.9	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	2.6	2.5	0.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.5	14.6	12.9	13.0	8.2	4.4
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h	305		860			1120
Approach Delay, s/veh	17.7		13.0			5.3
Approach LOS	B		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		30.1		12.4	9.9	20.2
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0		18.0	10.0	20.0
Max Q Clear Time (g_c+I1), s		7.6		7.9	5.8	11.6
Green Ext Time (p_c), s		9.4		0.8	0.4	4.6

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	48	311	305	22	11	19
Future Vol, veh/h	48	311	305	22	11	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	1	2	9	9	0
Mvmt Flow	51	327	321	23	12	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	344	0	-	0	762	333
Stage 1	-	-	-	-	333	-
Stage 2	-	-	-	-	429	-
Critical Hdwy	4.1	-	-	-	6.49	6.2
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.2	-	-	-	3.581	3.3
Pot Cap-1 Maneuver	1226	-	-	-	363	713
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	642	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1226	-	-	-	348	713
Mov Cap-2 Maneuver	-	-	-	-	348	-
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	642	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1226	-	-	-	515
HCM Lane V/C Ratio	0.041	-	-	-	0.061
HCM Control Delay (s)	8.1	-	-	-	12.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	15.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	29	0	347	5	677	61	481	556	3
Future Vol, veh/h	0	0	1	29	0	347	5	677	61	481	556	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	180	-	130	270	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	1	0	2	0	0	2	0
Mvmt Flow	0	0	1	30	0	361	5	705	64	501	579	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1946	2298	291	2007	2299	353	582	0	-	705	0	0
Stage 1	1583	1583	-	715	715	-	-	-	-	-	-	-
Stage 2	363	715	-	1292	1584	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.92	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.31	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	40	39	712	36	39	646	1002	-	0	902	-	-
Stage 1	116	170	-	392	438	-	-	-	0	-	-	-
Stage 2	634	438	-	175	170	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	10	17	712	~ 20	17	646	1002	-	-	902	-	-
Mov Cap-2 Maneuver	10	17	-	~ 20	17	-	-	-	-	-	-	-
Stage 1	115	76	-	390	436	-	-	-	-	-	-	-
Stage 2	278	436	-	78	76	-	-	-	-	-	-	-

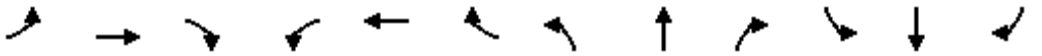
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	67.6	0.1	6.4
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1002	-	712	20	646	902	-	-
HCM Lane V/C Ratio	0.005	-	0.001	1.51	0.56	0.555	-	-
HCM Control Delay (s)	8.6	-	10.1	$ 668	17.4	13.9	-	-
HCM Lane LOS	A	-	B	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0	4.1	3.5	3.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th Signalized Intersection Summary
1: I-5 SB & Chemawa Road

05/23/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	576	896	229	948	0	0	0	0	66	4	158
Future Volume (veh/h)	0	576	896	229	948	0	0	0	0	66	4	158
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1709	1723	1600	1709	0				1586	1409	1641
Adj Flow Rate, veh/h	0	576	576	229	948	0				66	4	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	3	2	11	3	0				12	25	8
Cap, veh/h	0	1428	642	542	2728	0				90	5	174
Arrive On Green	0.00	0.44	0.44	0.36	0.84	0.00				0.07	0.07	0.07
Sat Flow, veh/h	0	3333	1460	1524	3333	0				1268	77	2447
Grp Volume(v), veh/h	0	576	576	229	948	0				70	0	39
Grp Sat Flow(s),veh/h/ln	0	1624	1460	1524	1624	0				1345	0	1224
Q Serve(g_s), s	0.0	10.9	32.9	10.3	5.9	0.0				4.6	0.0	1.4
Cycle Q Clear(g_c), s	0.0	10.9	32.9	10.3	5.9	0.0				4.6	0.0	1.4
Prop In Lane	0.00		1.00	1.00		0.00				0.94		1.00
Lane Grp Cap(c), veh/h	0	1428	642	542	2728	0				95	0	174
V/C Ratio(X)	0.00	0.40	0.90	0.42	0.35	0.00				0.73	0.00	0.22
Avail Cap(c_a), veh/h	0	1515	681	542	2728	0				269	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.69	0.69	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.2	23.3	22.0	1.6	0.0				41.0	0.0	39.5
Incr Delay (d2), s/veh	0.0	0.1	13.9	0.3	0.2	0.0				7.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	12.4	3.4	0.4	0.0				1.7	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.3	37.2	22.2	1.9	0.0				48.8	0.0	39.9
LnGrp LOS	A	B	D	C	A	A				D	A	D
Approach Vol, veh/h		1152			1177						109	
Approach Delay, s/veh		27.3			5.8						45.6	
Approach LOS		C			A						D	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		79.6		10.4	36.0	43.6						
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0						
Max Green Setting (Gmax), s		64.0		18.0	18.0	42.0						
Max Q Clear Time (g_c+I1), s		7.9		6.6	12.3	34.9						
Green Ext Time (p_c), s		13.9		0.2	0.4	4.7						

Intersection Summary												
HCM 6th Ctrl Delay			17.7									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	395	0	0	492	150	602	1	228	0	0	0
Future Volume (veh/h)	271	395	0	0	492	150	602	1	228	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1695	1668	0	0	1668	1668	1682	1750	1654			
Adj Flow Rate, veh/h	271	395	0	0	492	107	603	0	84			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	4	6	0	0	6	6	5	0	7			
Cap, veh/h	498	1975	0	0	644	139	780	0	341			
Arrive On Green	0.31	0.62	0.00	0.00	0.25	0.25	0.24	0.00	0.24			
Sat Flow, veh/h	1615	3253	0	0	2675	561	3203	0	1402			
Grp Volume(v), veh/h	271	395	0	0	300	299	603	0	84			
Grp Sat Flow(s),veh/h/ln	1615	1585	0	0	1585	1567	1602	0	1402			
Q Serve(g_s), s	8.4	3.2	0.0	0.0	10.5	10.6	10.5	0.0	2.9			
Cycle Q Clear(g_c), s	8.4	3.2	0.0	0.0	10.5	10.6	10.5	0.0	2.9			
Prop In Lane	1.00		0.00	0.00		0.36	1.00		1.00			
Lane Grp Cap(c), veh/h	498	1975	0	0	394	389	780	0	341			
V/C Ratio(X)	0.54	0.20	0.00	0.00	0.76	0.77	0.77	0.00	0.25			
Avail Cap(c_a), veh/h	498	1975	0	0	475	470	961	0	421			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	17.3	4.9	0.0	0.0	20.9	20.9	21.2	0.0	18.3			
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.0	13.0	13.6	2.9	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.7	0.6	0.0	0.0	4.7	4.8	3.7	0.0	0.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	4.9	0.0	0.0	34.0	34.5	24.0	0.0	18.5			
LnGrp LOS	B	A	A	A	C	C	C	A	B			
Approach Vol, veh/h		666			599			687				
Approach Delay, s/veh		10.3			34.2			23.3				
Approach LOS		B			C			C				

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	22.5	18.9				41.4		18.6				
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0				
Max Green Setting (Gmax), s	12.0	18.0				34.0		18.0				
Max Q Clear Time (g_c+I1), s	10.4	12.6				5.2		12.5				
Green Ext Time (p_c), s	0.2	2.3				4.1		2.1				

