## MEMORANDUM

Date: December 16, 2020
To: Project Management Team, Project Advisory Committee, \& Technical Advisory Committee
From: Matt Kittelson, PE, Julia Kuhn, PE, and Miranda Barrus
Project: Town of Lakeview Transportation System Plan Update
Subject: Final TM \#3: Transportation System Inventory and Existing Conditions

## INTRODUCTION

This technical memorandum (TM) provides an inventory and evaluation of the Town of Lakeview's transportation system as it exists today. This memorandum provides a baseline understanding of the current transportation system and identifies existing needs and deficiencies. The information summarized herein was obtained and assembled using measured traffic data and historical crash rates, Geographic Information System (GIS) maps and data provided by the Town, aerial imagery, and studies provided or produced by Lakeview, Lake County, and the Oregon Department of Transportation (ODOT). Much of the inventory and analysis results are presented in figures and tables and are supplemented with text as needed. The transportation needs identified in this memorandum will be used to help inform the policies, projects, programs, or studies recommended in the Transportation System Plan (TSP) Update.

The following elements of the Town's transportation system were included as part of the inventory and evaluation:

- Land Uses and Population Trends
- Roadway System
- Intersection Operations
- Crash Analysis
- Active Transportation
- Air Transportation and Rail
- Bridges
- Funding


## EXECUTIVE SUMMARY

The assessment of the existing transportation system conditions and the transportation network inventory as presented herein identified the following:

- Transportation disadvantaged populations exist throughout the Lakeview community, highlighting the need to provide transportation options for all users of the system to efficient access work, services, and recreation.
- Sidewalks are provided primarily along arterials and collectors in the denser residential and commercial areas of Town. Where available, sidewalk widths range from less than five feet on residential streets to greater than six feet in the downtown core. Areas of Town away from the downtown core are less likely to have an existing or complete sidewalk system. Notably, sidewalks near the Senior Center, which provides transit options for residents, are in disrepair.
- The commercial and downtown corridor of US 395, from S 1st Street to OR 140, is the only street section of highway in Lakeview that meets the target number of marked crossing according to its urban contexts and spacing recommendations in ODOT's Blueprint for Urban Design.
- People riding bicycles "share the road" with motorists along most of the streets within the Town. Share-the-road biking facilities are consistent with the Town's collector street standard, but do not meet the arterial street standard, which require six-foot bike lanes or paved shoulders, or facility type recommendations in ODOT's Blueprint for Urban Design. Limited bicycle lanes currently exists within Lakeview.
- The Lake County Senior Citizens Association (LCSCA) is the primary transit provider in Lakeview and the Inner Court Family Center primarily services North Lake County and serves riders coming to Lakeview. These services
provide rides through demand-responsive (e.g., curb-to-curb trips scheduled by advance reservation) and dial-a-ride shuttle service for seniors, persons with disabilities, and the general public. LCSCA has recently expanded service to include a monthly roundtrip to La Pine and is piloting a service to alturas. No dedicated transit facilifies exist in Lakeview.
- No operational deficiencies were identified on the State or local roadway system.
- Two fatal crashes occurred in the Lakeview UGB from 2014-2018. Both occurred on rural sections of road near the edge of the UGB. Four severe injury crashes occurred over the same period, two of which occurred on US 395 north of Industrial Lane.
- All study intersections and segments do not exceed applicable crash thresholds except for the section of US 395 north of OR 140. This segment transitions to a rural road to the north and experienced a crash rate of 1.65 (crashes per million vehicle-miles of travel), which exceeds that statewide rate for similar facilities.
- The US 395/OR 140 and US 395/J St/Missouri Avenue intersections were observed to have existing geometric layouts that may be confusing for drivers and contribute to long crossing distances for walking or riding a bike.
- The US 395/Industrial Lane, US 395/Kadrmas Road, US 395/7 th Street, and US 395/9th Street intersections were noted for further review through the Solutions analysis due to sight distances deficiencies, increased demand, or other needs as noted by the advisory committee.
- Two crashes involving bicycles or pedestrians were reported over the analysis period. One included a fatality and is included in the two fatal crashes reported from 2014-2018.
- No bridges in the Lakeview UGB were identified as having a low sufficiency rating or classified as "structurally deficient/distressed".
- OR 140 and US 395 are designated Oregon Highway Plan (OHP) freight routes serving as important connections between Southern and Central Oregon and California. Trucks account for approximately 27 percent of OR 140 traffic, 16 percent of US 395 traffic north of OR 140, and 30 percent of US 395 traffic south of OR 140.
- No local freight route designations exist in the Town but some streets experience truck traffic presumably using the local roadway network to avoid the highway system.
- Resources and expenses within the Town's Street Fund have generally been equal in recent years and have not included any discretionary capital improvement projects undertaken by the Town. As such, future improvements to the Town's roadway system will likely need to identify additional funding sources to be implemented.
- No local freight route designations exist in the Town but some Town streets experience heavy vehicle detours from the State highway system.


## OVERVIEW OF LAKEVIEW'S TRANSPORTATION SYSTEM

The TSP addresses the transportation needs for people driving, walking, and cycling within the Town's Urban Growth Boundary (UGB). The geographic extents of the UGB are illustrated in Figure 1. With just more than 2,000 residents, it is the largest town in Lake County and serves many of the retail and employment needs of the County's rural residents. OR 140 and US 395 provide east-west and north-south routes into, out of, or through the Town. The nearest large city is Klamath Falls, which is approximately 95 miles west on OR 140.

Lakeview is surrounded by agricultural and forested lands, including Fremont National Forest and outdoor recreational areas. In past decades, the Town's economic activity was primarily related to the operations of the sawmill, but with the decline in logging across the state, Lakeview's use of the current transportation system has shifted to support newly established industries.


## LAND USES AND POPULATION TRENDS

Existing land use patterns, economic development opportunities, and population demographics play a key role in identifying transportation needs and solutions within the TSP. This information can also help articulate the Town's vision for an enhanced transportation network for people driving, walking, and cycling, as well as to prioritize projects, programs, and policies that support economic development consistent with the existing Comprehensive Plan.

## LAND USE

Comprehensive Plan designations and the location of natural resources, environmental barriers, and activity centers can help define existing transportation system needs. The Town currently has nine Comprehensive Plan designations for lands within the UGB. As illustrated in Figure 2, properties with industrial and commercial designations are generally located north of OR 140 while residentially-designated lands are generally located south. Table 1 provides a summary of the Comprehensive Plan designations within the Town.

|  | Table 1: Comprehensive Plan Designations |
| :--- | :--- |

Source: Comprehensive Plan

## ACTIVITY CENTERS

Providing safe and efficient connections for people walking and cycling to, from, and between major activity centers in the Town is important for creating an equitable transportation system. Key activity centers in the UGB are shown in Figure 3. Some prominent destinations outside of Town limits are the Lake County Airport to the southwest and Warner Canyon Ski Area to the northwest.


Figure 2: Comprehensive Plan Designations


Figure 3

As shown in the figure, key activity centers include:

- Lake County Fairgrounds, Library, and Courthouse
- Lakeview Town Hall, Post Office, DMV, Fire and Police departments, and Lake District Hospital
- Lakeview High School, Daly Middle School, and Arthur D Hay Elementary School
- Swimming Pool City Park
- Bullard Canyon Trailhead
- McDonald City Park


## NATURAL RESOURCES AND ENVIRONMENTAL BARRIERS

Potential environmental considerations or constraints related to future transportation improvements were identified from a review of wetlands and waterways, forest lands, and historical and culture resource sites within the UGB. This review revealed that:

- Swaths of wetlands are present in much of the area north of OR 140, crossing and adjacent to major roads such as US 395, Rabbit Hill Road, Missouri Avenue, Roberta Road, and OR 140; some wetlands are present south of OR 140, primarily crossing and adjacent to US 395.
- Lands immediately outside of the UGB are designated for agriculture and ranging uses. A large portion of the lands further east and west are designated for forest use and are publicly owned.
- Oregon's Historic Sites Database from the State Historical Preservation Office (SHPO) considers the following locations eligible and significant sites (additional survey may be required at the time of design and construction of possible transportation improvements to assess potential impacts to such sites):
- Lake County Round Sale Barn - Bailey \& Massingill General Store
- Abert Lake Petroglyphs (location restricted)
- Heryford Brothers Building
- Nevada-California-Oregon Railway Passenger Station
- Post \& King Saloon
- House of William P Heryford
- House of John N \& Cornelia Watson


## POPULATION DEMOGRAPHICS

The Town's transportation system should be designed and operated to serve people of all ages and abilities. Table 2 summarizes the key population demographics that can help inform the needs of all residents. The information in Table 2 includes estimates for total population, youth (under 18 years of age), seniors ( 65 years and older in age), race/ethnicity, employment status, poverty level (as defined by the United States Census Bureau and for families with children under 18 years of age), and primary mode choice for commuting to work. This information is based on data summarized within the 2018 American Census Survey (ACS). For reference purposes, Figure 4 illustrates the location of the associated census block groups.

As shown, the area north of $N 2^{\text {nd }}$ Street and east of $N$ J Street (Census Block Group 3 on Figure 5), generally includes the population area with the greatest percentage of people considered to be "transportation disadvantaged" within the UGB.

Table 2: 2018 Population Demographics

|  | Block Group 2 | Block Group 3 | Block Group 4 | Block Group 5 | Block Group 7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Demographic | Area north and south of OR 140, east of N S St | Area north of N $2^{\text {nd }} \mathrm{St}$, east of N Jst | Downtown Core/ Western Residences | Area south of $S$ 3rd St, east of S J St | Area south of $S$ 9th St |
| Population | 511 people | 845 people | 625 people | 1,054 people | 556 people |
| Age | 19 percent are 18 and younger and 21 percent are 65 and older | 26 percent are 18 and younger and 16 percent are 65 and older | 10 percent are 18 and younger and 24 percent are 65 and older | 33 percent are 18 and younger and 19 percent are 65 and older | 19 percent are 18 and younger and 35 percent are 65 and older |
| Race | 16 percent are minority populations | 18 percent are minority populations | 22 percent are minority populations | 3 percent are minority populations | 3 percent are minority populations |
| Employment Status | 49 percent are not in the labor force (16 years and older) | 47 percent are not in the labor force (16 years and older) | 45 percent are not in the labor force (16 years and older) | 27 percent are not in the labor force (16 years and older) | 46 percent are not in the labor force (16 years and older) |
| Poverty Level | 0 percent are families below the poverty level | 38 percent are families below the poverty level | 7 percent are families below the poverty level | 24 percent are families below the poverty level | 23 percent are families below the poverty level |
| Transportation | 20 percent carpooled to work and 0 percent rode transit or a bike or walked to work | 17 percent carpooled to work and 16 percent rode transit or a bike or walked to work | 4 percent carpooled to work and 11 percent rode transit or a bike or walked to work | 2 percent carpooled to work and 8 percent rode transit or a bike or walked to work | 8 percent carpooled to work and 0.5 percent rode transit or a bike or walked to work |

The following areas represent the greatest percentage of each demographic:

- North of $\mathrm{N} 2^{\text {nd }}$ Street, east of N J Street (Block Group 3): 38 percent are below poverty; 33 percent commuted to work by modes alternate to a personal vehicle (e.g. carpooling, taking transit, walking, biking, etc.)
- Downtown Core/Western Residences (Block Group 4): 22 percent are minority populations
- South of S 3rd Street, east of S J Street (Block Group 5): 33 percent are youth; 49 percent are not in the labor force
- South of S $9^{\text {th }}$ Street (Block Group 7): 35 percent seniors

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Figure 4

## ROADWAY SYSTEM

The roadway system is an important conveyance of personal travel, freight, transit, and emergency response. This section summarizes the roadway system inventory of identified existing street system characteristics including roadway jurisdiction, functional classification, access management and spacing, and other key considerations.

## STREET SYSTEM CHARACTERISTICS

## ROADWAY JURISDICTION

The streets within the UGB are operated by the Town, Lake County, ODOT, Bureau of Land Management (BLM), and the United States Forest Service (USFS). The jurisdictional responsibility for these streets is shown in Figure 5. Local streets are owned and maintained by the Town. Some of the local roadway network is privately held.

## FUNCTIONAL CLASSIFICATION

The Town, Lake County, and ODOT organize streets into a functional classification system based on a hierarchy of mobility and access to, through, and between different land use types. The TSP inventory focuses on those streets classified as collectors and arterials. These classification levels are identified by ODOT for State facilities and by the Town for Town facilities. Table 3 summarizes the functional classifications within the Town.

| Table 3: Functional Classification Hierarchy |  |  |
| :---: | :---: | :---: |
| Functional Classification | Purpose | Example Streets |
| Arterials | - Represent the highest class of roadway <br> - Intended for mobility by serving high traffic volumes, particularly through traffic, at higher speeds <br> - Serve trucks movements and should emphasize traffic movement over local land access <br> Note: All arterials in Lakeview are on the State Highway system | $\begin{array}{r} \quad \text { OR } 140 \\ -\quad \text { US } 395 \end{array}$ |
| Collectors | - Represent the intermediate roadway class <br> - Collect traffic from the local street system and distribute it to the arterial street system <br> - Provide a balance between traffic movement and land access and should have continuous roadway sections to facilitate traffic circulation through the Town | - Roberta Avenue <br> - LStreet <br> - S 3rd Street |
| Local Streets | - Represent lowest roadway class <br> - Intended for local land access and to carry locally generated traffic at relatively low speeds compared to the collector street system <br> - Should provide connectivity through neighborhoods but be designed to discourage cut-through vehicular traffic | - $\mathrm{S}^{\text {ts }}$ Street <br> - G Street <br> - Millview Street |

Figure 6 illustrates the current functional classification of streets within Lakeview. The existing street system is well connected, providing key arterials via the state highway system to travel north-south and east-west through Town and a collector roadway system that provides access to and from the arterial network and key origins and destinations.

Potential modifications to the functional classification system will be reviewed as part of the solutions analysis for the TSP Update.

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## FACILITY CHARACTERISTICS

The following subsections provide a general inventory of existing street characteristics by facility type, including general use, posted speed limits, pavement types and conditions, Intelligent Transportation Systems (ITS) infrastructure, and other key roadway elements.

## State Facilities

State highways provide statewide and regional connections to the Town. Lakeview is served by two State highways, OR 140 and US 395, that are also designated on the National Highway System (NHS). OR 140 extends east from Lakeview to the Nevada state line and west to other communities, including Klamath Falls. US 395 extends south from Lakeview to the California state line and north to US 20 west of Burns. These State highways connect the Town's residents, employees, visitors, and freight throughout the state as well as with other states. Although these highways provide an important mobility function for motorists and freight, they can present a barrier to those walking and cycling within the Town. Table 4 summarizes key characteristics of OR 140 and US 395.

OR 140 and US 395 have posted speeds of 55 miles per hour (mph) as they enter the UGB and transition to 25 mph as they approach the Town limits and downtown core area. This is shown in Figure 7. As of 2020, the pavement condition for OR 140 is reported as "Good" within the study area. Similarly, the pavement condition for US 395 is reported as "Good" from the northern UGB limit to $S 1^{\text {st }}$ Street where it changes to "Fair" until the southern UGB limit. Both highways provide two vehicular travel lanes within the UGB as well as other areas within the County. Most sections of the highways within the UGB include on-street parking. This is reflective of a "main street" function that both highways serve within the Town.

ODOT maintains ITS infrastructure on US 395 just south of $\mathrm{S} 12^{\text {th }}$ Street (including a camera and road weather information system (RWIS)) to warn drivers leaving town of inclement weather.

| Table 4: State Highway Characteristics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Facility | Extents | Oregon Highway Plan (OHP) Designation | Posted Speed Limit (mph) | Number of Lanes | Travel Lane Width (ft) | Pavement Condition |
| OR 140 | Entire route within UGB | Statewide Highway, Freight Route | 25-55 | 2 | 12 | Good |
| US 395 | Entire route within UGB | Statewide Highway, Freight Route | 25-55 | 2 | 12-15 | Fair to Good |

## Town Streets

Lakeview owns and maintains much of the collector and local street system within the Town's limits. Most of the streets are not built to standards identified in the Town's design guidelines, as many do not have sidewalks and/or these sidewalks are substandard. This results in a disconnected network for those walking.

Town streets generally do not have posted speed limits but are assumed to operate consistent with a 25 -mph speed limit. Exceptions include the school zones that are posted at 20 mph . All Town intersections are either stop or yield controlled.

No local freight route designations exist in the Town but some Town streets experience heavy vehicle detours from the State highway system.

## County Facilities

The County maintains more than 10.6 miles of roadways; these streets are primarily located outside the Town limits but within the UGB. These streets provide connections to State highways, businesses, and residences.

County facilities within the UGB are built to typical County roadway improvement standards, which do not identify the need for curb, gutters, sidewalks, or bicycle facilities. Nearly all existing County facilities within the UGB would require modifications if a jurisdictional transfer to the Town occurs in the future.

## FREIGHT

OR 140 and US 395 are designated Oregon Highway Plan (OHP) freight routes serving as important connections between Southern and Central Oregon and California. Freight is a critical economic component for Lakeview and the region. Figure 8 illustrates the designated freight routes. Both State highways are also designated as Reduction Review Routes, which requires that ODOT consider the needs of load restrictions and oversize-dimension load needs as part of planning, project development, development review, and maintenance.

Per ODOT (Route Maps 3 and 5 through 9), these freight routes have the following movement restrictions:

- OR 140 east of US 395 and US 395 south of OR 140 require Over-Dimension Permits for Triples Combinations or operations exceeding 14 feet in height;
- Both highways require Special Transportation Permits for continuous movement of mobile homes and modular building units over 12 feet but not exceeding 14 feet in width;
- OR 140 east of US 395 has a truck-tractor overall length limit of 65 feet; and,
- Neither highway is authorized for loads 14 feet wide with gross weight up to 98,000 pounds.

Based on the Annual Average Daily Traffic (AADT) reported on ODOT's TransGIS online tool, trucks account for approximately 27 percent of OR 140 traffic, 16 percent of US 395 traffic north of OR 140, and 30 percent of US 395 traffic south of OR 140.

Freight is also transported on Town and County streets to access industrial sites and commercial zones. No specific local freight designations are identified by the Town. However, some Town streets experience truck traffic, presumably using the local roadway network to avoid the highway system.



## ROADWAY IMPROVEMENT STANDARDS

The Town's current street standards are summarized in Table 5.

| Table 5: Street Standards |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Functional Classification | Right-of-Way Widith <br> (fi) | Travel Lanes <br> (f) | Median/ Center Turn Lane (f) | Bke Lanes (fi) | OnStreet Parking (ft) | Curb <br> (in) | Planting <br> Strip (ft) | Sidewalks <br> (ft) |
| Arterial Streets |  |  |  |  |  |  |  |  |
| Arterials within the study area, which are all on the State Highway system, are subject to State highway improvement standards or guidance. |  |  |  |  |  |  |  |  |
| Collector Streets |  |  |  |  |  |  |  |  |
| All Zones Except DSCSD ${ }^{1}$ | 60 | 11 | None | Shared | 7 | 6 | 0-6 | 6 |
| DSCSD Zone | 100 | 10 | None | Shared | $\begin{gathered} 17 \\ \text { (angled) } \end{gathered}$ | 6 | 0-8 | 6-15 |
| Local Streets |  |  |  |  |  |  |  |  |
| Industrial, Commercial, and High Density Residential (R-3) Zones | 60 | 11 | None | Shared | 7 | 6 | 0-6 | 6 |
| DSCSD Zone | 100 | 10 | None | Shared | $\begin{gathered} 17 \\ \text { (angled) } \end{gathered}$ | 6 | 0-8 | 6-15 |
| Single-Family and Multiple Family Residential Zones | 60 | 10 | None | Shared | 8 (one side) | 6 | 0-10 | 6 |
| Alleys | 16-20 | N/A | N/A | N/A | None | None | None | None |
| Accessways and MultiUse Paths | 10-18 | 6-10 | N/A | N/A | N/A | None | None | None |

As State facilities, OR 140 and US 395 are subject to state cross section standards described in the Highway Design Manual (HDM). Within the UGB, the following cross-section elements are considered as part of future roadway improvements:

- 6-foot sidewalks with 3- to 6-foot buffer strips or 8-foot sidewalks without buffer strips
- 6-foot bike lanes or paved shoulders
- 12-foot travel lanes

ODOT's Blueprint for Urban Design provides a context-sensitive approach to roadway improvements. In the future, improvements to the state highway system would rely on its guidance and not solely on the cross-section standards within the HDM.

Over time, the Town and ODOT will modify the existing streets to reflect appropriate standards. These modifications will occur both as part of private development efforts and through public improvement projects.

## ACCESS MANAGEMENT AND SPACING

Providing adequate access to streets, land uses, and key destinations is critical for operating and planning for an effective transportation system for all users. ODOT, the County, and the Town all maintain standards to help balance the needs of through travelers, including freight and transit, and of area residents, employees, and visitors. Access management typically increases access spacing on higher classified roads to prioritize mobility and decreases access spacing on lower classified roads to prioritize local access.

## State Facilities

ODOT establishes access management spacing standards in the OHP and Oregon Administrative Rule (OAR) 734-051-4020(8). Those standards applicable to the highways within the Town are summarized in Table 6. These standards are based on the 2018 AADT, posted speed limit (see Figure 7), and functional classification of the roadways.

## Table 6: ODOT Statewide Highway Access Management Spacing Słandards

| Posted Speed (mph) | Facility | Extents | Access Spacing Standard (Feet) |
| :---: | :---: | :---: | :---: |
| 25 | OR 140 | N Q Street to US 395 | 150 |
|  | US 395 | S $9^{\text {th }}$ Street to OR 140 |  |
| 35 | US 395 | OR 140 to $\mathrm{N} 9^{\text {th }} / \mathrm{H}$ streets | 250 |
|  |  | South of S $12^{\text {th }}$ Street to $S 9^{\text {th }}$ Street |  |
| 40-45 | OR 140 | West of Roberta Road to N Q Street | 360 |
|  | US 395 | $\mathrm{N} 9^{\text {th }} / \mathrm{H}$ streets to north of Missouri Avenue |  |
|  |  | Kadrmas Road to south of S $12^{\text {th }}$ Street |  |
| 50 | US 395 | North of Missouri Avenue Industrial Lane | 1,100 |
| 55 | OR 140 | Western UGB limit to west of Roberta Road | 1,320 |
|  | US 395 | Industrial Lane to northern UGB limit |  |
|  |  | Southern UGB limit to Kadrmas Road |  |

OR 140 and US 395 generally do not meet the identified access spacing standards through town due to the existing built environment and the high number of access locations.

## Town Facilities

The Town's access management standards are summarized in Table 7. Given that the only arterial streets in the Town's transportation network are the State highways, they are subject to ODOT's access management spacing standards in Table 6.

| Table 7: Town Access Management Standards |  |  |
| :---: | :---: | :---: |
| Functional Classification | Spacing Between Intersections <br> of Public Streets (Feet) | Spacing Between Private <br> Driveways and Alleys (Feet) |
| Arterial | See Table 6 | See Table 6 |
| Collector | 300 | 100 |
| Local | 300 | 50 |