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	232	203	68	274	57	263	355	65	32	274	76
Future Volume (veh/h)	84	232	203	68	274	57	263	355	65	32	274	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1586	1654	1695	1709	1654	1436	1695	1668	1654	1518	1682	1532
Adj Flow Rate, veh/h	84	232	61	68	274	49	263	355	0	32	274	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	12	7	4	3	7	23	4	6	7	17	5	16
Cap, veh/h	100	425	369	82	329	59	326	1050	464	42	505	205
Arrive On Green	0.07	0.26	0.26	0.05	0.24	0.24	0.20	0.33	0.00	0.03	0.16	0.00
Sat Flow, veh/h	1511	1654	1437	1628	1366	244	1615	3169	1402	1446	3195	1298
Grp Volume(v), veh/h	84	232	61	68	0	323	263	355	0	32	274	0
Grp Sat Flow(s),veh/h/ln	1511	1654	1437	1628	0	1610	1615	1585	1402	1446	1598	1298
Q Serve(g_s), s	2.6	5.8	1.6	2.0	0.0	9.2	7.5	4.1	0.0	1.1	3.8	0.0
Cycle Q Clear(g_c), s	2.6	5.8	1.6	2.0	0.0	9.2	7.5	4.1	0.0	1.1	3.8	0.0
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	425	369	82	0	388	326	1050	464	42	505	205
V/C Ratio(X)	0.84	0.55	0.17	0.83	0.00	0.83	0.81	0.34	0.00	0.77	0.54	0.00
Avail Cap(c_a), veh/h	283	688	597	304	0	670	571	1713	758	270	1196	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.2	15.4	13.9	22.6	0.0	17.3	18.3	12.1	0.0	23.2	18.6	0.0
Incr Delay (d2), s/veh	13.0	0.8	0.2	14.7	0.0	3.5	3.5	0.1	0.0	19.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.8	0.4	1.0	0.0	2.9	2.5	1.1	0.0	0.5	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	16.3	14.0	37.3	0.0	20.8	21.8	12.3	0.0	42.2	19.3	0.0
LnGrp LOS	D	B	B	D	A	C	C	B	A	D	B	A
Approach Vol, veh/h		377			391			618			306	
Approach Delay, s/veh		20.1			23.7			16.3			21.7	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	11.6	7.2	15.6	5.4	19.9	6.4	16.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	18.0	9.0	20.0	9.0	26.0	9.0	20.0
Max Q Clear Time (g_c+I1), s	9.5	5.8	4.6	11.2	3.1	6.1	4.0	7.8
Green Ext Time (p_c), s	0.5	1.8	0.1	0.4	0.0	3.2	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	19.9
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	400	232	479	160	108	459
Future Volume (veh/h)	400	232	479	160	108	459
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1695	1709	1682	1682	1695	1682
Adj Flow Rate, veh/h	426	90	510	118	115	488
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	3	5	5	4	5
Cap, veh/h	522	468	805	185	402	1538
Arrive On Green	0.32	0.32	0.31	0.31	0.07	0.48
Sat Flow, veh/h	1615	1448	2663	594	1615	3279
Grp Volume(v), veh/h	426	90	315	313	115	488
Grp Sat Flow(s),veh/h/ln	1615	1448	1598	1575	1615	1598
Q Serve(g_s), s	9.9	1.8	6.9	7.0	1.8	3.8
Cycle Q Clear(g_c), s	9.9	1.8	6.9	7.0	1.8	3.8
Prop In Lane	1.00	1.00		0.38	1.00	
Lane Grp Cap(c), veh/h	522	468	499	492	402	1538
V/C Ratio(X)	0.82	0.19	0.63	0.64	0.29	0.32
Avail Cap(c_a), veh/h	789	708	742	731	642	2498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	10.0	12.1	12.1	8.3	6.5
Incr Delay (d2), s/veh	3.3	0.1	1.0	1.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.8	1.8	0.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.1	10.1	13.0	13.1	8.5	6.6
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h	516		628			603
Approach Delay, s/veh	15.0		13.1			7.0
Approach LOS	B		B			A

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	23.7		17.2	6.9	16.8
Change Period (Y+Rc), s	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s	32.0		20.0	9.0	19.0
Max Q Clear Time (g_c+I1), s	5.8		11.9	3.8	9.0
Green Ext Time (p_c), s	5.0		1.3	0.1	3.8

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	264	261	12	30	19
Future Vol, veh/h	15	264	261	12	30	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	72	72	72	72
Heavy Vehicles, %	7	5	3	18	0	0
Mvmt Flow	21	367	363	17	42	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	380	0	-	0	781	372
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	409	-
Critical Hdwy	4.17	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1152	-	-	-	366	678
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1152	-	-	-	359	678
Mov Cap-2 Maneuver	-	-	-	-	359	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	675	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1152	-	-	-	439
HCM Lane V/C Ratio	0.018	-	-	-	0.155
HCM Control Delay (s)	8.2	-	-	-	14.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	20	1	244	2	399	28	267	579	1
Future Vol, veh/h	0	0	2	20	1	244	2	399	28	267	579	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	180	-	130	270	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	5	0	6	0	6	16	2	7	0
Mvmt Flow	0	0	2	21	1	260	2	424	30	284	616	1

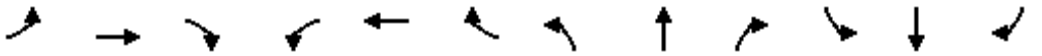
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1402	1613	309	1304	1613	212	617	0	-	424	0	0
Stage 1	1185	1185	-	428	428	-	-	-	-	-	-	-
Stage 2	217	428	-	876	1185	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.6	6.5	7.02	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.55	4	3.36	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	102	105	693	115	105	781	973	-	0	1132	-	-
Stage 1	204	265	-	567	588	-	-	-	0	-	-	-
Stage 2	771	588	-	304	265	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	54	79	693	92	79	781	973	-	-	1132	-	-
Mov Cap-2 Maneuver	54	79	-	92	79	-	-	-	-	-	-	-
Stage 1	204	198	-	566	587	-	-	-	-	-	-	-
Stage 2	513	587	-	227	198	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	15.5	0	2.9
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	973	-	693	91	781	1132	-	-
HCM Lane V/C Ratio	0.002	-	0.003	0.245	0.332	0.251	-	-
HCM Control Delay (s)	8.7	-	10.2	57	11.9	9.2	-	-
HCM Lane LOS	A	-	B	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0.9	1.5	1	-	-