Several collector roads with Lakeview do not meet identified access spacing standards due to existing access points, notably including the following facilities:

```
* N J Street
    * Center Street
* N/S L Street
* S 3rd Street
* N/S H Street
- S 7 th Street
N 2 nd Street
- S 9'h Street
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## INTERSECTION OPERATIONS

As part of the inventory, existing peak period intersection operations were evaluated at seven key locations. For reference purposes, the intersections that were studied are shown in Figure 1; the study intersection lane configurations and traffic control devices are illustrated Figure 9.

## TRAFFIC COUNTS

Traffic counts were conducted at the study intersections in October 2020 on a typical weekday over a 4-hour period (2:00 to 6:00 PM). All counts included the total number of pedestrians, bicyclists, and motor vehicles that entered the intersections in 15-minute intervals. Intersection traffic counts are located in Attachment A.

## ANALYSIS METHODOLOGY \& PERFORMANCE STANDARDS

All operational analyses described herein are in conformance with State, County, and Town standard methodologies and guidelines. More details on the analysis methodology can be found in the Methodology Memorandum, included in Attachment B.

The intersections were analyzed during the " $30^{\text {th }}$ highest hour," which generally corresponds to the August PM peak hour. The intersection turning movement volumes are summarized in Figure 10. The operational results for the intersections were compared with applicable Town, County, and State performance standards. ODOT defines intersection performance standards by "mobility targets" that are represented by a volume-to-capacity ratio. The County defines performance standards by "level-of-service," which is a rating from A to F to describe the experience of the user. Per the Methodology Memorandum, the Town does not have established performance standards; therefore, mobility targets are used for planning purposes.

## TRAFFIC OPERATIONS ANALYSIS

Intersection operations analyses identify any of the key locations where mobility targets/performance standards are not met today. The analysis used Vistro software and its Highway Capacity Manual (HCM) $6^{\text {th }}$ edition reports to summarize the volume-to-capacity ratios (v/c), level-of-service (LOS), delay (Del), and turning movements according to their respective mobility targets or performance standards, as well as $95^{\text {th }}$ percentile queues. The $v / c$ ratios, LOS, and delay are reported for the critical movement at unsignalized intersections.

Table 8 summarizes the results of the existing intersection operations analysis and compares them with applicable performance standards. Table 9 summarizes the $95^{\text {th }}$ percentile queues. Attachment $C$ includes the traffic operations worksheets. As shown, all study intersections meet applicable mobility targets. Although all study intersections provide sufficient capacity for existing traffic volumes, the Town identified the US $395 / 7^{\text {th }}$ Street and US $395 / 9^{\text {th }}$ Street intersections as critical facilities for emergency services, as well as the US 395/Kadrmas Road intersection to serve future development of the new Red Rocks industry.


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Table 8: Existing Intersection Operations

| Intersection | Jurisdiction | Performance Standard |  |  |  |  | ing | era |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | CM | v/c | LOS | Del | Mel? |
| 1: US 395/J St/Missouri Ave | ODOT | US 395 <br> Local Streets | v/c $\leq$ | $\begin{aligned} & \text { OHP } \\ & 0.80 \\ & 0.95 \end{aligned}$ | $\begin{gathered} \text { HDM } \\ 0.70 \\ 0.80 \\ \hline \end{gathered}$ | WB | 0.01 | B | 11.8 | Yes |
| 2: Roberta Rd/OR 140 | ODOT | OR 140 Roberta Ave | $v / C \leq$ | $\begin{aligned} & \text { OHP } \\ & 0.80 \\ & 0.95 \end{aligned}$ | $\begin{aligned} & \text { HDM } \\ & 0.70 \\ & 0.80 \end{aligned}$ | SB | 0.07 | B | 10.8 | Yes |
| 3: US 395/OR 140 | ODOT | $\begin{array}{r} \text { US } 395 \\ \text { OR } 140 \end{array}$ | $v / c \leq$ | $\begin{aligned} & \text { OHP } \\ & 0.85 \\ & 0.85 \end{aligned}$ | $\begin{gathered} \text { HDM } \\ 0.70 \\ 0.70 \end{gathered}$ | SBL | 0.28 | C | 15.2 | Yes |
| 4: US 395/S $7^{\text {th }}$ St | ODOT | $\begin{aligned} & \text { US } 395 \\ & \text { S } 7^{\text {th }} \text { St } \end{aligned}$ | $v / C \leq$ | $\begin{aligned} & \text { OHP } \\ & 0.85 \\ & 0.95 \end{aligned}$ | $\begin{aligned} & \text { HDM } \\ & 0.70 \\ & 0.80 \end{aligned}$ | EB | 0.04 | B | 11.6 | Yes |
| 5: US 395/S $9^{\text {th }}$ St | ODOT | $\begin{array}{l\|l} \text { US } 395 \\ \text { S } 9^{\text {th }} \text { St } \end{array} \quad \text { V/C } \leq$ |  | $\begin{aligned} & \text { OHP } \\ & 0.85 \\ & 0.95 \end{aligned}$ | $\begin{aligned} & \text { HDM } \\ & 0.70 \\ & 0.80 \end{aligned}$ | EB | 0.10 | B | 12.5 | Yes |
| 6: Roberta Rd/S 3rd $\mathrm{S} \dagger$ | County | LOS D or Better |  |  |  | WB | 0.05 | A | 9.0 | Yes |
| 7: L St/S 3 ${ }^{\text {rd }} \mathrm{St}$ | Town |  | $\mathrm{c} \leq 1.0$ |  |  | SB | 0.06 | A | 9.5 | Yes |

${ }^{1} C M=$ critical movement; $\mathrm{NB}=$ northbound; $\mathrm{SB}=$ southbound; $\mathrm{EB}=$ eastbound; $\mathrm{WB}=$ westbound; $\mathrm{L}=$ left; $\mathrm{T}=$ through; $\mathrm{R}=$ right
${ }^{2}$ Assumed planning standard

| Table 9: 95th Percentile Queuing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Intersection | Movement ${ }^{1}$ | Storage Length (Feet) ${ }^{2}$ | 95 ${ }^{\text {th }}$ Percentile Queue (Feet) ${ }^{3}$ | Adequate? |
|  | EBLTR | 130 | 25 | Yes |
| e | WBLTR | 150 | 25 | Yes |
| 2: Roberta Rd/OR 140 | NBLTR | 125 | 25 | Yes |
| 2. Roberla Rd/OR 140 | SBLTR | 110 | 25 | Yes |
|  | NBR | 25 | 25 | Yes |
|  | SBL | 75 | 50 | Yes |
| 3: US 395/OR 140 | SBTR | 75 | 25 | Yes |
|  | EBL | 100 | 25 | Yes |
|  | WBR | 90 | 0 | Yes |
| 4: US 395/S $7^{\text {th }}$ St | EBLTR | 100 | 25 | Yes |
| 5: US 395/S 9th St | EBLTR | 115 | 25 | Yes |
| 5. US 3\%/S | WBLTR | 115 | 25 | Yes |
| 6: Roberta Rd/S 3rd St | WBLTR | 130 | 25 | Yes |
| 7: L St/S 3rd St | SBLTR | 130 | 25 | Yes |

[^0]
## CRASH ANALYSIS

A crash analysis was performed to identify existing safety deficiencies and included a review of historic crash data at seven key intersections and three study segments. The following sections summarize the historic crash data; identified crash patterns on the transportation system among all users including motor vehicles, pedestrians, and bicyclists; fatal and serious injury crashes; and intersection and segment crash rates.

## HISTORIC CRASH DATA

The crash analysis summarized herein is based on the most recent available five years of reported crash data (January 1, 2014 through December 31, 2018) obtained from ODOT's Crash Analysis and Reporting Unit. The data includes the location, type, and severity of all crashes that occurred along Town, County and ODOT facilities within the Town UGB.

## CRASH PATTERNS

A total of 69 crashes were reported within the Lakeview UGB between 2014 and 2018 . Table 10 summarizes the reported crashes by severity. There were two reported fatalities during the study period. Thirty-five percent of the crashes resulted in a fatality or injury. Figure 11 shows a map of the study area crash locations based on severity. Over half of the study area crashes occurred on either OR 140 or US 395.

Table 10: Study Area Crash Severity (2014-2018)

|  | Fatal | Incapacitating <br> Injury (A) | Non- <br> Incapacitating <br> Injury (B) | Possible <br> Injury (C) | Property <br> Damage <br> Only (PDO) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> Reported <br> Crashes | 2 | 4 | 8 | 10 | 45 | 69 |
| Percent of <br> Total <br> Crashes | $3 \%$ | $6 \%$ | $12 \%$ | $14 \%$ | $65 \%$ | $100 \%$ |

Table 11 summarizes the collision type of the study area crashes. Turning movement, rear end, and angle crashes, typically associated with intersections, account for over 50 percent of crashes.

Table 11: Study Area Collision Types (2014-2018)

| Collision Type | Number of Reported Crashes | Percent of Toial Crashes |
| :--- | :---: | :---: |
| Turning Movement | 14 | $20 \%$ |
| Rear End | 13 | $19 \%$ |
| Angle | 10 | $15 \%$ |
| Fixed-Object | 10 | $15 \%$ |
| Backing | 7 | $10 \%$ |
| Miscellaneous/Non-Collision | 7 | $10 \%$ |
| Sideswipe (Overtaking) | 3 | $4 \%$ |
| Sideswipe (Meeting) | 2 | $3 \%$ |
| Parking Maneuver | 2 | $3 \%$ |
| Pedestrian | 1 | $1 \%$ |
| Total | $\mathbf{6 9}$ | $\mathbf{1 0 0 \%}$ |

## FATAL AND SERIOUS INJURY CRASHES

This section documents crash characteristics that resulted in fatal and serious injuries.
Two fatal crashes took place in the UGB between 2014 and 2018.

- One fatal crash occurred on Stock Drive Lane, west of Roberta Road The crash took place at 5:00 PM on a Tuesday in August 2016 under clear, daylight conditions and on a dry roadway surface. This crash involved a motorist and a bicyclist and resulted from the driver's vision being impaired by the sun. The crash was reported as a hit and run. Drugs and alcohol were reported as involved.
- One fatal crash occurred in the vicinity of the US 395/Geyser View Lane intersection. The crash took place at 3:00 PM on a Sunday in September 2018 under clear, daylight conditions and on a dry roadway surface. This motorcycle rear-end crash with a passenger car resulted from the driver failing to avoid a vehicle stopped in traffic waiting to make a left turn. No speeding, drugs, or alcohol were reported as involved.

Four serious injury crashes took place in the study area and are detailed below.

- One incapacitating crash occurred mid-block on north $2^{\text {nd }}$ Street, between north K and J streets. The crash took place at 5:00 PM on a Sunday in May 2014 under clear, daylight conditions and on a dry roadway surface. This passenger car rear-end crash with a parked vehicle resulted from failing to maintain the travel lane and improper driving. No speeding, drugs, or alcohol were reported as involved.
- Two incapacitating crashes occurred on US 395, north of Industrial Lane.
- The first crash at this location took place at 9:00 AM on a Sunday in March 2017 under snowy, daylight conditions and on a snowy roadway surface. This rear-end crash resulted from reckless driving, driving too fast for the conditions (but not exceeding the speed limit), and sliding or swerving into a vehicle stopped in traffic waiting to make a left turn due to the snowy roadway surface. No speeding, drugs, or alcohol were reported as involved.
- The second crash at this location took place at 9:00 AM on a Sunday in May 2018 under clear, daylight conditions and on a dry roadway surface. This turning movement crash resulted from inattention and the driver not yielding the right-of-way by making a left-turn in front of oncoming traffic. No speeding, drugs, or alcohol were reported as involved.
- The US 395/Industrial Lane intersection was also identified by the Town as a safety concern with heavy vehicles utilizing the opposing lane of Industrial Lane (a County facility) when making turns off US 395.
- One incapacitating crash occurred in the vicinity of the US 395/S $10^{\text {th }}$ Street intersection. The crash took place at 4:00 PM on a Monday under clear, daylight conditions and on a dry roadway surface. This sideswipemeeting crash (drivers traveling in opposite directions) resulted from careless driving and inattention. No speeding, drugs, or alcohol were reported as involved.


## PEDESTRIAN AND BICYCLE CRASHES

Two crashes involving people walking or bicycling were recorded.

- One pedestrian crash occurred in the vicinity of N G Street/ $1^{\text {st }}$ Street at 1:00 PM on a Thursday in February 2015 under clear, daylight conditions and on a dry roadway surface. This pedestrian crash was caused by the driver not yielding the right-of-way to the pedestrian and resulted in possible injuries. No speeding, drugs, or alcohol were reported as involved.
- One bicycle crash occurred on Stock Drive Lane, west of Roberta Road, resulting in fatal injuries. The crash is described in the previous section.


## INTERSECTION SAFETY ANALYSIS

The intersection safety analysis evaluated intersection crash rates against statewide crash performance standards. The analysis included a review of ODOT's Safety Priority Index System (SPIS) sites. Attachment D includes the crash data considered.

## STATEWIDE CRASH PERFORMANCE STANDARDS

The state has identified several safety performance standards in evaluating intersection safety. The intersection crash analysis used statewide performance standards of $90^{\text {th }}$ percentile and critical crash rates per ODOT's Analysis Procedures Manual (APM) at the study intersections to identify where existing safety issues may exist.

## 90th Percentile Crash Rate

The $90^{\text {th }}$ percentile crash rate performance standard is used to identify intersections with more crashes than expected (based on traffic volume) by comparing intersection crash rates to the statewide $90^{\text {th }}$ percentile crash rates for similar intersection types. The statewide $90^{\text {th }}$ percentile crash rates were developed from a study of 500 intersections in Oregon and are organized by land type and traffic control. Table 12 summarizes the study intersection crash rates, calculated according to ODOT APM Chapter 4. These rates were compared to the rural statewide $90^{\text {th }}$ percentile crash rates by intersection type obtained from Exhibit 4-1. As shown, all study intersections have crash rates below their $90^{\text {th }}$ percentile crash rates. See Attachment E for the analysis sheet.

| Table 12: Intersection and 90th Percentile Crash Rate Comparison |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Intersection | Total Crashes | 90ih Percentile Crash Rate ${ }^{1}$ | Intersection Crash Rate ${ }^{2}$ | Does Intersection Rate Exceed 90 ${ }^{\text {th }}$ Rate? |
| 1: US 395/J St/Missouri Ave | 1 | 1.08 | 0.17 | No |
| 2: Roberta Rd/OR 140 | 2 | 1.08 | 0.33 | No |
| 3: US 395/OR 140 | 1 | 1.08 | 0.08 | No |
| 4: US 395/S $7^{\text {th }}$ St | 1 | 0.475 | 0.12 | No |
| 5: US 395/S $9^{\text {th }}$ St | 1 | 1.08 | 0.13 | No |
| 6: Roberta Rd/S 3rd S $\dagger$ | 0 | 0.475 | 0.00 | No |
| 7: L St/S 3rd St | 0 | 0.475 | 0.00 | No |

'ODOT APM Exhibit 4-1 for rural intersections
${ }^{2}$ ODOT APM Intersection Crash Rate per MEV equation; AADT determined using identified intersection peak hours

## SPIS

ODOT identifies the top five and ten percent SPIS locations along State highways. No SPIS sites are identified within the UGB today.

## INTERSECTION GEOMETRICS

The US 395/OR 140 and US 395/J St/Missouri Avenue intersections were observed to have existing geometric layouts that may be confusing for drivers and contribute to long crossing distances for those walking or riding a bike. Geometrics improvements for both should be further evaluated as part of the forthcoming solutions analysis.

In addition, the US 395/Industrial Lane, US 395/Kadrmas Road, US 395/7th Street, and US 395/9th Street intersections were noted for further review through the Solutions analysis due to sight distances deficiencies, increased demand, or other needs as noted by the advisory committee.


## HIGHWAY SEGMENT SAFETY ANALYSIS

The crashes that have occurred along the segments of OR 140 and US 395 that did not occur at intersections were compared against the crash rates provided in Table II ODOT's 2018 statewide Crash Rate Book. From Table II, Table 13 lists the average crash rates for Other Principal Arterials of Rural Cities based on the past five years of reported crash rates. These crash rates represent the crashes per Million Vehicle-Miles of Travel (MVMT) of mainline state highways for federally defined urban and rural areas and based on functional classification. This evaluation is summarized in Table 13. See Attachment E for the analysis sheet.

| Table 13: Segment and Rural City Crash Rałe Comparison |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Street | Extents | Length (miles) | Tołal Crashes | Rural City Crash Rate ${ }^{1}$ | Segment Crash Rate | Does <br> Segment Rate Exceed Rural City Rate? |
| OR 140 | UGB (west) to US 395 | 1.5 | 6 | 1.32 | 0.75 | No |
| US 395 | UGB (south) to OR 140 | 2.1 | 13 | 1.32 | 1.18 | No |
| US 395 | OR 140 to UGB (north) | 2.3 | 14 | 1.32 | 1.65 | Yes |

'Determined based on crashes per MVMT.
As shown, the section of US 395 from OR 140 to the northern UGB exceeds the applicable crash rate. Key crash characteristics along this corridor are summarized below. Further, the Town identified this corridor as experience notable activity and conflicts between traffic, businesses, and recreational access.

- The top collision types were rear-end, turning movement-related, and/or involved a crash with an animal.
- Most of the crashes occurred during clear weather conditions (86\%), on a dry roadway surface (86\%), and during the day (86\%).
- Three crashes (21\%) were reported to involve alcohol, drugs, or excessive speed.
- Over half of the crashes (57\%) resulted in some level of injury; one crash resulted in fatal injuries.

Potential safety improvements to improve identified crash patterns will be recommended as part of this TSP update.

## ACTIVE TRANSPORTATION

An evaluation of existing network that serves people walking and riding a bicycle within the Town is provided below. This section also summarizes existing transit services available to area residents.

## BICYCLE SYSTEM

Today, people riding bicycles "share the road" with motorists along most of the streets within the Town. Share-theroad biking facilities are consistent with the Town's collector street standard, but do not meet the arterial street standard, which require six-foot bike lanes or paved shoulders. On state facilities, ODOT's recently published Blueprint for Urban Design provides recommendations on bicycle facility types based on a roadway's posted speed and daily traffic volumes. This guidance document will be referenced during the forthcoming solutions analysis.

Bike lanes are striped along three collector streets, as illustrated in Figure 12.
The condition of shared bike facilities along collector streets is dependent upon the roadway pavement conditions. The following section describes the LTS analysis completed for the bicycle system to identify gaps and needs for primary routes within the UGB.

## Bicycle Level of Traffic Stress

ODOT provides a methodology for evaluating Bicycle LTS (BLTS), which uses four levels to describe the "stress: that a person biking can experience on the roadway. These stresses range from BLTS 1 (little traffic stress) to BLTS 4 (high traffic stress). The BLTS score is determined based on vehicular speed, number of travel lanes per direction, the presence and width of an on-street bicycle facility and/or adjacent parking lane, and several other factors.

Table 14 provides definitions of each BLTS rating. Per ODOT, BLTS 2 is generally considered an acceptable level of stress for most adults and older children.

## Table 14: Bicycle Level of Traffic Stress (BLTS) Definition

## BLTS <br> Rating

## Definition of BLTS Segment, Suitability, and Condition

Represents little to no traffic stress, suitable for all cyclists. This includes children that are trained to safely 1 cross intersections alone and supervising riding parents of younger children. Traffic speeds and volumes are low. Also includes paths and lanes that are physically separated from motor vehicle traffic. Represents little traffic stress but requires more attention than young children can handle, so is suitable for teen and adult cyclists with adequate bike handling skills. Traffic speeds and volumes are slightly higher than LTS 1 streets, but speed differentials are still low.
Represents moderate stress and is suitable for most observant adult cyclists. Traffic speeds and volumes are moderate.
Represents high stress and suitable for experienced and skilled cyclists. Traffic speeds and volumes are high.

The BLTS analysis was only conducted for those arterials and collectors within the UGB where traffic volume data was available; Figure 13 illustrates the results of the BLTS analysis. As shown, US 395 and OR 140 have BLTS ratings 3 or greater, except for a short segment of OR 140 west of the at-grade rail crossing. These higher BLTS ratings mean these roadways are not suitable for all riders either due to posted speed limits ( 45 mph or higher) or the traffic volumes in combination with no dedicated facilities. The collector street system, though mostly lacking bicycle facilities, has BLTS ratings generally 2 or lower due to low traffic volumes and posted speed limits. However, Roberta Road, from S 3rd Street to OR 140, is a collector street rated with a BLTS score higher than 2 due to having a $45-\mathrm{mph}$ posted speed limit and no dedicated facilities.

Attachment F include the BLTS analysis worksheet.


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## PEDESTRIAN SYSTEM

Sidewalks are provided primarily along arterials and collectors in the denser residential and commercial areas of Town. Where available, sidewalk widths range from less than five feet on residential streets to greater than six feet in the downtown core. In locations where sidewalks are unavailable, people walking must use the roadway edge or roadway shoulder, if available.

The existing sidewalk infrastructure reflects a transition between a rural environment within the County to a small town.

Figure 14 illustrates where sidewalk gaps occur along the collector and arterial streets today. Figure 14 also illustrates where existing sidewalk infrastructure is broken or continuous, further showing gaps in primary routes. Notably, sidewalks near the Senior Center, which provides transit options for residents, are in disrepair. No information regarding ADA compliance of pedestrian facilities is available. ODOT and the Town should collaborate to assess and repair facilities as feasible.

Within Town, sidewalk infill and/or repair projects are generally the responsibility of adjacent property owners, but limited resources creates challenges in enforcing associated Town ordinances. Marked crossings are provided near schools and at major intersections, such as along US 395 at OR 140 and through the downtown core.

ODOT's Blueprint for Urban Design provides target spacing of crosswalks along State highways for different urban contexts, as defined in the guide. According to preliminary findings, Lakeview's urban context varies along OR 140 and US 395 from 'Rural Community' near the edge of Town and 'Traditional Downtown/Central Business District (CBD)' in the downtown core. These contexts have target crossing spacings ranging from 250 to 1,500 feet. Based on how these urban contexts are defined, the following crossing spacings are recommended along OR 140 and US 395 through the Town.

- Traditional Downtown/CBD: 250 to 550 feet
- US $395-S 1^{\text {st }}$ Street to $N 2^{\text {nd }}$ Street
- Residential/Commercial Corridor: 500 to 1,000 feet
- OR 140 - N U Street to US 395
- US 395 -S $12^{\text {th }}$ Street to $S 1^{\text {st }}$ Street; $\mathrm{N} 2^{\text {nd }}$ Street to N H Street;
- Suburban Fringe: 750 to 1,500 feet
- OR 140 - UGB to N U Street
- US 395 - UGB to $S 12^{\text {th }}$ Street; $N$ H Street to UGB

Today, the commercial and downtown corridor of US 395 from $S 1^{\text {st }}$ Street to OR 140 is the only street section that meets its target crossing spacings. Planning for marked crossings along US 395 and OR 140 according to their target spacing can help in developing a connected pedestrian system by prioritizing sidewalks that join with the crosswalks.

The following section describes the LTS analysis completed for the pedestrian system to identify gaps and needs for primary routes within the study area.

## Pedestrian Level of Traffic Stress

ODOT provides a methodology for evaluating Pedestrian LTS (PLTS), classifying four levels of traffic stress that a person walking can experience on the roadway. These stresses range from PLTS 1 (little traffic stress) to PLTS 4 (high traffic stress). The PLTS score is determined based on the presence, condition, and width of sidewalk, the presence, type, and width of sidewalk buffers (e.g. planter strips), and the general surrounding land use. All categories are scored and the highest score governs as the overall PLTS of a facility.

Table 15 provides definitions of each PLTS rating. Per ODOT, PLTS 2 is generally considered a reasonable target for most pedestrian facilities as this is the level of stress that is often considered acceptable to most people walking.

## Table 15: Pedestrian Level of Traffic Stress (BLTS) Definition

## PLTS <br> Rating

## Definition of PLTS Segment, Suitability, and Condifion

Represents little to no traffic stress, suitable for all users including children 10 or younger, groups of people, and people using wheeled mobility devices. Provides a separated facility with a buffer between the pedestrian and vehicular traffic.
Represents little traffic stress but requires more attention to the traffic situation than what young children may be capable. Suitable for children over 10, teens, and adults. Provides sidewalks in good condition; roadways may have higher speeds and volumes.
Represents moderate stress and is suitable for adults. An able-bodies adult would feel uncomfortable
3 but safe using this facility. Includes higher speed roadways with smaller or no buffers. Small areas in this facility may be impassable for a person using a wheeled mobility device. Some users are willing to use this facility.
Represents high traffic stress. Only able-bodied adults with limited route choices would use this facility.
4 Traffic speeds are moderate to high with narrow or no pedestrian facilities provided. Only the most confident users are willing to use this facility.

Figure 15 illustrates the results of the PLTS analysis for arterial and collector streets within the study area. Attachment F include the PLTS analysis worksheet. As shown, the following arterial and collector segments have PLTS ratings of two or lower, meaning walking facilities are generally comfortable for most users:

- US 395 from OR 140 to $N 6^{\text {th }}$ Street
- OR 140 from the at-grade railroad crossing to US 395
- N 2 ${ }^{\text {nd }}$ Street from N H Street to N D Street
- Center Street from N H Street to N D Street

Roadways near the edge of Town limits generally have higher PLTS ratings, meaning walking conditions may be uncomfortable for most users, mostly due to the lack or adequacy of dedicated pedestrian facilities.


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## TRANSIT

The Lake County Coordinated Transit Plan identifies existing transit services and facilities in the Town.

## ROUTES AND SERVICES

Lake County is served by two public transportation services that are both funded through the Lake County Public Transportation program and operate individually. The Lake County Senior Citizens Association (LCSCA) is the primary provider in Lakeview, while the Paisley-based Inner Court Family Center (ICFC) brings riders from the northern communities of Lake County into Lakeview for services. Both programs are primarily demand-responsive (e.g., curb-to-curb trips scheduled by advance reservation) although LCSCA is also piloting scheduled intercommunity and intracommunity services. All services are open to the general public and are described in more detail below.

- Lake County Senior Citizens Association: LCSCA primarily operates from 8:00 am to 5:00 pm, Monday through Friday, and provides demand-responsive trips throughout Lake County and connecting to neighboring counties. This service is available to the general public, focusing on seniors and those with medical needs, with scheduled service to Klamath Falls. LSCSA recently expanded service to include a weekly Lakeview Shopping Shuttle, a weekly trip from Christmas Valley to LaPine, and is piloting a service to Alturas, CA. These trips provide access to medical appointments, meal sites, shopping, social services, and other important destinations. Medical trips are most often provided to facilities in Lakeview, Bend, La Pine, and Medford. Since the LCSCA is a non-profit organization, it does not charge any fares for transportation services, but suggests a $\$ 10$ donation for trips to La Pine or Alturas, $\$ 20$ for trips to Klamath Falls, and $\$ 30$ for Bend or Medford. Trips are coordinated as often as possible to serve multiple riders, and are advertised in the newspaper, on the radio, and on Facebook. LCSCA generally provides over 400 trips monthly to approximately 90 seniors and persons with disabilities. This results in 800 driver hours and covers 15,000-20,000 miles each month. LCSCA also provides services in northern Lake County, with vehicles and drivers stationed in the Christmas Valley area. LCSCA operates with a fleet of 8 vehicles and one dedicated bus barn in the Christmas Valley area, all owned by the County.
- Inner Court Family Center: ICFC provides service in North Lake County and serves riders coming to Lakeview. Service is volunteer-based with volunteer drivers receiving mileage reimbursement. This service is demandresponsive and open to the general public. ICFC has no dedicated fleet or facilities.


## FACILITIES

There are no existing transit facilities within the Town of Lakeview.

## CONNECTIONS TO OTHER PROVIDERS

With regular service to La Pine, Bend, Klamath Falls, and Medford, rider transfers to other transit services in those communities are available, including the following:

- Sage Stage: Sage Stage is managed by Modoc Transportation Agency in California. This service provides public transportation in Modoc County, California. Sage Stage offers the following intercity transit routes:
- Alturas, Canby, Adin, Beiber, Fall River, Burney, and Redding;
- Alturas, Canby, Tulelake, Newell and Klamath Falls; and
- Alturas, Likely, Madeline, Susanville and Reno.

Sage Stage also provides local bus service in Alturas within a 10-mile radius including Modoc Estates and Cal Pines.

- Cascades East Transit (CET) in La Pine and Bend: CET serves Deschutes, Crook, and Jefferson counties and the Confederated Tribes of Warm Springs with local fixed route, deviated fixed route and demand response service as well as intercommunity service within the service region.
- Basin Transit Service (BTS) in Klamath Falls: BTS provides fixed route and complementary paratransit services within the district boundaries, generally within the urban area of Klamath Falls. BTS is planning out-of-district service throughout Klamath County and in partnership with transit services provided by The Klamath Tribes.
- Amtrak in Klamath Falls: this rail provider has a station in Klamath Falls and connects riders to all around the country
- Rogue Valley Transit District (RVTD) in Medford: this bus service operates similar to CET, connecting riders within and between the cities of Jackson County


## AIR TRANSPORTATION AND RAIL

## AIR TRANSPORTATION

The Lake County Airport is owned and operated by Lake County and is located southwest of the Town. The airport is surrounded by lands zoned as Agriculture. The airport is classified as a Category III - Regional General Aviation Airport. Category III airports typically support most twin and single-engine aircraft and can accommodate business jet operations. They serve regional transportation needs with a large and often sparsely populated service area. In particular, the USFS regularly fly Single Engine Air Tankers (SEATs) and helicopters from the airport as an operations base during fire season.

The airport's thousand-acre property supports airfield, landside, and support facilities. Airfield facilities include pavements used for aircraft movement such as runways, taxiways, and aprons. The airport runway supports general aviation aircraft, which includes private and business operator but does not include commercial airline operators. The runway is 100 feet wide and 5,318 feet long.

Landside facilities include hangers, airport buildings, and vehicle parking and support facilities include emergency services and utilities. Main access to the airport is provided by Airport Road (County Highway 1-10A), which is outside the Lakeview UGB.

Imagery surfaces and protected airspace associated with the airport do not affect facilities within Lakeview.

## RAIL

The Lake County Railroad, operated by Goose Lake Railway LLC, provides the only rail service through Lakeview. The rail line terminates in Lakeview and runs south into California, providing rail service between the study area and the communities of Alturas and Perez. The line is classified as a non-Class 1 railroad and only freight service. NonClass 1 railroads provide important collector/distributor services for Class 1 railroads and also local rail services for rural shippers. This rail service has exported goods over the last century such as timber, wheat, perlite, and livestock.

Within the UGB, the rail line runs north-south, west of US 395, adjacent to south M Street, and between north O and $N$ streets. The line crosses south $9^{\text {th }}$ and $3^{\text {rd }}$ streets, north $2^{\text {nd }}$ Street, OR 140, and Missouri Avenue with at-grade crossings, and terminates in the area west of US 395 and south of Industrial Lane near timber mills and similar industries. The line also crosses Deadman Creek, north of south $9^{\text {th }}$ Street by way of a rail bridge.

## BRIDGES

The existing bridge locations and conditions, such as weight restrictions, sufficiency ratings, and structurally deficient or functionally obsolete bridges, were also reviewed. The key characteristics of the three bridges located within the UGB are summarized in Table 16.

Table 16: Bridge Characteristics

| Bridge <br> ID | Carries | Crosses | Milepo <br> st | Design/Material | Owner | Sufficiency <br> Rating |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01990 | US 395 | Hammersly <br> Creek | 141.5 | Concrete Culvert | ODOT | $>80$ |
| 03917 | US 395 | Deadman <br> Creek | 143.77 | Continuous Concrete Culver | ODOT | $>80$ |
| $37 C 060$ | S 6 th <br> Street | Deadman <br> Creek | 0.4 | Prestressed Concrete Slab | Town | $>80$ |

The Town-owned bridge on south $6^{\text {th }}$ Street is on the National Bridge Inventory System (NBIS). No bridges are posted for weight restrictions.

Inspectors rate the bridges on structural integrity, functionality, scour rating, and other criteria, and assign a score called a sufficiency rating. The sufficiency rating is a numeric evaluation of a bridge's sufficiency to remain in service. Sufficiency ratings range from zero to 100 , with zero being entirely insufficient and 100 percent entirely sufficient. The sufficiency rating considers structural adequacy, serviceability, functional obsolescence, importance for public use, eligibility for federal replacement funds, and a few lesser factors. Bridges receiving low scores are posted to restrict the allowable maximum vehicle weight, rehabilitated, or replaced.

A sufficiency rating below 50 implies that the bridge is in poor condition and needs to be replaced. Bridges rated between 50 and 80 indicate that the bridge is in fair condition, and that rehabilitation, if cost-effective, will bring the bridge up to current standards. Bridges with sufficiency ratings above 80 may have specific elements that do not meet current minimum standards, but overall are in good or adequate condition in all areas and are not eligible for federal funding. As shown in Table 13, the most recent bridge inspection reports provided by ODOT show that no bridge has a sufficiency rating below 80 . Further, no bridge in the UGB is categorized as structurally or functionally obsolete.

## FUNDING

The Town Street Fund Budget resources and expenditures are shown in Table 17. As presented, the Town has operated with a budget of about $\$ 170,000$ to $\$ 190,00$ annually for Personnel Services and Materials \& Services. The Town has also received grant funding, shown in Table 17 as Capital Outlay, to repave local streets.

Resources and expenses have generally been equal in recent years and have not included any discretionary capital improvement projects undertaken by the Town. Funding is a primary and important goal of the Town. As such, future improvements to the Town's roadway system will likely need to identify additional funding sources to be implemented (e.g. tax levy or fuel tax). The Town identified the need for making grant opportunities well known to Town citizens who are responsible for infilling or repairing sidewalk. Further, transit grants (e.g. Statewide Transportation Improvement Fund) have the potential to fund sidewalk infill and/or repair projects showing a strong transit nexus, such as the sidewalks near the Senior Center.

Table 17 - Town of Lakeview Street Fund Budget History

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## NEXT STEPS

The existing needs and deficiencies will be used to help identify projects, priorities, and programs for inclusion into the TSP Update. These existing needs will also serve as the basis for the Future Needs analysis, to be summarized in Technical Memorandum \#4, which will be prepared in Winter 2020.

## ATTACHMENT A - TRAFFIC COUNTS



| $\begin{aligned} & \text { 5-Min Count } \\ & \text { Period } \\ & \text { Beginning At } \end{aligned}$ | US 395/N J St <br> (Northbound) |  |  |  | US 395/N J St (Southbound) |  |  |  | N J St (North Intersection)(Eastbound) |  |  |  | $\begin{gathered} \hline \text { N J St (North Intersection) } \\ \text { (Westbound) } \\ \hline \end{gathered}$ |  |  |  | Total | Hourly Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |
| 5:10 PM | 0 | 8 | 0 | 0 | 0 | 8 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 287 |
| 5:15 PM | 0 | 10 | 0 | 0 | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 281 |
| 5:20 PM | 0 | 11 | 0 | 0 | 0 | 3 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 18 | 272 |
| 5:25 PM | 0 | 14 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 272 |
| 5:30 PM | 0 | 8 | 0 | 0 | 0 | 8 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 274 |
| 5:35 PM | 0 | 9 | 0 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 260 |
| 5:40 PM | 0 | 12 | 0 | 0 | 0 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 267 |
| 5:45 PM | 0 | 8 | 0 | 0 | 0 | 6 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 18 | 263 |
| 5:50 PM | 0 | 8 | 0 | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 249 |
| 5:55 PM | 0 | 5 | 0 | 0 | 0 | 9 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 240 |
| Peak 15-Min Flowrates | Northbound |  |  |  | Southbound |  |  |  | Eastbound |  |  |  | Westbound |  |  |  | Total |  |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |  |
| All Vehicles | 0 | 132 | 0 | 0 | 0 | 164 | 60 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 76 |
| Heavy Trucks Buses | 0 | 28 | 0 |  | 0 | 12 | 12 |  | 8 | 0 | 0 |  | 0 | 0 | 0 |  |  | 0 |
| Pedestrians |  | 0 |  |  |  | 0 |  |  |  | 0 |  |  |  | 0 |  |  |  | 0 |
| Bicycles Scooters | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  | 0 |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| $\begin{aligned} & \text { 5-Min Count } \\ & \text { Period } \\ & \text { Beginning At } \end{aligned}$ | Roberta Rd (Northbound) |  |  |  | Roberta Rd (Southbound) |  |  |  | $\begin{gathered} \hline \text { OR } 140 \text { (N 4th St) } \\ \text { (Eastbound) } \\ \hline \end{gathered}$ |  |  |  | $\begin{gathered} \text { OR } 140 \text { (N 4th St) } \\ \text { (Westhound) } \end{gathered}$ |  |  |  | Total | Hourly Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |
| 5:10 PM | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 13 | 3 | 0 | 28 | 324 |
| 5:15 PM | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 5 | 1 | 0 | 0 | 8 | 6 | 0 | 24 | 324 |
| 5:20 PM | 1 | 2 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 1 | 8 | 1 | 0 | 21 | 320 |
| 5:25 PM | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 9 | 0 | 0 | 15 | 304 |
| 5:30 PM | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 5 | 1 | 0 | 2 | 10 | 3 | 0 | 26 | 300 |
| 5:35 PM | 0 | 1 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 7 | 0 | 0 | 2 | 7 | 0 | 0 | 22 | 291 |
| 5:40 PM | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 8 | 2 | 0 | 21 | 289 |
| 5:45 PM | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 1 | 3 | 3 | 0 | 16 | 270 |
| 5:50 PM | 0 | 1 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 6 | 2 | 0 | 2 | 7 | 1 | 0 | 24 | 278 |
| 5:55 PM | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 11 | 3 | 0 | 23 | 276 |
| Peak 15-Min Flowrates | Northbound |  |  |  | Southbound |  |  |  | Eastbound |  |  |  | Westbound |  |  |  | Total |  |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |  |
| All Vehicles | 20 | 16 | 28 | 0 | 32 | 12 | 12 | 0 | 4 | 72 | 8 | 0 | 20 | 128 | 16 | 0 |  | 8 |
| Heavy Trucks Buses | 0 | 4 | 4 |  | 12 | 0 | 0 |  | 4 | 4 | 4 |  | 0 | 24 | 0 |  |  | 6 |
| Pedestrians |  | 0 |  |  |  | 0 |  |  |  | 0 |  |  |  | 0 |  |  |  | 0 |
| Bicycles Scooters | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  | 0 |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Q

## Onatic conts

DATA THAT DRIVES COMMUNITIES
Location: US 395/N G St -- OR 140 (N 4th St)
Date: 10/7/2020

$34 \quad 20 \quad 95$
136
814

Peak Hour: 4:20 PM - 5:20 PM
Peak 15: 4:55 PM - 5:10 PM
PHF: 0.839109

Quality Counts
DATA THAT DRIVES COMMUNITIES
Location: US 395/N G St -- OR 140 (N 4th St)
Date: 10/7/2020

| Site Code: 15270703 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | US 395/N G St Southbound |  |  |  |  | Restaurant Dwy Southwestbound |  |  |  |  | OR 140 (N 4th St) Westbound |  |  |  |  | US 395/N G St Northbound |  |  |  |  | OR 140 ( N 4 th St) |  |  |  |  |
| Start | Right | Thru | Left |  | Peds | $\left.\begin{array}{\|c\|} \text { Right to } \\ \text { us } 395 / \mathrm{N} \\ \mathrm{G} \mathrm{St} \end{array} \right\rvert\,$ | $\begin{array}{\|c\|} \hline \text { Right to } \\ \text { OR 140 } \\ \text { (N 4th St) } \\ \hline \end{array}$ | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline 395 \text { US } \\ \mathrm{St} \end{array}$ | $\left\lvert\, \begin{gathered} \text { Left to } \\ \text { OR 140 } \\ \text { (N 4th St) } \end{gathered}\right.$ | Peds | $\begin{gathered} \text { Right to } \\ \text { Restaura } \\ \text { nt Dwy } \end{gathered}$ | Right | Thru | Left | Peds | Right | $\begin{array}{\|c\|} \text { Right to } \\ \text { Restaura } \\ \text { nt Dwy } \\ \hline \end{array}$ | Thru | Left | Peds | Right | Thru | Left to <br> Restaura <br> nt Dwy | Left | Peds |
| 02:00 PM | 0 | 0 |  | . |  | - | , | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 02:05 PM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:10 PM | - | 0 | 0 | 0 |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:15 PM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:20 PM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:25 PM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:30 PM | 0 |  |  | 0 |  |  | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:35 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:40 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:45 PM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:50 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:55 PM | 0 |  |  | 0 |  | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |
| 03:00 PM | , | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:05 PM |  | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |
| 03:10 PM | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $03: 15$ PM | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:20 PM | , | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 2 |
| 03:25 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |
| 03:30 PM | 0 | 0 | 0 |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:35 PM | , |  | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 |
| 03:40 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $03: 45$ PM | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:50 PM | , | , | 0 | , |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:55 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 PM | - | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:05 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:10 PM | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:20 PM | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 |
| 04:25 PM | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 |  |
| 04:35 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:40 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:50 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $04: 55$ PM | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:00 PM | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:05 PM | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:10 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 |
| 05:20 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:25 PM | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |  | 0 | 0 | 1 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  |  |
| 05:35 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 |
| 05:40 PM | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 PM | 0 | , | 0 | , | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 1 | 0 |  | 0 |  | 2 |
| 05:50 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 3 |
| 05:55 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 |  |
| Total | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 |  | 0 | 4 | 0 | 1 | 0 | 0 | 17 |
|  | 0 | 0 | 0 |  | 1 |  |  |  |  |  |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 2 | 0 | 0 |  | 0 | 5 |

Quality Counts
DATA THAT DRIVES COMMUNITIES
Location: US 395/N G St -- OR 140 (N 4th St)
Date: 10/7/2020

| Site Code: 15270703 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | US 395/N G St Southbound |  |  |  |  | Restaurant Dwy Southwestbound |  |  |  |  | OR $140(\mathrm{~N} 4$ th St)Westbound |  |  |  |  | US 395/N G St |  |  |  |  | OR $140(\mathrm{~N} 4$ th St $)$Eastbound |  |  |  |  |
| Start Time | Right | Thru | Left | Left to <br> Restaura <br> nt Dwy | U-Turn | $\begin{array}{\|c\|} \hline \text { Right to } \\ \text { US } 395 / \mathrm{N} \\ \text { G St } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { Right to } \\ \text { OR 140 } \\ \text { (N 4th St) } \end{array}$ | $\begin{array}{\|c} \hline \text { Leff to US } \\ 395 / \mathrm{N} \text { G } \\ \mathrm{St} \end{array}$ | $\begin{array}{\|c\|} \hline \text { Left to } \\ \text { OR 140 } \\ (\mathrm{N} \text { 4th St }) \end{array}$ | U-Turn | $\begin{array}{\|c\|} \hline \text { Right to } \\ \text { Restaura } \\ \text { nt Dwy } \end{array}$ | Right | Thru | Left | U-Turn | Right | Right to <br> Restaura <br> nt Dwy | Thru | Left | U-Turn | Right | Thru | Left to <br> Restaura <br> nt Dwy | Left | U-Turn |
| 02:00 PM |  |  |  |  |  |  | 0 | 0 | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 2 | 0 |  |  |
| 02:05 PM | 1 |  | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 |
| 02:10 PM | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | O | 0 | 0 | 0 |
| 02:15 PM | 2 |  | 1 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
| 02:20 PM | 1 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 | 0 |
| 02:25 PM | 0 |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 02:30 PM | 0 |  | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |  |
| 02:35 PM | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 0 |
| 02:40 PM | 0 |  | 1 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |  |
| 02:45 PM | 2 |  | 1 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| 02:50 PM | 0 |  | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:55 PM | 1 |  | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |  |
| 03:00 PM | 3 |  | 5 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 |
| 03:05 PM | 1 |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |  | 0 |
| 03:10 PM | 0 |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |  |
| 03:15 PM | 1 |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| $03: 20 \mathrm{PM}$ |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 1 | 0 | 2 |  |
| 03:25 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| 03:30 PM | 2 |  | 0 |  |  |  | 0 |  | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |  |
| 03:35 PM | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | , | 2 | 0 | 2 |  |
| 03:40 PM | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 03:45 PM | 1 |  | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |  |
| 03:50 PM | 2 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |
| 03:55 PM | 1 |  | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 04:00 PM | 1 |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |  |
| 04:05 PM | 0 |  | 1 | , | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| 04:10 PM | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| 04:15 PM | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |  | 0 | 1 |  |
| 04:20 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 1 | 0 |
| 04:25 PM | 1 |  | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |  |
| 04:30 PM | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| 04:35 PM | 2 |  | 3 |  |  |  | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |  |
| 04:40 PM | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 04:45 PM | 0 |  | 1 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 |  | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 |
| 04:50 PM | 0 |  | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 1 |  |
| 04:55 PM | 0 |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |  |
| $05: 05$ PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:10 PM | 0 |  | 1 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 05:15 PM | 0 |  | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 05:20 PM | 0 |  | 3 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |  |
| 05:25 PM | 0 |  | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 PM | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $05: 35 \mathrm{PM}$ | 1 |  | 0 | , | 0 | 0 | 0 | 0 | 0 | , | 0 | 1 | 0 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| $05: 40 \mathrm{PM}$ | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| $05: 45 \mathrm{PM}$ | , | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 05:50 PM | 0 |  | 0 | , | 0 | 0 | 0 | , | 0 | 0 | , | 1 | 1 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:55 PM | 0 |  | 1 |  | 0 |  | 0 | 0 | 0 | , | 0 | 0 | 1 |  | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Total | 27 |  | 46 | 0 | 0 | 1. | 0 | 0 | 0 | 0 | 0 | 44 | 36 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 46 | 0 |
|  | 4 | , | 12 |  |  |  |  |  |  |  |  | 5 | 7 | 1 |  | 0 |  |  |  |  | 0 | 7 |  | 11 |  |
|  | 12\% | 5\% | 13\% |  |  |  |  |  |  |  |  | 4\% | 4\% | 7\% |  | 0\% |  |  |  |  | 0\% | 5\% |  | 22\% |  |



| $\begin{aligned} & \text { 5-Min Count } \\ & \text { Period } \\ & \text { Beginning At } \end{aligned}$ | US 395(Northbound) |  |  |  | US 395(Southbound) |  |  |  | S 7th St(Eastbound) |  |  |  | S 7th St(Westbound) |  |  |  | Total | Hourly Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |
| 5:10 PM | 0 | 21 | 0 | 0 | 0 | 18 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 42 | 439 |
| 5:15 PM | 1 | 18 | 0 | 0 | 0 | 16 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 445 |
| 5:20 PM | 0 | 13 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 442 |
| 5:25 PM | 0 | 19 | 0 | 0 | 0 | 6 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 29 | 439 |
| 5:30 PM | 0 | 14 | 0 | 0 | 0 | 6 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 435 |
| 5:35 PM | 1 | 20 | 0 | 0 | 0 | 16 | 3 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 45 | 439 |
| 5:40 PM | 0 | 14 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 425 |
| 5:45 PM | 0 | 14 | 0 | 0 | 0 | 13 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 411 |
| 5:50 PM | 0 | 12 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 399 |
| 5:55 PM | 0 | 12 | 0 | 0 | 0 | 8 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 380 |
| Peak 15-Min Flowrates | Northbound |  |  |  | Southbound |  |  |  | Eastbound |  |  |  | Westbound |  |  |  | Total |  |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |  |
| All Vehicles | 16 | 200 | 0 | 0 | 0 | 212 | 36 | 0 | 24 | 0 | 8 | 0 | 0 | 0 | 0 | 0 |  | 6 |
| Heavy Trucks Buses | 0 | 24 | 0 |  | 0 | 8 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  | 2 |
| Pedestrians |  | 0 |  |  |  | 0 |  |  |  | 0 |  |  |  | 0 |  |  |  | 0 |
| Bicycles Scooters | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  | 0 |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| $\begin{aligned} & \text { 5-Min Count } \\ & \text { Period } \\ & \text { Beginning At } \end{aligned}$ | US 395(Northbound) |  |  |  | US 395(Southbound) |  |  |  | S 9th St(Eastbound) |  |  |  | S 9th St(Westbound) |  |  |  | Total | Hourly Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |
| 5:10 PM | 1 | 13 | 0 | 0 | 1 | 17 | 2 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 41 | 406 |
| 5:15 PM | 1 | 17 | 0 | 0 | 1 | 12 | 3 | 0 | 4 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 42 | 421 |
| 5:20 PM | 0 | 10 | 0 | 0 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 414 |
| 5:25 PM | 1 | 15 | 0 | 0 | 0 | 5 | 3 | 0 | 4 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 31 | 412 |
| 5:30 PM | 0 | 12 | 1 | 0 | 2 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 24 | 408 |
| 5:35 PM | 0 | 14 | 0 | 0 | 0 | 10 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 32 | 401 |
| 5:40 PM | 1 | 9 | 0 | 0 | 1 | 8 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 395 |
| 5:45 PM | 2 | 14 | 0 | 0 | 2 | 8 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 384 |
| 5:50 PM | 0 | 12 | 0 | 0 | 0 | 9 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 374 |
| 5:55 PM | 1 | 10 | 0 | 0 | 3 | 2 | 4 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 360 |
| Peak 15-Min |  | North | ound |  |  | South | ound |  |  | East | und |  |  | West | ound |  |  |  |
| Flowrates | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |
| All Vehicles | 8 | 184 | 0 | 0 | 12 | 172 | 28 | 0 | 36 | 12 | 8 | 0 | 0 | 4 | 8 | 0 |  | 2 |
| Heavy Trucks Buses | 0 | 8 | 0 |  | 0 | 4 | 0 |  | 4 | 0 | 0 |  | 0 | 0 | 0 |  |  | 6 |
| Pedestrians |  | 8 |  |  |  | 0 |  |  |  | 0 |  |  |  | 0 |  |  |  | 8 |
| Bicycles Scooters | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 4 | 0 |  |  | 4 |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| $\begin{aligned} & \text { 5-Min Count } \\ & \text { Period } \\ & \text { Beginning At } \end{aligned}$ | Roberta Rd (Northbound) |  |  |  | Roberta Rd (Southbound) |  |  |  | $\begin{gathered} \text { S 3rd St } \\ \text { (Eastbound) } \end{gathered}$ |  |  |  | S 3rd St(Westbound) |  |  |  | Total | Hourly Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |
| 5:10 PM | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 85 |
| 5:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 83 |
| 5:20 PM | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 79 |
| 5:25 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 64 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 |
| 5:35 PM | 0 | 1 | 1 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 54 |
| 5:40 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 48 |
| 5:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 47 |
| 5:50 PM | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 49 |
| 5:55 PM | 0 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 49 |
| Peak 15-Min Flowrates | Northbound |  |  |  | Southbound |  |  |  | Eastbound |  |  |  | Westbound |  |  |  | Total |  |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |  |
| All Vehicles | 0 | 28 | 8 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 52 | 0 |  | 44 |
| Heavy Trucks Buses | 0 | 16 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 8 |  |  | 4 |
| Pedestrians |  | 0 |  |  |  | 0 |  |  |  | 4 |  |  |  | 0 |  |  |  | 4 |
| Bicycles Scooters | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  | 0 |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| $\begin{aligned} & \text { 5-Min Count } \\ & \text { Period } \\ & \text { Beginning At } \end{aligned}$ | SLSt(Northbound) |  |  |  | SLSt(Southbound) |  |  |  | S 3rd St(Eastbound) |  |  |  | S 3rd St(Westbound) |  |  |  | Total | Hourly Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |
| 5:10 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 5 | 1 | 0 | 0 | 0 | 6 | 1 | 0 | 15 | 168 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 6 | 157 |
| 5:20 PM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 4 | 0 | 0 | 0 | 2 | 1 | 0 | 11 | 146 |
| 5:25 PM | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 14 | 140 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 10 | 139 |
| 5:35 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 4 | 1 | 0 | 10 | 143 |
| 5:40 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 5 | 140 |
| 5:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 6 | 135 |
| 5:50 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 122 |
| 5:55 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 115 |
| Peak 15-Min Flowrates | Northbound |  |  |  | Southbound |  |  |  | Eastbound |  |  |  | Westbound |  |  |  | Total |  |
|  | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U | Left | Thru | Right | U |  |  |  |
| All Vehicles | 0 | 0 | 0 | 0 | 24 | 0 | 28 | 0 | 28 | 28 | 0 | 0 | 0 | 68 | 60 | 0 |  | 6 |
| Heavy Trucks Buses | 0 | 0 | 0 |  | 0 | 0 | 4 |  | 0 | 0 | 0 |  | 0 | 12 | 4 |  |  | 0 |
| Pedestrians |  | 0 |  |  |  | 12 |  |  |  | 0 |  |  |  | 0 |  |  |  | 2 |
| Bicycles Scooters | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 4 |  |  | 4 |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## ATTACHMENT B - METHODOLOGY MEMORANDUM

## DRAFT MEMORANDUM

Date: July 14, 2020
To: Project Management Team, Technical Advisory Committee (TAC) \& Citizens Advisory Committee (CAC)

From: Matt Kittelson, PE, Julia Kuhn, PE, and Miranda Barrus
Project: Town of Lakeview Transportation System Plan Update
Subject: Draft Methodology Memorandum

## INTRODUCTION

This memorandum documents the methodology and key assumptions that are proposed for use as part of the analyses conducted for the Town of Lakeview Transportation System Plan Update (Lakeview TSP). The methodologies included in this memorandum are based on guidance provided in the Oregon Department of Transportation (ODOT) Analysis Procedures Manual (APM), Version 2 (APM - Reference 1) and direction provided by the Town of Lakeview and ODOT staff. The methodology and assumptions described in this memorandum include:

- Data collection methodologies that consider the ongoing COVID-19 pandemic;
- Traffic operations at the study intersection under existing, future no-build, and future build traffic conditions;
- Traffic safety at the study intersection and along study area roadways;
- Gaps and deficiencies in the bicycle and pedestrian network;
- Gaps and deficiencies in the transit service (service frequency, hours, coverage, etc.); and
- Gaps and deficiencies in other travel modes.

This information will serve as a baseline for identifying a comprehensive list of needs to be addressed as part of the TSP update as well as to help identify and evaluate potential solutions as part of a prioritized list of improvements for the TSP update.

## STUDY AREA

The Lakeview TSP update includes the multimodal transportation network within the town's urban growth boundary (UGB) and includes seven study intersections along OR 140 and US 395. Figure 1 illustrates the study area.

TSP INTERSECTIONS

The following study intersection will be evaluated to inform the identification of existing and future capacity needs: :