HCM 6th Signalized Intersection Summary
1: I-5 SB & Chemawa Road

05/19/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	733	1005	280	1824	0	0	0	0	188	6	610
Future Volume (veh/h)	0	733	1005	280	1824	0	0	0	0	188	6	610
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1723	1723	1723	1736	0				1695	1750	1736
Adj Flow Rate, veh/h	0	733	721	280	1824	0				188	6	561
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	1	0				4	0	1
Cap, veh/h	0	1678	748	294	2392	0				337	11	540
Arrive On Green	0.00	0.51	0.51	0.18	0.73	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	3359	1460	1641	3386	0				1618	52	2590
Grp Volume(v), veh/h	0	733	721	280	1824	0				194	0	561
Grp Sat Flow(s),veh/h/ln	0	1637	1460	1641	1650	0				1669	0	1295
Q Serve(g_s), s	0.0	16.9	57.1	20.3	40.8	0.0				12.5	0.0	25.0
Cycle Q Clear(g_c), s	0.0	16.9	57.1	20.3	40.8	0.0				12.5	0.0	25.0
Prop In Lane	0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h	0	1678	748	294	2392	0				348	0	540
V/C Ratio(X)	0.00	0.44	0.96	0.95	0.76	0.00				0.56	0.00	1.04
Avail Cap(c_a), veh/h	0	1691	754	294	2392	0				348	0	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.27	0.27	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.4	28.2	48.8	10.1	0.0				42.5	0.0	47.5
Incr Delay (d2), s/veh	0.0	0.1	23.9	17.1	0.6	0.0				1.7	0.0	49.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	23.0	9.4	11.6	0.0				5.2	0.0	19.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.5	52.1	65.9	10.8	0.0				44.2	0.0	97.0
LnGrp LOS	A	B	D	E	B	A				D	A	F
Approach Vol, veh/h		1454			2104						755	
Approach Delay, s/veh		35.1			18.1						83.4	
Approach LOS		D			B						F	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		91.0		29.0	25.5	65.5						
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0						
Max Green Setting (Gmax), s		87.0		25.0	21.0	62.0						
Max Q Clear Time (g_c+I1), s		42.8		27.0	22.3	59.1						
Green Ext Time (p_c), s		32.1		0.0	0.0	2.4						

Intersection Summary												
HCM 6th Ctrl Delay			35.3									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	701	0	0	887	69	1214	1	249	0	0	0
Future Volume (veh/h)	200	701	0	0	887	69	1214	1	249	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1723	0	0	1736	1668	1736	1750	1695			
Adj Flow Rate, veh/h	200	701	0	0	887	63	1215	0	155			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	3	2	0	0	1	6	1	0	4			
Cap, veh/h	249	1672	0	0	979	70	1324	0	575			
Arrive On Green	0.15	0.51	0.00	0.00	0.31	0.31	0.40	0.00	0.40			
Sat Flow, veh/h	1628	3359	0	0	3211	222	3307	0	1437			
Grp Volume(v), veh/h	200	701	0	0	468	482	1215	0	155			
Grp Sat Flow(s),veh/h/ln	1628	1637	0	0	1650	1696	1654	0	1437			
Q Serve(g_s), s	10.7	12.0	0.0	0.0	24.5	24.5	31.3	0.0	6.5			
Cycle Q Clear(g_c), s	10.7	12.0	0.0	0.0	24.5	24.5	31.3	0.0	6.5			
Prop In Lane	1.00		0.00	0.00		0.13	1.00		1.00			
Lane Grp Cap(c), veh/h	249	1672	0	0	517	532	1324	0	575			
V/C Ratio(X)	0.80	0.42	0.00	0.00	0.91	0.91	0.92	0.00	0.27			
Avail Cap(c_a), veh/h	249	1672	0	0	532	547	1360	0	591			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.89	0.89	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	36.8	13.7	0.0	0.0	29.6	29.6	25.6	0.0	18.1			
Incr Delay (d2), s/veh	15.0	0.1	0.0	0.0	22.0	21.6	9.9	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.1	3.9	0.0	0.0	12.1	12.3	12.8	0.0	2.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.8	13.8	0.0	0.0	51.7	51.2	35.4	0.0	18.3			
LnGrp LOS	D	B	A	A	D	D	D	A	B			
Approach Vol, veh/h		901			950			1370				
Approach Delay, s/veh		22.2			51.4			33.5				
Approach LOS		C			D			C				

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	17.8	32.2				50.0		40.0				
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0				
Max Green Setting (Gmax), s	12.8	29.0				45.0		37.0				
Max Q Clear Time (g_c+I1), s	12.7	26.5				14.0		33.3				
Green Ext Time (p_c), s	0.0	1.7				8.1		2.7				

Intersection Summary		
HCM 6th Ctrl Delay	35.6	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	354	467	86	348	47	346	360	90	64	509	124
Future Volume (veh/h)	101	354	467	86	348	47	346	360	90	64	509	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1695	1736	1750	1723	1723	1736	1709	1723	1586	1736	1736
Adj Flow Rate, veh/h	101	354	145	86	348	42	346	360	23	64	509	6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	4	1	0	2	2	1	3	2	12	1	1
Cap, veh/h	127	455	395	109	387	47	394	1276	574	77	679	303
Arrive On Green	0.08	0.27	0.27	0.07	0.26	0.26	0.24	0.39	0.39	0.05	0.21	0.21
Sat Flow, veh/h	1667	1695	1471	1667	1508	182	1654	3247	1460	1511	3299	1471
Grp Volume(v), veh/h	101	354	145	86	0	390	346	360	23	64	509	6
Grp Sat Flow(s),veh/h/ln	1667	1695	1471	1667	0	1690	1654	1624	1460	1511	1650	1471
Q Serve(g_s), s	4.3	13.9	5.7	3.7	0.0	16.0	14.5	5.4	0.7	3.0	10.4	0.2
Cycle Q Clear(g_c), s	4.3	13.9	5.7	3.7	0.0	16.0	14.5	5.4	0.7	3.0	10.4	0.2
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	455	395	109	0	434	394	1276	574	77	679	303
V/C Ratio(X)	0.79	0.78	0.37	0.79	0.00	0.90	0.88	0.28	0.04	0.83	0.75	0.02
Avail Cap(c_a), veh/h	209	566	491	209	0	564	506	1401	630	210	872	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	24.3	21.3	33.1	0.0	25.8	26.4	14.9	13.4	33.8	26.8	22.8
Incr Delay (d2), s/veh	8.0	4.9	0.4	9.2	0.0	13.6	12.6	0.1	0.0	15.5	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.6	1.8	1.6	0.0	7.2	6.5	1.7	0.2	1.4	3.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	29.2	21.8	42.3	0.0	39.4	39.0	15.0	13.5	49.3	29.1	22.8
LnGrp LOS	D	C	C	D	A	D	D	B	B	D	C	C
Approach Vol, veh/h		600			476			729			579	
Approach Delay, s/veh		29.3			39.9			26.3			31.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.1	18.8	9.5	22.5	7.7	32.2	8.7	23.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	19.0	9.0	24.0	10.0	31.0	9.0	24.0
Max Q Clear Time (g_c+I1), s	16.5	12.4	6.3	18.0	5.0	7.4	5.7	15.9
Green Ext Time (p_c), s	0.6	2.4	0.1	0.4	0.1	3.6	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	245	187	604	439	281	813
Future Volume (veh/h)	245	187	604	439	281	813
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1736	1709	1736	1736	1723	1736
Adj Flow Rate, veh/h	258	65	636	256	296	856
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	3	1	1	2	1
Cap, veh/h	341	298	871	350	488	2026
Arrive On Green	0.21	0.21	0.38	0.38	0.14	0.61
Sat Flow, veh/h	1654	1448	2383	924	1641	3386
Grp Volume(v), veh/h	258	65	457	435	296	856
Grp Sat Flow(s),veh/h/ln	1654	1448	1650	1570	1641	1650
Q Serve(g_s), s	6.5	1.7	10.6	10.6	4.2	6.0
Cycle Q Clear(g_c), s	6.5	1.7	10.6	10.6	4.2	6.0
Prop In Lane	1.00	1.00		0.59	1.00	
Lane Grp Cap(c), veh/h	341	298	626	595	488	2026
V/C Ratio(X)	0.76	0.22	0.73	0.73	0.61	0.42
Avail Cap(c_a), veh/h	670	587	742	706	619	2523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	14.7	11.8	11.8	8.1	4.5
Incr Delay (d2), s/veh	2.6	0.3	2.7	2.8	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.5	3.0	2.9	0.7	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.2	14.9	14.5	14.7	9.0	4.6
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h	323		892			1152
Approach Delay, s/veh	18.3		14.6			5.7
Approach LOS	B		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		31.3		13.2	10.4	20.9
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0		18.0	10.0	20.0
Max Q Clear Time (g_c+I1), s		8.0		8.5	6.2	12.6
Green Ext Time (p_c), s		9.6		0.8	0.4	4.3