```
| Roberta Avenue/OR 140 \ US 395/South 7th Street
| L Street/South 3rd Street > Roberta Road/South 3rd Street
| US 395/South 9}\mp@subsup{9}{}{\mathrm{ th Street }
```

- US 395/J Street/Missouri Avenue

Figure 1 illustrates the location of the study intersections; all study intersections are unsignalized.

$\qquad$

## VOLUME DEVELOPMENT

The following sections describe how existing "proxy" volumes will be calculated at the study intersection and how they will be used to evaluate existing and future traffic intersection operations.

## TRAFFIC COUNTS

Traffic patterns are not currently reflective of typical conditions due to school closures and "Stay Home, Stay Safe" orders associated with the COVID-19 pandemic. For these reasons, four-hour traffic counts will be conducted at the study intersections in Fall 2020 contingent on school being back in session. If school is not back in session in the fall, alternative methods will be pursued, including estimating current volumes based on historical counts and trends.

## SEASONAL ADJUSTMENT FACTOR

$30^{\text {th }}$ Hour Volumes ( 30 HV ) will be developed based on the traffic counts collected or estimated at the study intersections and the application of seasonal adjustment factors consistent with the methodology identified in the APM. The APM provides three methods for identifying seasonal adjustment factors for highway traffic volumes. All three methods utilize information provided by Automatic Traffic Recorders (ATRs) positioned in select locations throughout the State Highway System that collect traffic data 24 -hours a day, 365 days a year. Each method was evaluated to determine which is most appropriate for the study intersections. Below is a description of each. Based on the evaluations, the ATR On-Site Method will be used for study intersections on State facilities.

- On-Site ATR Method: Calculates seasonal adjustment factors based on local ATR locations. This method requires that no major study intersections be located within the ATR and the project area and Average Annual Daily Traffic (AADT) be within 10 percent of the AADT within the project area.
- Characteristics Table: Calculates seasonal adjustment factors based on representative ATR locations from locations around the state based on AADT, seasonal traffic trends, area type, number of travel lanes, etc.
- Seasonal Trends Table: Calculates seasonal adjustment factors based seasonal variation trends from representative travel patterns (e.g., summer, commuter, weekend, etc.)

Lakeview is in south central Oregon at the junction of US 395 and OR 140. ATR stations are located north and south of town on US 395 (19-004 and 19-008) and west on OR-140 (18-017). As shown in Table 1, seasonal adjustment factors based on these stations range from 1.01 to 1.03 with an average of 1.02 when adjusting for data collected in September.

As regional highways connecting small communities, OR 140 and US 395 have AADT lower than that observed within the Town of Lakeview. However, these ATRs represent traffic entering or exiting Lakeview from major external destinations and, as such, reasonable fluctuation in travel demand within the town. No major cities, towns, or highway junctions exist between any of the ATR locations and Lakeview. For these reasons, we propose to utilize the On-Site ATR Method based on these stations to calculate seasonal adjustment factors for Lakeview.

Table 1 presents values that represent the percent of Average Daily Traffic (ADT) at these ATR's from the past five years during their average peak month and the month when traffic counts proposed to be collected (September 2020), which result in their respective seasonal adjustment factors.

Table 1: Seasonal Adjustment Factor Calculation

| Year | 2014 | 2015 | 2016 | 2017 | 2018 | Average | Seasonal Adjustment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ATR 18-017 (OR 140, Beatiy) |  |  |  |  |  |  |  |
| Peak Month (July) | 131 | 127 | 129 | 131 | 127 | 129 | N/A |
| Count Month (September) | 118 | 127 | 129 | 132 | 128 | 128 | 1.01 |
| ATR 19-004 (US 395, Valley Falls) |  |  |  |  |  |  |  |
| Peak Month (August) | 131 | 129 | 136 | 181 | 135 | 134 | N/A |
| Count Month (September) | 121 | 131 | 131 | 130 | 136 | 130.67 | 1.03 |
| ATR 19-008 (US 395, New Pine Creek) |  |  |  |  |  |  |  |
| Peak Month (August) | 125 | 120 | 126 | 163 | 121 | 124 | N/A |
| Count Month (September) | 117 | 123 | 129 | 118 | 133 | 123.33 | 1.01 |
|  |  |  |  |  |  | Average | 1.02 |

Note: crossed out values are dropped from average calculations per ODOT methodology. Calculations are based on the percentage of ADT from the peak month divided by the percentage of ADT from the count month.

US 395 and OR 140 have ADT in the range of 4,000 within Lakeview. Per APM guidance, the ATRs shown in Table 1 are within $10 \%$ of that value $(4,300$ and 3,800 )

## HISTORICAL GROWTH FACTOR

If traffic counts cannot be collected in Fall 2020 and analysis requires developing "proxy volumes" to replicate current traffic volumes, available traffic counts collected in previous years will be historically adjusted per the APM utilizing data from ODOT's Future Volume Tables (FVT). Per the APM, an R-squared value (RSQ, a measure of fit) of 0.75 is preferred, however, and $R$-squared value of 0.5 or higher is acceptable when applying the data from the FVTs. If the $R$-squared value is unacceptable, then a nearby location with similar characteristics should be substituted.

Based on the data provided in ODOT's FVTs, the annual growth rate for the study intersections was calculated from the existing (2016) and future (2038) traffic volumes along OR 140 (mileposts 95.39, 95.72,96.03, and 96.35) and US 395 (mileposts $142.88,143.01,143.06,143.32,143.65,143.86$, and 144.08 ) at locations within the study area with acceptable R-squared values. Based on the analyses of these locations, the applicable annual growth rate is approximately 0.2 percent and will be applied to historical traffic counts for the existing conditions analysis if traffic counts are not collection in Fall 2020.

## FORECAST TRAFFIC VOLUMES

The horizon year for the Lakeview TSP will be 2040. Forecast traffic volumes for the study intersections will be developed based on the existing traffic volumes and ODOT's historical trends method, described in the previous section, by applying an annual growth rate of approximately 0.2 percent to the study intersections.

## TRAFFIC ANALYSIS

This section documents the mobility standards and targets that will be used to evaluate the performance of the study intersections and to identify potential alternatives to address operational issues on ODOT and local facilities.

## INTERSECTION OPERATIONAL STANDARDS

The seven identified study intersections are subject to the corresponding jurisdiction's operating standards described in the following sections.

## ODOT FACILITIES

ODOT uses volume-to-capacity ( $\mathrm{v} / \mathrm{c}$ ) ratios (mobility targets) to assess intersection operations. Table 6 of the Oregon Highway Plan (OHP - Reference 2) and Table 10-2 of the Oregon Highway Design Manual (HDM Reference 3) provide maximum $v / \mathrm{c}$ ratios for all signalized and unsignalized intersection located outside the Portland metropolitan area. The OHP ratios are used to evaluate existing and future no-build conditions, while the HDM ratios are used in the creation of future alternatives for projects along state highways. The ODOT controlled intersections within the study area are located along OR 140 and US 395. The following provides a summary of the state highway classifications, freight route designations, and other roadway characteristics at each of the study intersections to help determine v/c ratios.

1. Roberta Avenue/OR 140 - The east and west legs of OR 140 are classified as Statewide Highways and designated OHP freight routes outside of an MPO with a posted speed of 40 miles per hour (mph). The north and south legs are Town facilities so ODOT's Freight Route on a Statewide Highway mobility target will be applied to the east and west approaches and ODOT's District/Local Interest Roads mobility target will be applied to the north and south approaches.
2. US $395 /$ South $9^{\text {th }}$ Street - The north and south legs of US 395 are classified as Statewide Highways and designated OHP freight routes outside of an MPO with posted speeds of 25 mph north and 35 mph south whereas the east and west legs are Town facilities. ODOT's Freight Route on a Statewide Highway mobility target will be applied to the north and south approaches and ODOT's District/Local Interest Roads mobility target will be applied to the east and west legs.
3. US 395/J Street/Missouri Avenue - The north and south legs of US 395 are classified as Statewide Highways and designated OHP freight routes outside of an MPO with a posted speed of 45 mph whereas the west leg is a Town facility. ODOT's Freight Route on a Statewide Highway mobility target will be applied to the north and south approaches and ODOT's District/Local Interest Roads mobility target will be applied to the west leg.
4. US $395 /$ South $7^{\text {th }}$ Street - The north and south legs of US 395 are classified as Statewide Highways and designated OHP freight routes outside of an MPO with a posted of 25 mph whereas the west leg is a Town facility. ODOT's Freight Route on a Statewide Highway mobility target will be applied to the north and south approaches and ODOT's District/Local Interest Roads mobility target will be applied to the west leg.
5. US $395 /$ OR 140 - The north and south legs of US 395 and the west leg of OR 140 are classified as Statewide Highways and designated OHP freight routes outside of an MPO with posted speeds of 25 mph west and south and 35 mph north. Therefore, ODOT's Freight Route on a Statewide Highway mobility target will be applied to the north, south, and west legs.

Table 1 summarizes the $v / c$ ratios that will be used to identify existing and potential future operational issues at the ODOT study intersections.

Table 1: ODOT Mobility Targets

| Map ID | Intersection | Traffic Control | OHP Mobility Targeł | HDM Standard |
| :---: | :---: | :---: | :---: | :---: |
| 1 | US 395/J Street/Missouri Avenue | Unsignalized | $\begin{gathered} \text { US 395: } 0.80 \\ \text { Local Streets: } 0.95 \end{gathered}$ | $\begin{gathered} \text { US 395: } 0.70 \\ \text { Local Streets: } 0.80 \end{gathered}$ |
| 2 | Roberta Avenue/OR 140 | Unsignalized | OR 140: 0.80 <br> Roberta Avenue: 0.90 | $\begin{gathered} \text { OR 140: } 0.70 \\ \text { Roberta Avenue: } 0.75 \end{gathered}$ |
| 3 | US 395/OR 140 | Unsignalized | 0.85 | 0.70 |
| 4 | US 395/South 7th Street | Unsignalized | $\begin{gathered} \text { US 395: } 0.85 \\ \text { S } 7^{\text {th }} \text { Street: } 0.95 \end{gathered}$ | $\begin{gathered} \text { US 395: } 0.70 \\ \text { S } 7^{\text {th }} \text { Street: } 0.80 \end{gathered}$ |
| 5 | US 395/South 9th Street | Unsignalized | US 395: 0.85 S $9^{\text {th }}$ Street: 0.95 | $\begin{gathered} \text { US 395: } 0.70 \\ \text { S 9th Street: } 0.80 \end{gathered}$ |

## LOCAL FACILITIES

The Town of Lakeview does not have established mobility targets for local facilities. As such, we will evaluate and report operational characteristics of study intersections on the local system based on a volume-to-capacity ratio of 1.0 .

Table 2: Town Mobility Targets

| Map ID | Intersection | Traffic Control | Mobility Target |
| :---: | :--- | :---: | :---: |
| 6 | Roberta Road/South 3rd Street | Unsignalized | 1.0 for planning purpose |
| 7 | L Street/South 3rd Street | Unsignalized | 1.0 for planning purpose |

Traffic operations at the study intersections will be evaluated as outlined above. Potential solutions will be identified and evaluated for the study intersections that are found to exceed the mobility targets and standards under existing and future traffic conditions.

## ANALYSIS PARAMETERS

The bullets below identify the specific sources of data and methodologies proposed to conduct the operational analysis. Analysis of all state facilities will be conducted according to the APM, unless otherwise agreed upon by the Town and ODOT.

1. Intersection/Roadway Geometry (number of lanes, lane configurations, cross-section elements, etc.) will be collected through aerial photography and confirmed through a site visit. Available as-built data may also be used to verify existing roadway geometry. The analysis models will be built on scaled roadway line work from GIS or aerial photography.
2. Operational Data (posted speeds, intersection control, rail crossings, etc.) will be collected through aerial photography and confirmed through Oregon digital video log, straight line charts, GIS data, and local knowledge.
3. Peak Hour Factors (PHF) will be calculated for each intersection, as available within traffic count data, and applied to the existing conditions analysis. Per the APM, PHF's of 0.95 will be used for the year 2040 analysis for major arterial to major arterial facilities, with 0.92 applied to major arterial to minor arterial facilities, 0.90 applied to minor arterial to minor arterial facilities, 0.88 applied to minor arterial to collector arterials, and 0.85
applied to collector to collector or lower classification roads. If the existing PHF is greater than these default future values, the existing PHF will be applied.
4. Traffic Volume development is described above.
5. Traffic Operations
a. The methodologies identified in the Highway Capacity Manual 6th Edition (HCM - Reference 4) will be used to analyze traffic operations at the study intersections.
b. Vistro 7 will be used to conduct the traffic operations analyses. Vistro 7 is a software tool designed to assist with operations analyses in accordance with HCM 6th Edition methodologies. Level-of-service (LOS), Delay (del), and Volume to Capacity ( $\mathrm{v} / \mathrm{c}$ ) will be reported at all intersections regardless of jurisdiction. The LOS, del, and v/c will be reported for the critical movement at unsignalized intersections. Failing, unsignalized intersections will be evaluated using ODOT's ADT-based preliminary signal warrants and the Manual on Uniform Traffic Control Devices (MUTCD Warrant 1).

## TRAFFIC ANALYSIS SOFTWARE \& INPUT ASSUMPTIONS

Vistro software will be used for the intersection analysis. The reported results will be the level of service, intersection delay, and v/c ratios generated by the HCM reports. Analysis assumptions are listed in Table 4.

Table 4: Analysis Assumptions

## Arterial Intersection Parameters

Peak Hour Factor
Conflicting Bikes and Pedestrian per Hour
Area Type
Ideal Saturation Flow Rate (for all movements)
Lane Width
Percent Heavy Vehicles
Percent Grade
$95^{\text {th }}$ percentile \& Average vehicle queues

## Existing Conditions

## From traffic counts

From traffic counts, as available
Other
1,750 passenger cars per hour per lane 12 feet unless field observations suggest otherwise From traffic counts by movement, as available Estimated based on field observations Vistro summary output

## CRASH ANALYSIS

The five most recent years of crash data will be obtained from ODOT's crash database and reviewed at the study intersections and along state and non-state roadway segments within the study area, consistent with the methodologies outlined in the APM. The crash data will be analyzed to identify potential crash patterns (such as crash types and locations). Crash rates and critical crash rates will be developed, as applicable. Intersection crash rates will be compared to the published 90th-percentile crash rates in Exhibit 4-1 of the APM. In addition, ODOT's top $10 \%$ ODOT Safety Priority System sites will be reviewed, as appropriate. Identified potential countermeasures (and resulting crash percentage reduction) will be taken from the All Roads Transportation Safety (ARTS) Crash Reduction Factors (CRF) listing or the CRF Appendix when available.

## MULTIMODAL ANALYSIS

The multimodal analysis will be performed in accordance with the Level of Traffic Stress (LTS) methodologies identified in Chapter 14 of the APM for pedestrian and bicycle facilities along collector and arterial roadways within the study area. Pedestrian and Bicycle LTS have unique criteria that are used to determine a facility's LTS score (e.g. number of lanes, bike lane widths, adjacent parking, roadway functional classification, daily volume, paved
shoulder widths, posted speed limits, sidewalk conditions and widths, illumination presence, etc.). LTS scores range from little traffic stress (LTS 1) to high traffic stress (LTS 4) and are based on the perceived safety issue of being in close proximity to vehicles whether on a spacing distance or speed basis. In addition to the LTS evaluation, the multimodal analysis will assess availability of sidewalks and bicycle lanes and identify gaps in primary routes along collector and arterial roadways.

## REFERENCES

1. Oregon Department of Transportation. Analysis Procedures Manual, 2018.
2. Oregon Department of Transportation. Oregon Highway Plan, 2015.
3. Oregon Department of Transportation. Highway Design Manual, 2012.
4. Transportation Research Board. Highway Capacity Manual, 6th Edition, 2016.

## ATTACHMENT C - OPERATIONS WORKSHEETS

Town of Lakeview
Weekday PM Peak Hour
Version 2020 (SP 0-6)
Transportation System Plan Update
Existing 2020 Traffic Conditions

## Intersection Level Of Service Report <br> Intersection 1: US 395/N J St

Control Type: Analysis Method:
Analysis Period:

Two-way stop HCM 6th Edition 15 minutes

| Delay (sec / veh): | 12.6 |
| :---: | :---: |
| Level Of Service: | B |
| Volume to Capacity $(\mathrm{v} / \mathrm{c}):$ | 0.008 |

0.008

Intersection Setup

| Name | US 395 |  |  | US 395 |  |  | N J St |  |  | Put Rd |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach | Northbound |  |  | Southbound |  |  | Eastbound |  |  | Westbound |  |  |
| Lane Configuration | $\stackrel{t}{4}$ |  |  | $\stackrel{t}{\square}$ |  |  | $\stackrel{t}{4}$ |  |  | $\stackrel{t}{4}$ |  |  |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Entry Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Entry Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Pocket Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Speed [mph] | 45.00 |  |  | 50.00 |  |  | 25.00 |  |  | 25.00 |  |  |
| Grade [\%] | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  |
| Crosswalk | No |  |  | No |  |  | No |  |  | No |  |  |

## Volumes

| Name | US 395 |  |  | US 395 |  |  | N J St |  |  | Put Rd |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base Volume Input [veh/h] | 0 | 113 | 0 | 2 | 128 | 51 | 16 | 0 | 0 | 3 | 1 | 2 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [\%] | 0.00 | 20.00 | 0.00 | 50.00 | 18.00 | 20.00 | 19.00 | 0.00 | 0.00 | 100.00 | 0.00 | 100.00 |
| Growth Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 113 | 0 | 2 | 128 | 51 | 16 | 0 | 0 | 3 | 1 | 2 |
| Peak Hour Factor | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 | 0.8300 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 34 | 0 | 1 | 39 | 15 | 5 | 0 | 0 | 1 | 0 | 1 |
| Total Analysis Volume [veh/h] | 0 | 136 | 0 | 2 | 154 | 61 | 19 | 0 | 0 | 4 | 1 | 2 |
| Pedestrian Volume [ped/h] | 0 |  |  | 0 |  |  | 0 |  |  | 0 |  |  |

Intersection Settings

| Priority Scheme | Free | Free | Stop |  |
| :---: | :---: | :---: | :---: | :---: |
| Flared Lane |  |  | No |  |
| Storage Area [veh] | 0 | 0 | 0 |  |
| Two-Stage Gap Acceptance |  |  | 0 |  |
| Number of Storage Spaces in Median | 0 | 0 | No |  |

Movement, Approach, \& Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d_M, Delay for Movement [s/veh] | 7.63 | 0.00 | 0.00 | 8.01 | 0.00 | 0.00 | 11.28 | 11.25 | 9.37 | 12.64 | 11.37 | 10.19 |
| Movement LOS | A | A | A | A | A | A | B | B | A | B | B | B |
| 95th-Percentile Queue Length [veh/In] | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.10 | 0.10 | 0.10 | 0.04 | 0.04 | 0.04 |
| 95th-Percentile Queue Length [ft/ln] | 0.00 | 0.00 | 0.00 | 0.13 | 0.13 | 0.13 | 2.48 | 2.48 | 2.48 | 0.98 | 0.98 | 0.98 |
| d_A, Approach Delay [s/veh] |  | 0.00 |  |  | 0.07 |  |  | 11.28 |  |  | 11.76 |  |
| Approach LOS |  | A |  |  | A |  |  | B |  |  | B |  |
| d_I, Intersection Delay [s/veh] | 0.82 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS | B |  |  |  |  |  |  |  |  |  |  |  |

Town of Lakeview
Weekday PM Peak Hour
Transportation System Plan Update
Existing 2020 Traffic Conditions

## Intersection Level Of Service Report Intersection 2: OR 140/Roberta Rd

Control Type: Analysis Method: Analysis Period:

Two-way stop HCM 6th Edition 15 minutes

| Delay (sec / veh): | 11.6 |
| :---: | :---: |
| Level Of Service: | B |
| Volume to Capacity $(\mathrm{v} / \mathrm{c}):$ | 0.023 |

Intersection Setup

| Name | Roberta Rd |  |  | Roberta Rd |  |  | OR 140 |  |  | OR 140 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach | Northbound |  |  | Southbound |  |  | Eastbound |  |  | Westbound |  |  |
| Lane Configuration | $\stackrel{t}{4}$ |  |  | $\stackrel{t}{1}$ |  |  | $\stackrel{t}{4}$ |  |  | $\stackrel{t}{1}$ |  |  |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Entry Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Entry Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Pocket Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Speed [mph] | 45.00 |  |  | 25.00 |  |  | 40.00 |  |  | 40.00 |  |  |
| Grade [\%] | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  |
| Crosswalk | No |  |  | No |  |  | No |  |  | No |  |  |

## Volumes

| Name | Roberta Rd |  |  | Roberta Rd |  |  | OR 140 |  |  | OR 140 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 13 | 11 | 15 | 15 | 11 | 14 | 5 | 81 | 8 | 13 | 121 | 21 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [\%] | 15.00 | 18.00 | 13.00 | 20.00 | 9.00 | 14.00 | 20.00 | 15.00 | 38.00 | 8.00 | 12.00 | 5.00 |
| Growth Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 13 | 11 | 15 | 15 | 11 | 14 | 5 | 81 | 8 | 13 | 121 | 21 |
| Peak Hour Factor | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 | 0.8800 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 4 | 3 | 4 | 4 | 3 | 4 | 1 | 23 | 2 | 4 | 34 | 6 |
| Total Analysis Volume [veh/h] | 15 | 13 | 17 | 17 | 13 | 16 | 6 | 92 | 9 | 15 | 138 | 24 |
| Pedestrian Volume [ped/h] | 0 |  |  | 0 |  |  | 0 |  |  | 0 |  |  |

Intersection Settings

| Priority Scheme | Stop | Stop | Free |
| :---: | :---: | :---: | :---: |
| Flared Lane | No | No |  |
| Storage Area [veh] | 0 | 0 |  |
| Two-Stage Gap Acceptance | No | No |  |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, \& Intersection Results

| V/C, Movement V/C Ratio | 0.03 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d_M, Delay for Movement [s/veh] | 11.42 | 11.61 | 9.24 | 11.55 | 11.44 | 9.56 | 7.75 | 0.00 | 0.00 | 7.50 | 0.00 | 0.00 |
| Movement LOS | B | B | A | B | B | A | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh/ln] | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | 0.01 | 0.01 | 0.01 | 0.03 | 0.03 | 0.03 |
| 95th-Percentile Queue Length [ft/ln] | 5.29 | 5.29 | 5.29 | 5.57 | 5.57 | 5.57 | 0.34 | 0.34 | 0.34 | 0.78 | 0.78 | 0.78 |
| d_A, Approach Delay [s/veh] | 10.65 |  |  | 10.83 |  |  | 0.43 |  |  | 0.64 |  |  |
| Approach LOS | B |  |  | B |  |  | A |  |  | A |  |  |
| d_I, Intersection Delay [s/veh] | 3.03 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS | B |  |  |  |  |  |  |  |  |  |  |  |

Town of Lakeview
Weekday PM Peak Hour
Transportation System Plan Update
Existing 2020 Traffic Conditions

## Intersection Level Of Service Report Intersection 3: OR 140/US 395

Control Type: Analysis Method: Analysis Period:

Two-way stop HCM 6th Edition 15 minutes

$$
\begin{array}{cc}
\text { Delay (sec / veh): } & 17.2 \\
\text { Level Of Service: } & \mathrm{C} \\
\text { Volume to Capacity }(\mathrm{v} / \mathrm{c}): & 0.281
\end{array}
$$

Intersection Setup

| Name | N G St |  |  | US 395 |  |  | OR 140 |  |  | US 395 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach | Northbound |  |  | Southbound |  |  | Eastbound |  |  | Westbound |  |  |
| Lane Configuration | $\Gamma$ |  |  | $7 \hat{F}$ |  |  | $\rightarrow \hat{F}$ |  |  | $\stackrel{T}{T}$ |  |  |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Entry Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Entry Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Pocket Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Speed [mph] | 25.00 |  |  | 35.00 |  |  | 25.00 |  |  | 25.00 |  |  |
| Grade [\%] | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  |
| Crosswalk | Yes |  |  | Yes |  |  | Yes |  |  | No |  |  |

## Volumes

| Name | N G St |  |  | US 395 |  |  | OR 140 |  |  | US 395 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base Volume Input [veh/h] | 0 | 0 | 7 | 97 | 20 | 35 | 52 | 154 | 8 | 14 | 161 | 139 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [\%] | 2.00 | 2.00 | 0.00 | 13.00 | 5.00 | 12.00 | 22.00 | 5.00 | 0.00 | 7.00 | 4.00 | 4.00 |
| Growth Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 0 | 0 | 7 | 97 | 20 | 35 | 52 | 154 | 8 | 14 | 161 | 139 |
| Peak Hour Factor | 1.0000 | 1.0000 | 0.8400 | 0.8400 | 0.8400 | 0.8400 | 0.8400 | 0.8400 | 0.8400 | 0.8400 | 0.8400 | 0.8400 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 0 | 0 | 2 | 29 | 6 | 10 | 15 | 46 | 2 | 4 | 48 | 41 |
| Total Analysis Volume [veh/h] | 0 | 0 | 8 | 115 | 24 | 42 | 62 | 183 | 10 | 17 | 192 | 165 |
| Pedestrian Volume [ped/h] | 2 |  |  | 1 |  |  | 5 |  |  | 0 |  |  |

Intersection Settings

| Priority Scheme | Stop | Stop | Free |
| :---: | :---: | :---: | :---: |
| Flared Lane |  | Yes |  |
| Storage Area [veh] | 0 | 0 |  |
| Two-Stage Gap Acceptance | No | No |  |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, \& Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.01 | 0.28 | 0.06 | 0.05 | 0.05 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d_M, Delay for Movement [s/veh] | 0.00 | 0.00 | 9.25 | 17.21 | 14.47 | 10.16 | 7.99 | 0.00 | 0.00 | 7.71 | 0.00 | 0.00 |
| Movement LOS |  |  | A | C | B | B | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh/ln] | 0.00 | 0.00 | 0.03 | 1.14 | 0.37 | 0.37 | 0.15 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 |
| 95th-Percentile Queue Length [ft/ln] | 0.00 | 0.00 | 0.71 | 28.45 | 9.20 | 9.20 | 3.85 | 0.00 | 0.00 | 0.96 | 0.96 | 0.00 |
| d_A, Approach Delay [s/veh] | 9.25 |  |  | 15.21 |  |  | 1.94 |  |  | 0.35 |  |  |
| Approach LOS | A |  |  | C |  |  | A |  |  | A |  |  |
| d_I, Intersection Delay [s/veh] | 4.22 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS | C |  |  |  |  |  |  |  |  |  |  |  |

## Generated with PTV VISTRO

Town of Lakeview
Weekday PM Peak Hour
Transportation System Plan Update
Existing 2020 Traffic Conditions

## Intersection Level Of Service Report

 Intersection 4: US 395/S 7th StControl Type: Analysis Method: Analysis Period:

Two-way stop HCM 6th Edition 15 minutes

| Delay (sec / veh): | 11.9 |
| :---: | :---: |
| Level Of Service: | B |
| Volume to Capacity $(\mathrm{v} / \mathrm{c}):$ | 0.042 |

Intersection Setup

| Name | US 395 |  | US 395 |  | S 7th St |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach | Northbound |  | Southbound |  | Eastbound |  |
| Lane Configuration | $-$ |  | $\stackrel{\rightharpoonup}{\square}$ |  | $\stackrel{ }{ }$ |  |
| Turning Movement | Left | Thru | Thru | Right | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Entry Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Entry Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Pocket Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Speed [mph] | 30.00 |  | 25.00 |  | 25.00 |  |
| Grade [\%] | 0.00 |  | 0.00 |  | 0.00 |  |
| Crosswalk | No |  | No |  | Yes |  |

## Volumes

| Name | US 395 |  | US 395 |  | S 7th St |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base Volume Input [veh/h] | 9 | 196 | 205 | 18 | 21 | 4 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [\%] | 0.00 | 5.00 | 7.00 | 0.00 | 0.00 | 0.00 |
| Growth Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 9 | 196 | 205 | 18 | 21 | 4 |
| Peak Hour Factor | 0.9000 | 0.9000 | 0.9000 | 0.9000 | 0.9000 | 0.9000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 3 | 54 | 57 | 5 | 6 | 1 |
| Total Analysis Volume [veh/h] | 10 | 218 | 228 | 20 | 23 | 4 |
| Pedestrian Volume [ped/h] | 0 |  | 0 |  | 1 |  |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
| :---: | :---: | :---: | :---: |
| Flared Lane |  |  | No |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance | 0 | 0 | No |
| Number of Storage Spaces in Median |  | 0 | 0 |

Movement, Approach, \& Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d_M, Delay for Movement [s/veh] | 7.73 | 0.00 | 0.00 | 0.00 | 11.91 | 9.79 |
| Movement LOS | A | A | A | A | B | A |
| 95th-Percentile Queue Length [veh/ln] | 0.02 | 0.02 | 0.00 | 0.00 | 0.15 | 0.15 |
| 95th-Percentile Queue Length [ft/ln] | 0.57 | 0.57 | 0.00 | 0.00 | 3.70 | 3.70 |
| d_A, Approach Delay [s/veh] | 0.34 |  | 0.00 |  | 11.60 |  |
| Approach LOS | A |  | A |  | B |  |
| d_I, Intersection Delay [s/veh] | 0.78 |  |  |  |  |  |
| Intersection LOS | B |  |  |  |  |  |

Town of Lakeview
Weekday PM Peak Hour
Transportation System Plan Update
Existing 2020 Traffic Conditions

## Intersection Level Of Service Report Intersection 5: US 395/S 9th St

Control Type: Analysis Method: Analysis Period:

Two-way stop HCM 6th Edition 15 minutes

| Delay (sec / veh): | 12.8 |
| :---: | :---: |
| Level Of Service: | B |
| Volume to Capacity $(\mathrm{v} / \mathrm{c}):$ | 0.079 |

Intersection Setup

| Name | US 395 |  |  | US 395 |  |  | S 9th St |  |  | S 9th St |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach | Northbound |  |  | Southbound |  |  | Eastbound |  |  | Westbound |  |  |
| Lane Configuration | $\stackrel{f}{\square}$ |  |  | $\stackrel{H}{\square}$ |  |  | $\stackrel{H}{4}$ |  |  | $\stackrel{H}{4}$ |  |  |
| Turning Movement | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Entry Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Entry Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Pocket Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Speed [mph] | 35.00 |  |  | 25.00 |  |  | 25.00 |  |  | 25.00 |  |  |
| Grade [\%] | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  | 0.00 |  |  |
| Crosswalk | Yes |  |  | Yes |  |  | Yes |  |  | Yes |  |  |

## Volumes

| Name | US 395 |  |  | US 395 |  |  | S 9th St |  |  | S 9th St |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base Volume Input [veh/h] | 13 | 153 | 2 | 14 | 148 | 42 | 36 | 4 | 5 | 1 | 3 | 6 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [\%] | 46.00 | 5.00 | 50.00 | 0.00 | 8.00 | 2.00 | 8.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Growth Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 13 | 153 | 2 | 14 | 148 | 42 | 36 | 4 | 5 | 1 | 3 | 6 |
| Peak Hour Factor | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 | 0.8900 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 4 | 43 | 1 | 4 | 42 | 12 | 10 | 1 | 1 | 0 | 1 | 2 |
| Total Analysis Volume [veh/h] | 15 | 172 | 2 | 16 | 166 | 47 | 40 | 4 | 6 | 1 | 3 | 7 |
| Pedestrian Volume [ped/h] | 1 |  |  | 2 |  |  | 1 |  |  | 0 |  |  |

Intersection Settings

| Priority Scheme | Free | Free | Stop |  |
| :---: | :---: | :---: | :---: | :---: |
| Flared Lane |  |  | No |  |
| Storage Area [veh] | 0 | 0 | 0 |  |
| Two-Stage Gap Acceptance |  |  | 0 |  |
| Number of Storage Spaces in Median | 0 | 0 | No |  |

Movement, Approach, \& Intersection Results

| V/C, Movement V/C Ratio | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.08 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d_M, Delay for Movement [s/veh] | 8.22 | 0.00 | 0.00 | 7.57 | 0.00 | 0.00 | 12.84 | 12.79 | 9.92 | 12.01 | 12.38 | 9.21 |
| Movement LOS | A | A | A | A | A | A | B | B | A | B | B | A |
| 95th-Percentile Queue Length [veh/ln] | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.31 | 0.31 | 0.31 | 0.05 | 0.05 | 0.05 |
| 95th-Percentile Queue Length [ft/ln] | 1.01 | 1.01 | 1.01 | 0.86 | 0.86 | 0.86 | 7.76 | 7.76 | 7.76 | 1.22 | 1.22 | 1.22 |
| d_A, Approach Delay [s/veh] |  | 0.65 |  |  | 0.53 |  |  | 12.49 |  |  | 10.33 |  |
| Approach LOS |  | A |  |  | A |  |  | B |  |  | B |  |
| d_I, Intersection Delay [s/veh] | 2.05 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS | B |  |  |  |  |  |  |  |  |  |  |  |

## Generated with PTV VISTRO

Town of Lakeview
Weekday PM Peak Hour
Transportation System Plan Update
Existing 2020 Traffic Conditions
Intersection Level Of Service Report Intersection 6: Roberta Rd/S 3rd St

Control Type: Analysis Method: Analysis Period:

Two-way stop HCM 6th Edition 15 minutes

| Delay $(\mathrm{sec} / \mathrm{veh}):$ | 9.3 |
| :---: | :---: |
| Level Of Service: | A |
| Volume to Capacity $(\mathrm{v} / \mathrm{c}):$ | 0.021 |

Intersection Setup

| Name | Roberta Rd |  | Roberta Rd |  | S 3rd St |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach | Northbound |  | Southbound |  | Westbound |  |
| Lane Configuration | $\stackrel{\rightharpoonup}{\mathrm{F}}$ |  | $-$ |  | $T$ |  |