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	330	324	23	12	20
Future Vol, veh/h	51	330	324	23	12	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	1	2	9	9	0
Mvmt Flow	54	347	341	24	13	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	365	0	-	0	808	353
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	455	-
Critical Hdwy	4.1	-	-	-	6.49	6.2
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.2	-	-	-	3.581	3.3
Pot Cap-1 Maneuver	1205	-	-	-	341	695
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	624	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1205	-	-	-	326	695
Mov Cap-2 Maneuver	-	-	-	-	326	-
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	624	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1205	-	-	-	488
HCM Lane V/C Ratio	0.045	-	-	-	0.069
HCM Control Delay (s)	8.1	-	-	-	12.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	20.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	31	0	368	5	686	65	510	563	3
Future Vol, veh/h	0	0	1	31	0	368	5	686	65	510	563	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	180	-	130	270	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	1	0	2	0	0	2	0
Mvmt Flow	0	0	1	32	0	383	5	715	68	531	586	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2018	2375	295	2080	2376	358	589	0	-	715	0	0
Stage 1	1650	1650	-	725	725	-	-	-	-	-	-	-
Stage 2	368	725	-	1355	1651	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.92	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.31	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	35	35	707	~ 31	35	641	996	-	0	895	-	-
Stage 1	105	158	-	387	433	-	-	-	0	-	-	-
Stage 2	630	433	-	160	158	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	7	14	707	~ 16	14	641	996	-	-	895	-	-
Mov Cap-2 Maneuver	7	14	-	~ 16	14	-	-	-	-	-	-	-
Stage 1	104	64	-	385	431	-	-	-	-	-	-	-
Stage 2	252	431	-	65	64	-	-	-	-	-	-	-

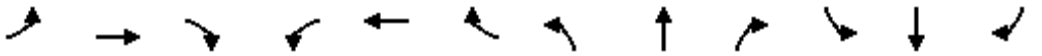
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	92.2	0.1	7
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	996	-	707	16	641	895	-	-
HCM Lane V/C Ratio	0.005	-	0.001	2.018	0.598	0.594	-	-
HCM Control Delay (s)	8.6	-	10.1	$ 965.9	18.6	14.7	-	-
HCM Lane LOS	A	-	B	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0	4.6	4	4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 6th Signalized Intersection Summary
1: I-5 SB & Chemawa Road

05/23/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	578	896	257	954	0	0	0	0	73	4	158
Future Volume (veh/h)	0	578	896	257	954	0	0	0	0	73	4	158
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1709	1723	1600	1709	0				1586	1409	1641
Adj Flow Rate, veh/h	0	578	587	257	954	0				73	4	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	3	2	11	3	0				12	25	8
Cap, veh/h	0	1442	648	527	2709	0				98	5	188
Arrive On Green	0.00	0.44	0.44	0.35	0.83	0.00				0.08	0.08	0.08
Sat Flow, veh/h	0	3333	1460	1524	3333	0				1275	70	2447
Grp Volume(v), veh/h	0	578	587	257	954	0				77	0	39
Grp Sat Flow(s),veh/h/ln	0	1624	1460	1524	1624	0				1345	0	1224
Q Serve(g_s), s	0.0	10.8	33.6	11.9	6.2	0.0				5.0	0.0	1.3
Cycle Q Clear(g_c), s	0.0	10.8	33.6	11.9	6.2	0.0				5.0	0.0	1.3
Prop In Lane	0.00		1.00	1.00		0.00				0.95		1.00
Lane Grp Cap(c), veh/h	0	1442	648	527	2709	0				103	0	188
V/C Ratio(X)	0.00	0.40	0.91	0.49	0.35	0.00				0.75	0.00	0.21
Avail Cap(c_a), veh/h	0	1515	681	527	2709	0				269	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.66	0.66	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.9	23.3	23.2	1.7	0.0				40.7	0.0	39.0
Incr Delay (d2), s/veh	0.0	0.1	15.1	0.3	0.2	0.0				7.7	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	12.9	4.0	0.5	0.0				1.8	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.1	38.3	23.5	2.0	0.0				48.4	0.0	39.4
LnGrp LOS	A	B	D	C	A	A				D	A	D
Approach Vol, veh/h		1165			1211						116	
Approach Delay, s/veh		27.8			6.6						45.4	
Approach LOS		C			A						D	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		79.1		10.9	35.1	44.0						
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0						
Max Green Setting (Gmax), s		64.0		18.0	18.0	42.0						
Max Q Clear Time (g_c+I1), s		8.2		7.0	13.9	35.6						
Green Ext Time (p_c), s		14.0		0.3	0.3	4.3						

Intersection Summary												
HCM 6th Ctrl Delay			18.3									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	404	0	0	526	172	602	1	237	0	0	0
Future Volume (veh/h)	271	404	0	0	526	172	602	1	237	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1695	1668	0	0	1668	1668	1682	1750	1654			
Adj Flow Rate, veh/h	271	404	0	0	526	124	603	0	87			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	4	6	0	0	6	6	5	0	7			
Cap, veh/h	477	1975	0	0	666	156	780	0	342			
Arrive On Green	0.30	0.62	0.00	0.00	0.26	0.26	0.24	0.00	0.24			
Sat Flow, veh/h	1615	3253	0	0	2631	598	3203	0	1402			
Grp Volume(v), veh/h	271	404	0	0	326	324	603	0	87			
Grp Sat Flow(s),veh/h/ln	1615	1585	0	0	1585	1560	1602	0	1402			
Q Serve(g_s), s	8.5	3.3	0.0	0.0	11.5	11.6	10.5	0.0	3.0			
Cycle Q Clear(g_c), s	8.5	3.3	0.0	0.0	11.5	11.6	10.5	0.0	3.0			
Prop In Lane	1.00		0.00	0.00		0.38	1.00		1.00			
Lane Grp Cap(c), veh/h	477	1975	0	0	414	408	780	0	342			
V/C Ratio(X)	0.57	0.20	0.00	0.00	0.79	0.79	0.77	0.00	0.25			
Avail Cap(c_a), veh/h	477	1975	0	0	475	468	961	0	421			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	17.9	4.9	0.0	0.0	20.6	20.7	21.1	0.0	18.3			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	14.1	14.7	2.9	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.8	0.6	0.0	0.0	5.2	5.2	3.7	0.0	0.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	4.9	0.0	0.0	34.7	35.3	24.0	0.0	18.6			
LnGrp LOS	B	A	A	A	C	D	C	A	B			
Approach Vol, veh/h		675			650			690				
Approach Delay, s/veh		10.7			35.0			23.3				
Approach LOS		B			D			C				