| Turning Movement | Thru | Right | Left | Thru | Left | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Entry Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Entry Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Pocket Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Speed [mph] | 45.00 |  | 45.00 |  | 25.00 |  |
| Grade [\%] | 0.00 |  | 0.00 |  | 0.00 |  |
| Crosswalk | No |  | No |  | No |  |

## Volumes

| Name | Roberta Rd |  | Roberta Rd |  | S 3rd St |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base Volume Input [veh/h] | 18 | 6 | 15 | 16 | 11 | 20 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [\%] | 44.00 | 0.00 | 0.00 | 25.00 | 0.00 | 15.00 |
| Growth Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 18 | 6 | 15 | 16 | 11 | 20 |
| Peak Hour Factor | 0.6000 | 0.6000 | 0.6000 | 0.6000 | 0.6000 | 0.6000 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 8 | 3 | 6 | 7 | 5 | 8 |
| Total Analysis Volume [veh/h] | 30 | 10 | 25 | 27 | 18 | 33 |
| Pedestrian Volume [ped/h] | 0 |  | 0 |  | 0 |  |

Intersection Settings

| Priority Scheme | Free | Free | Stop |
| :---: | :---: | :---: | :---: |
| Flared Lane |  |  | No |
| Storage Area [veh] | 0 | 0 | 0 |
| Two-Stage Gap Acceptance |  |  |  |
| Number of Storage Spaces in Median | 0 | 0 | No |

Movement, Approach, \& Intersection Results

| V/C, Movement V/C Ratio | 0.00 | 0.00 | 0.02 | 0.00 | 0.02 | 0.03 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d_M, Delay for Movement [s/veh] | 0.00 | 0.00 | 7.31 | 0.00 | 9.33 | 8.81 |
| Movement LOS | A | A | A | A | A | A |
| 95th-Percentile Queue Length [veh/ln] | 0.00 | 0.00 | 0.05 | 0.05 | 0.17 | 0.17 |
| 95th-Percentile Queue Length [ft/ln] | 0.00 | 0.00 | 1.20 | 1.20 | 4.23 | 4.23 |
| d_A, Approach Delay [s/veh] | 0.00 |  | 3.51 |  | 8.99 |  |
| Approach LOS | A |  | A |  | A |  |
| d_I, Intersection Delay [s/veh] | 4.48 |  |  |  |  |  |
| Intersection LOS | A |  |  |  |  |  |

## Intersection Level Of Service Report

 Intersection 7: S L St/S 3rd StControl Type: Analysis Method: Analysis Period:

Two-way stop HCM 6th Edition 15 minutes

| Delay (sec / veh): | 10.0 |
| :---: | :---: |
| Level Of Service: | B |
| Volume to Capacity $(\mathrm{v} / \mathrm{c}):$ | 0.033 |

Intersection Setup

| Name | S L St |  | S 3rd St |  | S 3rd St |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach | Southbound |  | Eastbound |  | Westbound |  |
| Lane Configuration | $T$ |  | $4$ |  | $\hat{F}$ |  |
| Turning Movement | Left | Right | Left | Thru | Thru | Right |
| Lane Width [ft] | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |
| No. of Lanes in Entry Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Entry Pocket Length [ft] | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| No. of Lanes in Exit Pocket | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Pocket Length [ft] | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Speed [mph] | 25.00 |  | 25.00 |  | 25.00 |  |
| Grade [\%] | 0.00 |  | 0.00 |  | 0.00 |  |
| Crosswalk | Yes |  | No |  | No |  |

## Volumes

| Name | SLSt |  | $\mathrm{S} \mathrm{3rd} \mathrm{St}$ |  | S 3 rd St |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base Volume Input [veh/h] | 18 | 21 | 23 | 29 | 45 | 32 |
| Base Volume Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Heavy Vehicles Percentage [\%] | 6.00 | 10.00 | 4.00 | 0.00 | 9.00 | 6.00 |
| Growth Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| In-Process Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Site-Generated Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Diverted Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Pass-by Trips [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Existing Site Adjustment Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Volume [veh/h] | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Hourly Volume [veh/h] | 18 | 21 | 23 | 29 | 45 | 32 |
| Peak Hour Factor | 0.7100 | 0.7100 | 0.7100 | 0.7100 | 0.7100 | 0.7100 |
| Other Adjustment Factor | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Total 15-Minute Volume [veh/h] | 6 | 7 | 8 | 10 | 16 | 11 |
| Total Analysis Volume [veh/h] | 25 | 30 | 32 | 41 | 63 | 45 |
| Pedestrian Volume [ped/h] |  | 5 |  | 0 |  | 0 |

Intersection Settings

| Priority Scheme | Stop | Free | Free |
| :---: | :---: | :---: | :---: |
| Flared Lane | No |  |  |
| Storage Area [veh] | 0 | 0 |  |
| Two-Stage Gap Acceptance | No | 0 |  |
| Number of Storage Spaces in Median | 0 | 0 | 0 |

Movement, Approach, \& Intersection Results

| V/C, Movement V/C Ratio | 0.03 | 0.03 | 0.02 | 0.00 | 0.00 | 0.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d_M, Delay for Movement [s/veh] | 10.01 | 9.12 | 7.53 | 0.00 | 0.00 | 0.00 |
| Movement LOS | B | A | A | A | A | A |
| 95th-Percentile Queue Length [veh/ln] | 0.21 | 0.21 | 0.07 | 0.07 | 0.00 | 0.00 |
| 95th-Percentile Queue Length [ft/ln] | 5.17 | 5.17 | 1.68 | 1.68 | 0.00 | 0.00 |
| d_A, Approach Delay [s/veh] | 9.52 |  | 3.30 |  | 0.00 |  |
| Approach LOS | A |  | A |  | A |  |
| d_I, Intersection Delay [s/veh] | 3.24 |  |  |  |  |  |
| Intersection LOS | B |  |  |  |  |  |

## ATTACHMENT D - RAW CRASH DATA



# ACTION CODE TRANSLATION LIST 

## ACTION SHORT

CODE DESCRIPTION LONG DESCRIPTION

| 000 | NONE | NO ACTION OR NON-WARRANTED |
| :---: | :---: | :---: |
| 001 | SKIDDED | SkIDDED |
| 002 | on/off V | GEtting on or off stopped or parked vehicle |
| 003 | LOAD OVR | OVERHANGING LOAD Struck another vehicle, etc. |
| 006 | SLOW DN | SLOWED DOwn |
| 007 | Avoiding | AVOIDING MANEUVER |
| 008 | PAR PARK | PARALLEL PARKING |
| 009 | ANG PARK | Angle Parking |
| 010 | Interfere | PASSENGER Interfering with driver |
| 011 | Stopped | Stopped in traffic not waiting to make a left turn |
| 012 | STP/L TRN | Stopped because of left turn Signal or waiting, etc. |
| 013 | STP TURN | Stopped While executing A turn |
| 014 | EMR V PKD | Emergency vehicle legally parked in the roadway |
| 015 | GO A/Stop | PROCEED AFTER Stopping for a stop Sign/flashing red. |
| 016 | TRN A/RED | TURNED ON RED AFTER STOPPING |
| 017 | LOSTCTRL | LOST CONTROL OF VEHICLE |
| 018 | EXIT DWY | Entering Street or highway from alley or dilveway |
| 019 | ENTR DWY | Entering Alley or driveway from street or highway |
| 020 | STR ENTR | before entering roadway, Struck pedestrian, etc. on Sidewalk or shoulder |
| 021 | NO DRVR | CAR RAN AWAY - NO DRIVER |
| 022 | PREV COL | Struck, OR WAS Struck by, vehicle or pedestrian in prior collision before acc. Stabilized |
| 023 | STALLED | VEHICLE STALLED OR DISABLED |
| 024 | DRVR DEAD | DEAD BY UNASSOCIATED CAUSE |
| 025 | FAtigue | fatigued, Sleepy, Asleep |
| 026 | SUN | DRIVER BLINDED BY SUN |
| 027 | HDLGHTS | DRIVER BLINDED BY HEADLIGHTS |
| 028 | ILLNESS | PHYSICALLY ILL |
| 029 | THRU MED | VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER |
| 030 | PURSUIT | PURSUING OR ATTEMPTING TO STOP A VEhICLE |
| 031 | PASSING | PASSING SITUATION |
| 032 | PRKOFFRD | VEHICLE PARKED BEYOND CURB OR SHOULDER |
| 033 | CROS MED | VEHICLE CROSSED EARTH OR GRASS MEDIAN |
| 034 | $\mathrm{X} \mathrm{N} / \mathrm{SGNL}$ | Crossing at intersection - no traffic signal present |
| 035 | X W/ SGNL | CROSSING AT Intersection - traffic signal present |
| 036 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 037 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 038 | DISTRACT | DRIVER'S Attention distracted |
| 039 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 040 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 041 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 042 | A/traf-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 043 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 044 | puSh mV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 045 | WORK ON | WORKING IN ROADWAY OR ALONG SHOULDER |
| 046 | W/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WIth traffic |
| 047 | A/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC |
| 050 | LAY ON RD | StANDING OR LYING IN ROADWAY |
| 051 | ENT Offrd | Entering / Starting in traffic lane from off road |
| 052 | MERGING | MERGING |

## ACTION CODE TRANSLATION LIST

| 00 | NO CODE | NO CAUSE ASSOCIATED AT THIS LEVEL |
| :--- | :--- | :--- |
| 01 | TOO-FAST | TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED. |
| 02 | NO-YIELD | DID NOT YIELD RIGHT-OF-WAY |
| 03 | PAS-STOP | PASSED STOP SIGN OR RED FLASHER |
| 04 | DIS SIG | DISREGARDED TRAFFIC SIGNAL |
| 05 | LEFT-CTR | DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING |
| 06 | IMP-OVER | IMPROPER OVERTAKING |
| 07 | TOO-CLOS | FOLLOWED TOO CLOSELY |
| 08 | IMP-TURN | MADE IMPROPER TURN |
| 09 | DRINKING | ALCOHOL OR DRUG INVOLVED |
| 10 | OTHR-IMP | OTHER IMPROPER DRIVING |
| 11 | MECH-DEF | MECHANICAL DEFECT |
| 12 | OTHER | OTHER (NOT IMPROPER DRIVING) |
| 13 | IMP LNC | IMPROPER CHANGE OF TRAFFIC LANES |
| 14 | DIS TCD | DISREGARDED OTHER TRAFFIC CONTROL DEVICE |
| 15 | WRNG WAY | WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED ROi |
| 16 | FATIGUE | DRIVER DROWSY/FATIGUED/SLEEPY |
| 17 | ILLNESS | PHYSICAL ILLNESS |
| 18 | IN RDWY | NON-MOTORIST ILLEGALLY IN ROADWAY |
| 19 | NT VISBL | NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN |
| 20 | IMP PKNG | VEHICLE IMPROPERLY PARKED |
| 21 | DEF STER | DEFECTIVE STEERING MECHANISM |
| 22 | DEF BRKE | INADEQUATE OR NO BRAKES |
| 24 | LOADSHFT | VEHICLE LOST LOAD OR LOAD SHIFTED |
| 25 | TIREFAIL | TIRE FAILURE |
| 26 | PHANTOM | PHANTOM / NON-CONTACT VEHICLE |
| 27 | INATTENT | INATTENTION |
| 28 | NM INATT | NON-MOTORIST INATTENTION |
| 29 | FAVOID | FAILED TO AVOID VEHICLE AHEAD |
| 30 | SPEED | DRIVING IN EXCESS OF POSTED SPEED |
| 31 | RACING | SPEED RACING (PER PAR) |
| 32 | CARELESS | CARELESS DRIVING (PER PAR) |
| 33 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 34 | AGGRESV | AGGRESSIVE DRIVING (PER PAR) |
| 35 | RDRAGE | ROAD RAGE (PER PAR) |
| 40 | VIEW OBS | VIEW OBSCURED |
| 50 | USED MDN | IMPROPER USE OF MEDIAN OR SHOULDER |
| 51 | FAIL LN | FAILED TO MAINTAIN LANE |
| 52 | OFF RD | RAN OFF ROAD |


| \& | OTH | MISCELL |
| :--- | :--- | :--- |
| - | BACK | BACKING |
| 0 | PED |  |


| 1 | ANGL | PEDESTRIA |
| :--- | :--- | :--- |
| 2 | HEAD | ANGLE |


| 2 | HEAD | HEAD-ON |
| :--- | :--- | :--- |
| 3 | REAR | REAR |

3 REAR REAR-END

| 4 | SS-M | SIDESWIPE - MEETING |
| :--- | :--- | :--- |

5 SS-O SIDESWIPE - OVERTAKIng
6 TURN TURNING MOVEMENT
PARK PARKING MANEUVER
8 NCOL NON-COLLISION
9 FIX FIXED OBJECT OR OTHER OBJECT

## CRASH TYPE CODE TRANSLATION LIST

CRASH SHORT
TYPE DESCRIPTION LONG DESCRIPTION

| $\&$ | OVERTURN | OVERTURNED |
| :--- | :--- | :--- |
| 0 | NON-COLL | OTHER NON-COLLISIO |


| 0 | NON-COLL | OTHER NON-COLLISION |
| :--- | :--- | :--- |
| 1 | OTH RDWY | MOTOR VEHICLE ON OTHER ROADWAY |


| 1 | OTH RDWY | MOTOR VEHICLE ON OTH |
| :--- | :--- | :--- |
| 2 | PRKD MV | PARKED MOTOR VEHICLE |


| LIC | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NOT LICENSED (HAD NEVER BEEN LICENSED) |
| 1 | OR-Y | VALID OREGON LICENSE |
| 2 | OTH-Y | VALID LICENSE, OTHER STATE OR COUNTRY |
| 3 | SUSP | SUSPENDED/REVOKED |
| 4 | EXP | EXPIRED |
| 8 | N-VAL | OTHER NON-VALID LICENSE |
| 9 | UNK | UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH |


| RES <br> CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :---: | :--- |

## ERROR CODE TRANSLATION LIST

| ERROR CODE | SHORT <br> DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 000 | NONE | NO ERROR |
| 001 | WIDE TRN | WIDE TURN |
| 002 | CUT CORN | CUT CORNER ON TURN |
| 003 | FAIL TRN | FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS |
| 004 | L IN TRF | LEFT TURN IN FRONT OF ONCOMING TRAFFIC |
| 005 | L PROHIB | LEFT TURN WHERE PROHIBITED |
| 006 | FRM WRng | TURNED FROM WRONG LANE |
| 007 | TO WRONG | TURNED INTO WRONG LANE |
| 008 | ILLEG U | U-TURNED ILLEGALLY |
| 009 | IMP STOP | IMPROPERLY STOPPED IN TRAFFIC LANE |
| 010 | IMP SIG | IMPROPER SIGNAL OR FAILURE TO SIGNAL |
| 011 | IMP BACK | BACKING IMPROPERLY (NOT PARKING) |
| 012 | IMP PARK | IMPROPERLY PARKED |
| 013 | UNPARK | Improper Start leaving Parked position |
| 014 | IMP STRT | IMPROPER START FROM STOPPED POSITION |
| 015 | IMP LGHT | IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC) |
| 016 | InAttent | INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97) |
| 017 | UNSF VEH | DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT) |
| 018 | Oth PARK | ENTERING/EXITING PARKED POSITION W/ InSufficient Clearance; other improper Parking maneuver |
| 019 | DIS DRIV | DISREGARDED OTHER DRIVER'S SIGNAL |
| 020 | DIS SGNL | DISREGARDED TRAFFIC SIGNAL |
| 021 | RAN Stop | DISREGARDED Stop Sign or flashing red |
| 022 | DIS SIGN | DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER |
| 023 | DIS OFCR | DISREGARDED POLICE OFFICER OR FLAGMAN |
| 024 | DIS EMER | DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE |
| 025 | DIS RR | DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN |
| 026 | REAR-END | FAILED TO AVOID Stopped or parked vehicle ahead other than School bus |
| 027 | BIKE ROW | DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST |
| 028 | No Row | DID NOT HAVE RIGHT-OF-WAY |
| 029 | PED ROW | FAILED TO YIELD RIGHT-OF-WAY to pedestrian |
| 030 | PAS CURV | PASSING ON A CURVE |
| 031 | PAS WRng | PASSING ON THE WRONG SIDE |
| 032 | PAS tANG | PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS |
| 033 | PAS X -WK | PASSED VEHICLE Stopped at crosswalk for pedestrian |
| 034 | PAS INTR | PASSING AT INTERSECTION |
| 035 | PAS HILL | PASSING ON CREST Of hill |
| 036 | N/PAS ZN | PASSING IN "NO PASSING" ZONE |
| 037 | PAS TRAF | PASSING In FRONT OF ONCOMING TRAFFIC |
| 038 | CUT-IN | CUtting in (TWO LANES - TWO WAY OnLy) |
| 039 | WRNGSIDE | DRIVING ON WRONG SIDE Of the road (2-WAY UNDIVIDED ROADWAYS) |


| ERROR | SHORT DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 040 | THRU MED | DRIVING THROUGH SAFETY ZONE OR OVER ISLAND |
| 041 | F/ST BUS | FAILED TO STOP FOR SCHOOL BUS |
| 042 | F/SLO MV | FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE |
| 43 | too Close | FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT) |
| 044 | STRDL LN | STRADDLING OR DRIVING ON WRONG LANES |
| 045 | IMP CHG | ImPROPER CHANGE OF TRAFFIC LANES |
| 046 | WRNG WAY | WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD |
| 047 | BASCRULE | DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED) |
| 048 | OPN DOOR | OPENED DOOR INTO ADJACENT TRAFFIC LANE |
| 049 | Impeding | IMPEDING TRAFFIC |
| 050 | SPEED | DRIVING In EXCESS OF POSTED SPEED |
| 051 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 052 | CARELESS | CARELESS DRIVING (PER PAR) |
| 053 | RACING | SPEED RACING (PER PAR) |
| 054 | X N/SGNL | CROSSING AT Intersection, NO TRAFFIC SIGNAL PRESENT |
| 055 | X W/SGNL | CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT |
| 056 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 057 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 059 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 060 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 061 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 062 | A/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 063 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 064 | PUSH MV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 065 | WORK IN RD | WORKING IN ROADWAY OR ALONG SHOULDER |
| 070 | LAY ON RD | Standing Or Lying in roadway |
| 071 | NM IMP USE | IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST |
| 073 | ELUDING | ELUding / Attempt to elude |
| 079 | F NEG CURV | FAILED TO NeGotiate a curve |
| 080 | FAIL LN | FAILED TO MAINTAIN LANE |
| 081 | OFF RD | RAN OFF ROAD |
| 082 | No CLEAR | DRIVER MISJUDGED CLEARANCE |
| 083 | OVRSTEER | OVER-CORRECTING |
| 084 | NOT USED | CODE NOT IN USE |
| 085 | OVRLOAD | OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS |
| 97 | UNA DIS TC | UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE |

EVENT SHORT
CODE DESCRIPTION

| 001 | FEL/JUMP | OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEhICLE |
| :---: | :---: | :---: |
| 002 | INTERFER | PASSENGER INTERFERED WITH DRIVER |
| 003 | bug inte | ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER |
| 004 | INDRCT PED | PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK) |
| 005 | SUB-PED | "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC. |
| 006 | INDRCT BIK | PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK) |
| 007 | HITCHIKR | HITCHHIKER (SOLICITING A RIDE) |
| 008 | PSNGR TOW | PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE |
| 009 | ON/OFF V | GEtting On/OFF Stopped/parked vehicle (OCCUPANTS Only; must have physical contact w/ vehic |