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	21.7	19.7				41.4		18.6				
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0				
Max Green Setting (Gmax), s	12.0	18.0				34.0		18.0				
Max Q Clear Time (g_c+I1), s	10.5	13.6				5.3		12.5				
Green Ext Time (p_c), s	0.2	2.1				4.2		2.1				

Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	250	203	68	330	68	263	355	65	36	274	76
Future Volume (veh/h)	84	250	203	68	330	68	263	355	65	36	274	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1586	1654	1695	1709	1654	1436	1695	1668	1654	1518	1682	1532
Adj Flow Rate, veh/h	84	250	66	68	330	59	263	355	0	36	274	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	12	7	4	3	7	23	4	6	7	17	5	16
Cap, veh/h	101	487	423	82	380	68	319	1008	446	45	485	197
Arrive On Green	0.07	0.29	0.29	0.05	0.28	0.28	0.20	0.32	0.00	0.03	0.15	0.00
Sat Flow, veh/h	1511	1654	1437	1628	1366	244	1615	3169	1402	1446	3195	1298
Grp Volume(v), veh/h	84	250	66	68	0	389	263	355	0	36	274	0
Grp Sat Flow(s),veh/h/ln	1511	1654	1437	1628	0	1610	1615	1585	1402	1446	1598	1298
Q Serve(g_s), s	2.9	6.6	1.8	2.2	0.0	12.0	8.2	4.5	0.0	1.3	4.2	0.0
Cycle Q Clear(g_c), s	2.9	6.6	1.8	2.2	0.0	12.0	8.2	4.5	0.0	1.3	4.2	0.0
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	101	487	423	82	0	448	319	1008	446	45	485	197
V/C Ratio(X)	0.84	0.51	0.16	0.83	0.00	0.87	0.82	0.35	0.00	0.80	0.57	0.00
Avail Cap(c_a), veh/h	260	696	604	280	0	677	463	1454	643	249	1099	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.1	15.3	13.7	24.6	0.0	18.0	20.1	13.7	0.0	25.2	20.6	0.0
Incr Delay (d2), s/veh	12.4	0.6	0.1	14.1	0.0	6.8	6.7	0.2	0.0	20.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.1	0.5	1.0	0.0	4.3	3.1	1.3	0.0	0.6	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	16.0	13.8	38.7	0.0	24.7	26.8	13.9	0.0	46.0	21.4	0.0
LnGrp LOS	D	B	B	D	A	C	C	B	A	D	C	A
Approach Vol, veh/h		400			457			618			310	
Approach Delay, s/veh		19.9			26.8			19.4			24.2	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	11.9	7.5	18.6	5.6	20.6	6.6	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	18.0	9.0	22.0	9.0	24.0	9.0	22.0
Max Q Clear Time (g_c+I1), s	10.2	6.2	4.9	14.0	3.3	6.5	4.2	8.6
Green Ext Time (p_c), s	0.4	1.8	0.1	0.5	0.0	3.0	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	329	22	2	399	68	6
Future Vol, veh/h	329	22	2	399	68	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	8	0	0	8	0	0
Mvmt Flow	411	28	3	499	85	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	439	0	930	425
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	505	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1132	-	299	634
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	610	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1132	-	298	634
Mov Cap-2 Maneuver	-	-	-	-	298	-
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	608	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	311	-	-	1132	-
HCM Lane V/C Ratio	0.297	-	-	0.002	-
HCM Control Delay (s)	21.4	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	433	232	479	170	108	459
Future Volume (veh/h)	433	232	479	170	108	459
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1695	1709	1682	1682	1695	1682
Adj Flow Rate, veh/h	461	94	510	124	115	488
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	3	5	5	4	5
Cap, veh/h	555	497	774	187	383	1495
Arrive On Green	0.34	0.34	0.30	0.30	0.07	0.47
Sat Flow, veh/h	1615	1448	2635	617	1615	3279
Grp Volume(v), veh/h	461	94	318	316	115	488
Grp Sat Flow(s),veh/h/ln	1615	1448	1598	1571	1615	1598
Q Serve(g_s), s	11.1	1.9	7.4	7.4	1.9	4.1
Cycle Q Clear(g_c), s	11.1	1.9	7.4	7.4	1.9	4.1
Prop In Lane	1.00	1.00		0.39	1.00	
Lane Grp Cap(c), veh/h	555	497	485	477	383	1495
V/C Ratio(X)	0.83	0.19	0.66	0.66	0.30	0.33
Avail Cap(c_a), veh/h	800	717	678	667	613	2336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	9.8	12.8	12.9	8.9	7.1
Incr Delay (d2), s/veh	4.4	0.1	1.1	1.2	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	2.0	2.0	0.4	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.2	9.9	14.0	14.1	9.2	7.2
LnGrp LOS	B	A	B	B	A	A
Approach Vol, veh/h	555		634			603
Approach Delay, s/veh	15.9		14.0			7.6
Approach LOS	B		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.8		18.6	7.0	16.9
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0		21.0	9.0	18.0
Max Q Clear Time (g_c+I1), s		6.1		13.1	3.9	9.4
Green Ext Time (p_c), s		4.9		1.5	0.1	3.4

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	264	261	14	36	52
Future Vol, veh/h	25	264	261	14	36	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	72	72	72	72
Heavy Vehicles, %	7	5	3	18	0	0
Mvmt Flow	35	367	363	19	50	72

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	382	0	-	0	810	373
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	437	-
Critical Hdwy	4.17	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1150	-	-	-	352	678
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	655	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1150	-	-	-	341	678
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	655	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1150	-	-	-	483
HCM Lane V/C Ratio	0.03	-	-	-	0.253
HCM Control Delay (s)	8.2	-	-	-	15
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1

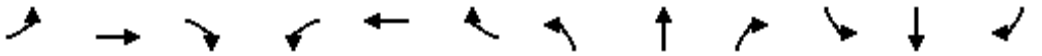
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	20	1	247	2	406	28	278	601	1
Future Vol, veh/h	0	0	2	20	1	247	2	406	28	278	601	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	180	-	130	270	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	5	0	6	0	6	16	2	7	0
Mvmt Flow	0	0	2	21	1	263	2	432	30	296	639	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1453	1668	320	1348	1668	216	640	0	-	432	0	0
Stage 1	1232	1232	-	436	436	-	-	-	-	-	-	-
Stage 2	221	436	-	912	1232	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.6	6.5	7.02	4.1	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.6	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.55	4	3.36	2.2	-	-	2.22	-	-
Pot Cap-1 Maneuver	93	97	682	106	97	776	954	-	0	1124	-	-
Stage 1	191	252	-	561	583	-	-	-	0	-	-	-
Stage 2	767	583	-	289	252	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	48	71	682	84	71	776	954	-	-	1124	-	-
Mov Cap-2 Maneuver	48	71	-	84	71	-	-	-	-	-	-	-
Stage 1	191	186	-	560	582	-	-	-	-	-	-	-
Stage 2	505	582	-	212	186	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	16	0	3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	954	-	682	83	776	1124	-	-
HCM Lane V/C Ratio	0.002	-	0.003	0.269	0.339	0.263	-	-
HCM Control Delay (s)	8.8	-	10.3	63.6	12	9.3	-	-
HCM Lane LOS	A	-	B	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0	1	1.5	1.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	739	1005	298	1827	0	0	0	0	212	6	610
Future Volume (veh/h)	0	739	1005	298	1827	0	0	0	0	212	6	610
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1723	1723	1723	1736	0				1695	1750	1736
Adj Flow Rate, veh/h	0	739	718	298	1827	0				212	6	561
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	1	0				4	0	1
Cap, veh/h	0	1637	730	314	2392	0				338	10	540
Arrive On Green	0.00	0.50	0.50	0.19	0.73	0.00				0.21	0.21	0.21
Sat Flow, veh/h	0	3359	1460	1641	3386	0				1623	46	2590
Grp Volume(v), veh/h	0	739	718	298	1827	0				218	0	561
Grp Sat Flow(s),veh/h/ln	0	1637	1460	1641	1650	0				1669	0	1295
Q Serve(g_s), s	0.0	17.5	58.1	21.5	41.0	0.0				14.3	0.0	25.0
Cycle Q Clear(g_c), s	0.0	17.5	58.1	21.5	41.0	0.0				14.3	0.0	25.0
Prop In Lane	0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h	0	1637	730	314	2392	0				348	0	540
V/C Ratio(X)	0.00	0.45	0.98	0.95	0.76	0.00				0.63	0.00	1.04
Avail Cap(c_a), veh/h	0	1637	730	314	2392	0				348	0	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.22	0.22	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.4	29.5	47.9	10.2	0.0				43.3	0.0	47.5
Incr Delay (d2), s/veh	0.0	0.1	29.1	13.3	0.5	0.0				3.2	0.0	49.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	24.4	9.7	11.6	0.0				6.0	0.0	19.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.5	58.6	61.2	10.7	0.0				46.4	0.0	97.0
LnGrp LOS	A	B	E	E	B	A				D	A	F
Approach Vol, veh/h		1457			2125						779	
Approach Delay, s/veh		38.8			17.8						82.8	
Approach LOS		D			B						F	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		91.0		29.0	27.0	64.0						
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0						
Max Green Setting (Gmax), s		87.0		25.0	23.0	60.0						
Max Q Clear Time (g_c+I1), s		43.0		27.0	23.5	60.1						
Green Ext Time (p_c), s		32.1		0.0	0.0	0.0						

Intersection Summary												
HCM 6th Ctrl Delay			36.4									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	731	0	0	908	84	1214	1	280	0	0	0
Future Volume (veh/h)	200	731	0	0	908	84	1214	1	280	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1723	0	0	1736	1668	1736	1750	1695			
Adj Flow Rate, veh/h	200	731	0	0	908	77	1215	0	193			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	3	2	0	0	1	6	1	0	4			
Cap, veh/h	241	1671	0	0	979	83	1325	0	576			
Arrive On Green	0.15	0.51	0.00	0.00	0.32	0.32	0.40	0.00	0.40			
Sat Flow, veh/h	1628	3359	0	0	3165	261	3307	0	1437			
Grp Volume(v), veh/h	200	731	0	0	487	498	1215	0	193			
Grp Sat Flow(s),veh/h/ln	1628	1637	0	0	1650	1689	1654	0	1437			
Q Serve(g_s), s	10.7	12.7	0.0	0.0	25.7	25.7	31.3	0.0	8.4			
Cycle Q Clear(g_c), s	10.7	12.7	0.0	0.0	25.7	25.7	31.3	0.0	8.4			
Prop In Lane	1.00		0.00	0.00		0.15	1.00		1.00			
Lane Grp Cap(c), veh/h	241	1671	0	0	525	537	1325	0	576			
V/C Ratio(X)	0.83	0.44	0.00	0.00	0.93	0.93	0.92	0.00	0.34			
Avail Cap(c_a), veh/h	241	1671	0	0	532	544	1360	0	591			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.88	0.88	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	37.2	13.9	0.0	0.0	29.7	29.7	25.6	0.0	18.7			
Incr Delay (d2), s/veh	18.6	0.1	0.0	0.0	24.8	24.4	9.8	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.3	4.1	0.0	0.0	12.9	13.2	12.8	0.0	2.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	14.0	0.0	0.0	54.5	54.1	35.3	0.0	18.9			
LnGrp LOS	E	B	A	A	D	D	D	A	B			
Approach Vol, veh/h		931			985			1408				
Approach Delay, s/veh		23.0			54.3			33.1				
Approach LOS		C			D			C				

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	17.3	32.6				49.9		40.1				
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0				
Max Green Setting (Gmax), s	12.3	29.0				45.0		37.0				
Max Q Clear Time (g_c+I1), s	12.7	27.7				14.7		33.3				
Green Ext Time (p_c), s	0.0	1.0				8.4		2.7				

Intersection Summary	
HCM 6th Ctrl Delay	36.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	415	467	86	384	54	346	360	90	76	509	124
Future Volume (veh/h)	101	415	467	86	384	54	346	360	90	76	509	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1695	1736	1750	1723	1723	1736	1709	1723	1586	1736	1736
Adj Flow Rate, veh/h	101	415	171	86	384	49	346	360	21	76	509	6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	4	1	0	2	2	1	3	2	12	1	1
Cap, veh/h	127	493	428	109	419	53	388	1212	545	93	661	295
Arrive On Green	0.08	0.29	0.29	0.07	0.28	0.28	0.23	0.37	0.37	0.06	0.20	0.20
Sat Flow, veh/h	1667	1695	1471	1667	1497	191	1654	3247	1460	1511	3299	1471
Grp Volume(v), veh/h	101	415	171	86	0	433	346	360	21	76	509	6
Grp Sat Flow(s),veh/h/ln	1667	1695	1471	1667	0	1688	1654	1624	1460	1511	1650	1471
Q Serve(g_s), s	4.6	17.6	7.1	3.9	0.0	19.0	15.5	6.0	0.7	3.8	11.2	0.3
Cycle Q Clear(g_c), s	4.6	17.6	7.1	3.9	0.0	19.0	15.5	6.0	0.7	3.8	11.2	0.3
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	493	428	109	0	472	388	1212	545	93	661	295
V/C Ratio(X)	0.79	0.84	0.40	0.79	0.00	0.92	0.89	0.30	0.04	0.82	0.77	0.02
Avail Cap(c_a), veh/h	196	554	481	196	0	552	454	1231	553	217	819	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	25.5	21.8	35.2	0.0	26.7	28.3	16.9	15.2	35.5	28.9	24.6
Incr Delay (d2), s/veh	9.2	9.8	0.4	9.2	0.0	18.1	17.1	0.1	0.0	12.2	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	7.7	2.3	1.7	0.0	9.1	7.4	2.0	0.2	1.6	4.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	35.3	22.2	44.4	0.0	44.8	45.4	17.0	15.3	47.6	32.1	24.6
LnGrp LOS	D	D	C	D	A	D	D	B	B	D	C	C
Approach Vol, veh/h		687			519			727			591	
Approach Delay, s/veh		33.3			44.7			30.5			34.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	19.3	9.8	25.4	8.7	32.6	9.0	26.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	19.0	9.0	25.0	11.0	29.0	9.0	25.0
Max Q Clear Time (g_c+I1), s	17.5	13.2	6.6	21.0	5.8	8.0	5.9	19.6
Green Ext Time (p_c), s	0.5	2.2	0.1	0.4	0.1	3.4	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	35.0
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	507	74	6	481	43	4
Future Vol, veh/h	507	74	6	481	43	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	5	0	0	1	0	0
Mvmt Flow	604	88	7	573	51	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	692	0	1235	648
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	587	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	912	-	197	474
Stage 1	-	-	-	-	524	-
Stage 2	-	-	-	-	560	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	912	-	195	474
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	524	-
Stage 2	-	-	-	-	554	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	29
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	205	-	-	912	-
HCM Lane V/C Ratio	0.273	-	-	0.008	-
HCM Control Delay (s)	29	-	-	9	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	267	187	604	476	281	813
Future Volume (veh/h)	267	187	604	476	281	813
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1736	1709	1736	1736	1723	1736
Adj Flow Rate, veh/h	281	65	636	277	296	856
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	3	1	1	2	1
Cap, veh/h	362	317	843	367	471	2005
Arrive On Green	0.22	0.22	0.38	0.38	0.14	0.61
Sat Flow, veh/h	1654	1448	2324	974	1641	3386
Grp Volume(v), veh/h	281	65	469	444	296	856
Grp Sat Flow(s),veh/h/ln	1654	1448	1650	1561	1641	1650
Q Serve(g_s), s	7.4	1.7	11.4	11.4	4.4	6.3
Cycle Q Clear(g_c), s	7.4	1.7	11.4	11.4	4.4	6.3
Prop In Lane	1.00	1.00		0.62	1.00	
Lane Grp Cap(c), veh/h	362	317	622	588	471	2005
V/C Ratio(X)	0.78	0.21	0.75	0.75	0.63	0.43
Avail Cap(c_a), veh/h	645	565	715	677	591	2432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	14.7	12.5	12.5	8.6	4.8
Incr Delay (d2), s/veh	2.7	0.2	3.6	3.8	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	3.5	3.4	0.9	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	15.0	16.1	16.3	9.7	4.9
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h	346		913			1152
Approach Delay, s/veh	18.8		16.2			6.1
Approach LOS	B		B			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		32.0		14.1	10.6	21.4
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0		18.0	10.0	20.0
Max Q Clear Time (g_c+I1), s		8.3		9.4	6.4	13.4
Green Ext Time (p_c), s		9.5		0.8	0.4	4.0

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	88	330	324	29	16	42
Future Vol, veh/h	88	330	324	29	16	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	1	2	9	9	0
Mvmt Flow	93	347	341	31	17	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	372	0	-	0	890	357
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	533	-
Critical Hdwy	4.1	-	-	-	6.49	6.2
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.2	-	-	-	3.581	3.3
Pot Cap-1 Maneuver	1198	-	-	-	305	692
Stage 1	-	-	-	-	693	-
Stage 2	-	-	-	-	575	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1198	-	-	-	281	692
Mov Cap-2 Maneuver	-	-	-	-	281	-
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	575	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1198	-	-	-	493
HCM Lane V/C Ratio	0.077	-	-	-	0.124
HCM Control Delay (s)	8.3	-	-	-	13.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.4

Intersection	
Int Delay, s/veh	21.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	31	0	381	5	710	65	517	578	3
Future Vol, veh/h	0	0	1	31	0	381	5	710	65	517	578	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	180	-	130	270	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	1	0	2	0	0	2	0
Mvmt Flow	0	0	1	32	0	397	5	740	68	539	602	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2062	2432	303	2129	2433	370	605	0	-	740	0	0
Stage 1	1682	1682	-	750	750	-	-	-	-	-	-	-
Stage 2	380	750	-	1379	1683	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.92	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.31	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	32	32	699	~ 29	32	630	983	-	0	876	-	-
Stage 1	100	152	-	374	422	-	-	-	0	-	-	-
Stage 2	619	422	-	155	152	-	-	-	0	-	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	6	12	699	~ 15	12	630	983	-	-	876	-	-
Mov Cap-2 Maneuver	6	12	-	~ 15	12	-	-	-	-	-	-	-
Stage 1	100	59	-	372	420	-	-	-	-	-	-	-
Stage 2	228	420	-	60	59	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	97.6	0.1	7.3
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	983	-	699	15	630	876	-	-
HCM Lane V/C Ratio	0.005	-	0.001	2.153	0.63	0.615	-	-
HCM Control Delay (s)	8.7	-	10.2	$ 1051.9	19.9	15.4	-	-
HCM Lane LOS	A	-	B	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	0	4.7	4.4	4.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

1. I-5 SB Ramps at Chemawa Road NE

Right Turns on Red
APM Section 13.4.2: RTOR
Equation: vRTOR=sRTOR*(r/C)

AM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	666	0	0	149	43	0	0	68	90	318	0	0	113
2026 Background	654	0	0	158	44	0	0	68	90	320	0	0	119
2026 Buildout	633	0	0	158	44	0	0	68	90	309	0	0	119
PM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	636	0	0	79	55	0	0	91	120	292	0	0	60
2026 Background	632	0	0	64	54	0	0	91	120	284	0	0	49
2026 Buildout	615	0	0	64	56	0	0	91	120	287	0	0	49

Intersection v/c
APM Section 13.4.4: Critical Intersection v/c ratio
Method: Determine Critical Movements in HCM 2000 reports
HCM 6th reports, detemine adjusted and sat flow rates
Adjust Flow/Sat Flow
Sum up Crit Movement Flow Rates
Xc of intersection = sum(crit.move. Flow rates*(C/(C-L))

AM Peak Hour																		
					Adjust Flow				Saturated Flow				Adj/Sat Flows				C	L	Xc
	Critcial Movement				EBR	WBL	-	SBTh+R	EBR	WBL	-	SBTh+R	EBR	WBL	-	SBTh+R	Sum			
2023 Existing					526	216	0	66	1460	1524	0	1346	0.360274	0.141732		0.049034	0.55104	90	12	0.636
2026 Background	EBR	WBL	-	SBTh+R	576	229	0	70	1460	1524	0	1345	0.394521	0.150262		0.052045	0.596828	90	12	0.689
2026 Buildout					587	257	0	77	1460	1524	0	1345	0.402055	0.168635		0.057249	0.627939	90	12	0.725
PM Peak Hour																				
					Adjust Flow				Saturated Flow				Adj/Sat Flows				C	L	Xc
	Critcial Movement				EBR	WBL	-	SBR	EBR	WBL	-	SBR	EBR	WBL	-	SBR	Sum			
2023 Existing					655	264	0	515	1460	1641	0	2590	0.44863	0.160878		0.198842	0.808349	120	12	0.898
2026 Background	EBR	WBL	-	SBR	721	280	0	561	1460	1641	0	2590	0.493836	0.170628		0.216602	0.881066	120	12	0.979
2026 Buildout					718	298	0	561	1460	1641	0	2590	0.491781	0.181597		0.216602	0.88998	120	12	0.989

2. I-5 NB Ramps at Chemawa Road NE

Right Turns on Red
APM Section 13.4.2: RTOR
Equation: vRTOR=sRTOR*(r/C)

AM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	0	68	215	0	0	38	38	0	60	0	43	136	0
2026 Background	0	68	228	0	0	38	38	0	60	0	43	144	0
2026 Buildout	0	76	237	0	0	38	38	0	60	0	48	150	0
PM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	0	9	193	0	0	57	49	0	90	0	6	105	0
2026 Background	0	9	173	0	0	57	49	0	90	0	6	94	0
2026 Buildout	0	11	160	0	0	57	49	0	90	0	7	87	0

Intersection v/c
APM Section 13.4.4: Critical Intersection v/c ratio
Method: Determine Critical Movements in HCM 2000 reports
HCM 6th reports, detemine adjusted and sat flow rates
Adjust Flow/Sat Flow
Sum up Crit Movement Flow Rates
Xc of intersection = sum(crit.move. Flow rates*(C/(C-L))

AM Peak Hour																		
					Adjust Flow				Saturated Flow				Adj/Sat Flows					
	Critcial Movement				EBL	WBTh+R	NBL	-	EBL	WBTh+R	NBL	-	EBL	WBTh+R	NBL	-	Sum	C	L	Xc
2023 Existing					255	562	568	0	1615	3238	3203	0	0.157895	0.173564	0.177334		0.508792	60	12	0.636
2026 Background	EBL	WBTh+R	NBL	-	271	599	603	0	1615	3236	3203	0	0.167802	0.185105	0.188261		0.541168	60	12	0.676
2026 Buildout					271	650	603	0	1615	3229	3203	0	0.167802	0.201301	0.188261		0.557364	60	12	0.697
PM Peak Hour																		
					Adjust Flow				Saturated Flow				Adj/Sat Flows					
	Critcial Movement				EBL	WBTh	NBL	-	EBL	WBTh	NBL	-	EBL	WBTh	NBL	-	Sum	C	L	Xc
2023 Existing					188	895	1145	0	1628	3433	3307	0	0.115479	0.260705	0.346235		0.722419	90	12	0.834
2026 Background	EBL	WBTh	NBL	-	200	950	1215	0	1628	3433	3307	0	0.12285	0.276726	0.367402		0.766978	90	12	0.885
2026 Buildout					200	985	1215	0	1628	3426	3307	0	0.12285	0.287507	0.367402		0.77776	90	12	0.897

3. Portland Road NE at Hazelgreen Road NE

Right Turns on Red
APM Section 13.4.2: RTOR
Equation: vRTOR=sRTOR*(r/C)

AM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	191	13	123	177	56	56	50	57	80	134	9	77	126
2026 Background	203	12	123	177	56	56	50	58	80	142	8	77	128
2026 Buildout	203	13	123	177	54	54	52	58	80	137	9	80	128
PM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	440	7	109	158	63	63	54	66	90	308	5	65	116
2026 Background	467	7	109	158	62	62	55	67	90	322	5	67	118
2026 Buildout	436	8	109	158	61	61	57	67	90	296	5	69	118

Intersection v/c
APM Section 13.4.4: Critical Intersection v/c ratio
Method: Determine Critical Movements in HCM 2000 reports
HCM 6th reports, detemine adjusted and sat flow rates
Adjust Flow/Sat Flow
Sum up Crit Movement Flow Rates
Xc of intersection = sum(crit.move. Flow rates*(C/(C-L))

AM Peak Hour																		
					Adjust Flow				Saturated Flow				Adj/Sat Flows					C	L	Xc
	Critcial Movement				EBL	WBTh+R	NBL	SBTh	EBL	WBTh+R	NBL	SBTh	EBL	WBTh+R	NBL	SBTh	Sum			
2023 Existing					79	303	248	268	1511	1611	1615	3195	0.052283	0.188082	0.15356	0.083881	0.477807	80	16	0.597
2026 Background	EBL	WBTh+R	NBL	SBTh	84	323	263	274	1511	1610	1615	3195	0.055592	0.200621	0.162848	0.085759	0.504821	80	16	0.631
2026 Buildout					84	389	263	274	1511	1610	1615	3195	0.055592	0.241615	0.162848	0.085759	0.545815	80	16	0.682
PM Peak Hour																				
					Adjust Flow				Saturated Flow				Adj/Sat Flows					C	L	Xc
	Critcial Movement				EBL	WBTh+R	NBL	SBTh	EBL	WBTh+R	NBL	SBTh	EBL	WBTh+R	NBL	SBTh	Sum			
2023 Existing					95	367	326	498	1667	1691	1654	3299	0.056989	0.217031	0.197098	0.150955	0.622073	90	16	0.757
2026 Background	EBL	WBTh+R	NBL	SBTh	101	390	346	509	1667	1690	1654	3299	0.060588	0.230769	0.20919	0.154289	0.654836	90	16	0.796
2026 Buildout					101	433	346	509	1667	1688	1654	3299	0.060588	0.256517	0.20919	0.154289	0.680583	90	16	0.828

5. Portland Road NE at Kale Street NE

Right Turns on Red
APM Section 13.4.2: RTOR
Equation: vRTOR=sRTOR*(r/C)

AM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	0	233	74	0	0	35	38	0	60	0	136	47	0
2026 Background	0	247	79	0	0	36	37	0	60	0	148	49	0
2026 Buildout	0	247	85	0	0	35	38	0	60	0	144	54	0
PM Peak Hour													
	sRTOR				r				C	vRTOR			
	EBR	WBR	NBR	SBR	EBR	WBR	NBR	SBR		EBR	WBR	NBR	SBR
2023 Existing	0	185	316	0	0	38	36	0	60	0	117	190	0
2026 Background	0	197	327	0	0	38	36	0	60	0	125	196	0
2026 Buildout	0	197	355	0	0	38	36	0	60	0	125	213	0

Intersection v/c
APM Section 13.4.4: Critical Intersection v/c ratio
Method: Determine Critical Movements in HCM 2000 reports
HCM 6th reports, detemine adjusted and sat flow rates
Adjust Flow/Sat Flow
Sum up Crit Movement Flow Rates
Xc of intersection = sum(crit.move. Flow rates*(C/(C-L))

AM Peak Hour																	
	Critcial Movement				Adjust Flow				Saturated Flow				Adj/Sat Flows				C	L	Xc
	-	WBL	NBTh+R	SBL	-	WBL	NBTh+R	SBL	-	WBL	NBTh+R	SBL	-	WBL	NBTh+R	SBL	Sum			
2023 Existing					0	401	612	109	0	1615	3261	1615		0.248297	0.187672	0.067492	0.503462	60	12	0.629
2026 Background	-	WBL	NBTh+R	SBL	0	426	628	115	0	1615	3257	1615		0.263777	0.192815	0.071207	0.5278	60	12	0.66
2026 Buildout					0	461	634	115	0	1615	3252	1615		0.285449	0.194957	0.071207	0.551613	60	12	0.69
PM Peak Hour																				
	Critcial Movement				Adjust Flow				Saturated Flow				Adj/Sat Flows				C	L	Xc
	-	WBL	NBTh+R	SBL	-	WBL	NBTh+R	SBL	-	WBL	NBTh+R	SBL	-	WBL	NBTh+R	SBL	Sum			
2023 Existing					0	243	860	279	0	1654	3314	1641		0.146917	0.259505	0.170018	0.57644	60	12	0.721
2026 Background	-	WBL	NBTh+R	SBL	0	258	892	296	0	1654	3307	1641		0.155985	0.269731	0.180378	0.606094	60	12	0.758
2026 Buildout					0	281	913	296	0	1654	3298	1641		0.169891	0.276834	0.180378	0.627103	60	12	0.784