| 010 | SUB OTRN | OVERTURNED AFTER FIRST HARMFUL EVENT |
| 011 | MV PUSHD | VEHICLE BEING PUSHED |
| 012 | MV TOWED | VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE |
| 013 | FORCED | VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN |
| 014 | SET MOTN | VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.) |
| 015 | RR ROW | AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL) |
| 016 | LT RL Row | AT OR ON LIGHT-RAIL RIGHT-OF-WAY |
| 017 | RR HIT V | TRAIN STRUCK VEhicle |
| 018 | V HIT RR | VEhicle struck train |
| 019 | HIT RR CAR | vehicle struck railroad car on roadway |
| 020 | JACKNIFE | JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE |
| 021 | TRL OTRN | TRAILER OR TOWED VEHICLE OVERTURNED |
| 022 | CN BROKE | TRAILER CONNECTION BROKE |
| 023 | DETACH TRL | DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT |
| 024 | V DOOR OPN | VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE |
| 025 | WHEELOFF | WHEEL CAME OFF |
| 026 | HOOD UP | HOOD FLEW UP |
| 028 | LOAD SHIFT | LOST LOAD, LOAD MOVED OR Shifted |
| 029 | TIREFAIL | TIRE FAILURE |
| 030 | PET | PET: CAT, DOG AND SIMILAR |
| 031 | LVSTOCK | STOCK: COW, CALF, BULL, STEER, SHEEP, ETC. |
| 032 | HORSE | HORSE, MULE, OR DONKEY |
| 033 | HRSE\&RID | HORSE AND RIDER |
| 034 | GAME | WILD AnIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK) |
| 035 | DEER ELK | DEER OR ELK, WAPITI |
| 036 | AnML Veh | ANIMAL-DRAWN VEHICLE |
| 037 | CULVERT | CULVERT, OPEN LOW OR HIGH MANHOLE |
| 038 | Atenuatn | IMPACT ATTENUATOR |
| 039 | PK METER | PARKING METER |
| 040 | CURB | CURB (ALSO NARROW SIDEWALKS ON BRIDGES) |
| 041 | JIGGLE | JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION |
| 042 | GDRL END | LEADING EDGE OF GUARDRAIL |
| 043 | GARDRAIL | GUARD RAIL (NOT METAL MEDIAN BARRIER) |
| 044 | BARRIER | MEDIAN BARRIER (RAISED OR METAL) |
| 045 | WALL | REtAINING WALL OR TUNNEL WALL |
| 046 | BR RAIL | BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH) |
| 047 | BR ABUTMNT | BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013) |
| 048 | BR COLMN | BRIDGE PILLAR OR COLUMN |
| 049 | BR GIRDR | BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD) |
| 050 | ISLAND | TRAFFIC RAISED ISLAND |
| 051 | GORE | GORE |
| 052 | POLE UNK | POLE - TYPE UNKNOWN |
| 053 | POLE UTL | POLE - POWER OR TELEPHONE |
| 054 | ST LIGHT | POLE - Street light only |
| 055 | TRF SGNL | POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY |
| 056 | SGN BRDG | POLE - SIGN BRIDGE |
| 057 | STOPSIGN | Stop OR YIELD SIGN |

## EVENT CODE TRANSLATION LIST

| CODE | DESCRIPTION | LONG DESCRIPTION |
| :---: | :---: | :---: |
| 058 | OTH SIGN | OTHER SIGN, INCLUDING STREET SIGNS |
| 059 | HYDRANT | HYDRANT |
| 060 | MARKER | DELINEATOR OR MARKER (REFLECTOR POSTS) |
| 061 | MAILBOX | MAILBOX |
| 062 | tree | tree, Stump or shrubs |
| 063 | VEG OHED | tree branch or other vegetation overhead, etc. |
| 064 | WIRE/CBL | WIRE OR CABLe ACROSS OR OVER THE ROAD |
| 065 | TEMP SGN | TEMPORARY SIGN OR BARRICADE IN ROAD, ETC. |
| 066 | PERM SGN | PERMANENT SIGN OR BARRICADE IN/OFF ROAD |
| 067 | SLIDE | SLIDES, FALLEN OR FALLING ROCKS |
| 068 | FRGN OBJ | FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL) |
| 069 | EQP WORK | EQUIPMENT WORKING IN/OFF ROAD |
| 070 | OTH EQP | OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT) |
| 071 | MAIN EQP | WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT |
| 072 | OTHER WALL | ROCK, BRICK OR OTHER SOLID WALL |
| 073 | IRRGL PVMT | OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR) |
| 074 | OVERHD OBJ | OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE |
| 075 | CAVE IN | BRIDGE OR ROAD CAVE IN |
| 076 | HI WAter | HIGH WATER |
| 077 | SNO BANK | SNOW BANK |
| 078 | LO-HI EDGE | Low OR HIGH Shoulder at Pavement edge |
| 079 | DITCH | CUT SLOPE OR DITCH EMBANKMENT |
| 080 | OBJ FRM MV | STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS) |
| 081 | FLY-OBJ | STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE) |
| 082 | VEH HID | VEhicle ObSCURED view |
| 083 | VEG HID | VEGETATION OBSCURED VIEW |
| 084 | BLDG HID | VIEW OBSCURED BY Fence, Sign, Phone booth, etc. |
| 085 | WIND GUST | WIND GUST |
| 086 | IMMERSED | VEHICLE IMMERSED IN BODY OF WATER |
| 087 | FIRE/EXP | FIRE OR EXPLOSION |
| 088 | FENC/BLD | FENCE OR BUILDING, ETC. |
| 089 | OTHR CRASH | CRASH RELATED TO ANOTHER SEPARATE CRASH |
| 090 | TO 1 SIDE | TWO-WAY traffic on divided roadway all routed to one side |
| 091 | BUILDING | BUILDING OR OTHER STRUCTURE |
| 092 | PHANTOM | OTHER (PHANTOM) NON-CONTACT VEHICLE |
| 093 | CELL PHONE | CELL PHONE (ON PAR OR DRIVER IN USE) |
| 094 | VIOL GDL | teenage driver in violation of graduated license pgm |
| 095 | GUY WIRE | GUY WIRE |
| 096 | BERM | BERM (EARTHEN OR GRAVEL MOUND) |
| 097 | GRAVEL | GRAVEL IN ROADWAY |
| 098 | ABR EDGE | ABRUPT EDGE |
| 099 | CELL WTNSD | CELL PHONE USE WITNESSED BY OTHER PARTICIPANT |
| 100 | UNK FIXD | FIXED OBJECT, UNKNOWN TYPE. |
| 101 | OTHER OBJ | NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE |
| 102 | TEXTING | TEXTING |
| 103 | WZ WORKER | WORK ZONE WORKER |
| 104 | ON VEhicle | PASSENGER RIDING ON VEhICLE EXTERIOR |
| 105 | PEDAL PSGR | PASSENGER RIDING ON PEDALCYCLE |
| 106 | MAN WHLCHR | PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR |
| 107 | MTR WHLCHR | PEDESTRIAN IN MOTORIZED Wheelchair |
| 108 | OFFICER | LAW ENFORCEMENT / POLICE OFFICER |
| 109 | SUB-BIKE | "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC. |
| 110 | N-MTR | NON-MOTORIST STRUCK VEHICLE |
| 111 | S CAR VS V | Street Car/Troliey (on Rails or overhead wire system) Struck vehicle |
| 112 | v VS S CAR | VEhicle struck street Car/trolley (on Rails or overhead wire system) |
| 113 | S CAR ROW | AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY |

## event code translation list

SHORT
CODE DESCRIPTION LONG DESCRIPTION

| 114 | RR EQUIP | VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS |
| :--- | :--- | :--- |
| 115 | DSTRCT GPS | DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE |
| 116 | DSTRCT OTH | DISTRACTED BY OTHER ELECTRNIC DEVICE |



| CLASS | DESCRIPTION |
| :---: | :--- |
| 01 | RURAL PRINCIPAL ARTERIAL - INTERSTATE |
| 02 | RURAL PRINCIPAL ARTERIAL - OTHER |
| 06 | RURAL MINOR ARTERIAL |
| 07 | RURAL MAJOR COLLECTOR |
| 08 | RURAL MINOR COLLECTOR |
| 09 | RURAL LOCAL |
| 11 | URBAN PRINCIPAL ARTERIAL - INTERSTATE |
| 12 | URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP |
| 14 | URBAN PRINCIPAL ARTERIAL - OTHER |
| 16 | URBAN MINOR ARTERIAL |
| 17 | URAN MAJOR COLLETOR |
| 18 | URBAN MINOR COLLETTOR |
| 19 | URBAN LOCAL |
| 78 | UNKNOWN RURAL SYSTEM |
| 79 | UNKNOWN RURAL NON-SYSTEM |
| 98 | UNKNOWN URBAN SYSTEM |
| 99 | UNKNOWN URBAN NON-SYSTEM |

## INJURY SEVERITY CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- | :--- |
| 1 | KILL | FATAL INJURY (K) |
| 2 | INJA | SUSPECTED SERIOUS INJURY (A) |
| 3 | INJB | SUSPECTED MINOR INJURY (B) |
| 4 | INJC | POSSIBLE INJURY (C) |
| 5 | PRI | DIED PRIOR TO CRASH |
| 7 | NO<5 | NO INJURY- O TO 4 YEARS OF AGE |
| 9 | NONE | NO APPARENT INJURY (0) |

## MEDIAN TYPE CODE TRANSLATION LIST

|  | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NO MEDIAN |
| 1 | RSDMD | SOLID MEDIAN BARRIER |
| 2 | DIVMD | EARTH, GRASS OR PAVED MEDIAN |

## LIGHT CONDITION CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | DAY | DAYLIGHT |
| 2 | DLIT | DARKNESS - WITH STREET LIGHTS |
| 3 | DARK | DARKNESS - NO STREET LIGHTS |
| 4 | DAWN | DAWN (TWILIGHT) |

5 DUSK DUSK (TWILIGHT)
mileage type code translation list

| CODE | LONG DESCRIPTION |
| :---: | :--- |
| 0 | REGULAR MILEAGE |
| T | TEMPORARY |
| Y | SPUR |
| $Z$ | OVERLAPPING |

MOVEMENT TYPE CODE TRANSLATION LIST

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | STRGHT | STRAIGHT AHEAD |
| 2 | TURN-R | TURNING RIGHT |
| 3 | TURN-L | TUANING LEFT |
| 4 | U-TURN | MARING A U-TURN |
| 5 | BACK | BACKING |
| 6 | STOP | STOPPED IN TRAFFIC |
| 7 | PRKD-P | PARKED - PROPERLY |
| 8 | PRKD-I | PARKED - IMPROPRLY |
| 9 | PARKNG | PARKING MANEUVER |

PARTICIPANT TYPE CODE TRANSLATION LISI

| CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |

## traffic control device code translation list

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 000 | NONE | NO CONTROL |
| 001 | TRF SIGNAL | TRAFFIC SIGNALS |
| 002 | FLASHBCN-R | FLASHING BEACON - RED (STOP) |
| 003 | FLASHBCN-A | FLASHING BEACON - AMBER (SLOW) |
| 004 | STOP SIGN | STOP SIGN |
| 005 | SLOW SIGN | SLOW SIGN |
| 006 | REG-SIGN | REGULATORY SIGN |
| 007 | YIELD | YIELD SIGN |
| 008 | WARNING | WARNING SIGN |
| 009 | CURVE | CURVE SIGN |
| 010 | SCHL X-ING | SCHOOL CROSSING SIGN OR SPECIAL SIGNAL |
| 011 | OFCR/FLAG | POLICE OFFICER, FLAGMAN - SCHOOL PATROL |
| 012 | BRDG-GATE | BRIDGE GATE - BARRIER |
| 013 | TEMP-BARR | TEMPORARY BARRIER |
| 014 | NO-PASS-ZN | NO PASSING ZONE |
| 015 | ONE-WAY | ONE-WAY STREET |
| 016 | CHANNEL | CHANNELIZATINN |
| 017 | MEDAN BAR | MEDIAN BARRIER |
| 018 | PILOT CAR | PILOT CAR |
| 019 | SP PED SIG | SPECIAL PEDESTRIAN SIGNAL |
| 020 | X-BUCK | CROSSBUCK |
| 021 | THR-GN-SIG | THROUGH GREEN ARROW OR SIGNAL |
| 022 | L-GRN-SIG | LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 023 | R-GRN-SIG | RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 024 | WIGNG | WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE |
| 025 | X-BUCK WRN | CROSSBUCK AND ADVANCE WARNING |
| 026 | WW W/ GATE | FLASHING LIGHTS WITH DROP-ARM GATES |
| 027 | OVRHD SGNL | SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY) |
| 028 | SP RR STOP | SPECIAL RR STOP SIGN |
| 029 | ILUM GRD X | ILLUMINATED GRADE CROSSING |
| 037 | RAMP METER | METERED RAMPS |
| 038 | RUMBLE STR | RUMBLE STRIP |
| 090 | L-TURN REF | LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED) |
| 091 | R-TURN ALL | RIGHT TURN AT ALL TIMES SIGN, ETC. |
| 092 | EMR SGN/FL | EMERGENCY SIGNS OR FLARES |
| 093 | ACCEL LANE | ACCELERATION OR DECELERATION LANES |
| 094 | R-TURN PRO | RIGHT TURN PROHIBITED ON RED AFTER STOPPING |
| 095 | BUS STPSGN | BUS STOP SIGN AND RED LIGHTS |
| 099 | UNKNOWN | UNKNOWN OR NOT DEFINITE |

## VEhICLE TYPE CODE TRANSLATION LIS

WEATHER CONDITION CODE TRANSLATION LIST

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 00 | PDO | NOT COLLECTED FOR PDO CRASHES |
| 01 | PSNGR CAR | PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC. |
| 02 | BOBTAIL | TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL) |
| 03 | FARM TRCTR | FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT |
| 04 | SEMI TOW | TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW |
| 05 | TRUCK | TRUCK WITH NON-DETACHABLE BED, PANEL, ETC. |
| 06 | MOPED | MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE |
| 07 | SCHL BUS | SCHOOL BUS (INCLUDES VAN) |
| 08 | OTH BUS | OTHER BUS |
| 09 | MTRCYCLE | MOTORCYCLE, DIRT BIKE |
| 10 | OTHER | OTHER: FORKLIFT, BACKHOE, ETC. |
| 11 | MOTRHOME | MOTORHOME |
| 12 | TROLLEY | MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES) |
| 13 | ATV | ATV |
| 14 | MTRSCTR | MOTORIZED SCOOTER (STANDING) |
| 15 | SNOWMOBILE | SNOWMOBILE |
| 99 | UNKNOWN | UNKNOWN VEHICLE TYPE |


| CODE | SHORT | DESC |
| :---: | :--- | :--- |
| 0 | LONG DESCRIPTION |  |
| 1 | CLR | UNKNOWN |
| 2 | CLD | CLEAR |
| 3 | RAIN | CLOUDY |
| 4 | RLT | SLEET |
| 5 | FOG | FOG |
| 6 | SNOW | SNOW |
| 7 | DUST | DUST |
| 8 | SMOK | SMOKE |
| 9 | ASH | ASH |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Intersectional Crashes at S L St \& S 3rd St
January 1, 2014 through December 31, 2018

| COLLISION TYPE | FATAL CRASHES | $\begin{gathered} \text { NON- } \\ \text { FATAL } \\ \text { CRASHES } \end{gathered}$ | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE <br> INJURED | TRUCKS | $\begin{aligned} & \text { DRY } \\ & \text { SURF } \end{aligned}$ | WET <br> SURF | DAY | DARK | INTERSECTION | INTERSECTION RELATED | $\begin{aligned} & \text { OFF- } \\ & \text { ROAD } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

YEAR:
TOTAL
FINAL TOTAL

Disclaimers: Effective 2016, collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers,
see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

Intersectional Crashes at S Roberta St \& S 3rd St January 1, 2014 through December 31, 2018

| LLISION TYP | FATAL CRASHES | NONFATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | $\begin{aligned} & \text { DRY } \\ & \text { SURF } \end{aligned}$ | WET SURF | DAY | DARK | INTERSECTION | INTERSECTION RELATED | $\begin{aligned} & \text { OFF- } \\ & \text { ROAD } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - |  |  |  |  |  |  | Trucks |  |  |  | DA |  |  |  |

YEAR.
TOTAL
FINAL TOTAL

Disclaimers: Effective 2016, collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants. Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers,
see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.


# ACTION CODE TRANSLATION LIST 

## ACTION SHORT

CODE DESCRIPTION LONG DESCRIPTION

| 000 | NONE | NO ACTION OR NON-WARRANTED |
| :---: | :---: | :---: |
| 001 | SKIDDED | SkIDDED |
| 002 | on/off V | GEtting on or off stopped or parked vehicle |
| 003 | LOAD OVR | OVERHANGING LOAD Struck another vehicle, etc. |
| 006 | SLOW DN | SLOWED DOwn |
| 007 | Avoiding | AVOIDING MANEUVER |
| 008 | PAR PARK | PARALLEL PARKING |
| 009 | ANG PARK | Angle Parking |
| 010 | Interfere | PASSENGER Interfering with driver |
| 011 | Stopped | Stopped in traffic not waiting to make a left turn |
| 012 | STP/L TRN | Stopped because of left turn Signal or waiting, etc. |
| 013 | STP TURN | Stopped While executing A turn |
| 014 | EMR V PKD | Emergency vehicle legally parked in the roadway |
| 015 | GO A/Stop | PROCEED AFTER Stopping for a stop Sign/flashing red. |
| 016 | TRN A/RED | TURNED ON RED AFTER STOPPING |
| 017 | LOSTCTRL | LOST CONTROL OF VEHICLE |
| 018 | EXIT DWY | Entering Street or highway from alley or dilveway |
| 019 | ENTR DWY | Entering Alley or driveway from street or highway |
| 020 | STR ENTR | before entering roadway, Struck pedestrian, etc. on Sidewalk or shoulder |
| 021 | NO DRVR | CAR RAN AWAY - NO DRIVER |
| 022 | PREV COL | Struck, OR WAS Struck by, vehicle or pedestrian in prior collision before acc. Stabilized |
| 023 | STALLED | VEHICLE STALLED OR DISABLED |
| 024 | DRVR DEAD | DEAD BY UNASSOCIATED CAUSE |
| 025 | FAtigue | fatigued, Sleepy, Asleep |
| 026 | SUN | DRIVER BLINDED BY SUN |
| 027 | HDLGHTS | DRIVER BLINDED BY HEADLIGHTS |
| 028 | ILLNESS | PHYSICALLY ILL |
| 029 | THRU MED | VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER |
| 030 | PURSUIT | PURSUING OR ATTEMPTING TO STOP A VEhICLE |
| 031 | PASSING | PASSING SITUATION |
| 032 | PRKOFFRD | VEHICLE PARKED BEYOND CURB OR SHOULDER |
| 033 | CROS MED | VEHICLE CROSSED EARTH OR GRASS MEDIAN |
| 034 | $\mathrm{X} \mathrm{N} / \mathrm{SGNL}$ | Crossing at intersection - no traffic signal present |
| 035 | X W/ SGNL | CROSSING AT Intersection - traffic signal present |
| 036 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 037 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 038 | DISTRACT | DRIVER'S Attention distracted |
| 039 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 040 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 041 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 042 | A/traf-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 043 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 044 | puSh mV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 045 | WORK ON | WORKING IN ROADWAY OR ALONG SHOULDER |
| 046 | W/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WIth traffic |
| 047 | A/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC |
| 050 | LAY ON RD | StANDING OR LYING IN ROADWAY |
| 051 | ENT Offrd | Entering / Starting in traffic lane from off road |
| 052 | MERGING | MERGING |

## ACTION CODE TRANSLATION LIST

| 00 | NO CODE | NO CAUSE ASSOCIATED AT THIS LEVEL |
| :--- | :--- | :--- |
| 01 | TOO-FAST | TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED. |
| 02 | NO-YIELD | DID NOT YIELD RIGHT-OF-WAY |
| 03 | PAS-STOP | PASSED STOP SIGN OR RED FLASHER |
| 04 | DIS SIG | DISREGARDED TRAFFIC SIGNAL |
| 05 | LEFT-CTR | DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING |
| 06 | IMP-OVER | IMPROPER OVERTAKING |
| 07 | TOO-CLOS | FOLLOWED TOO CLOSELY |
| 08 | IMP-TURN | MADE IMPROPER TURN |
| 09 | DRINKING | ALCOHOL OR DRUG INVOLVED |
| 10 | OTHR-IMP | OTHER IMPROPER DRIVING |
| 11 | MECH-DEF | MECHANICAL DEFECT |
| 12 | OTHER | OTHER (NOT IMPROPER DRIVING) |
| 13 | IMP LNC | IMPROPER CHANGE OF TRAFFIC LANES |
| 14 | DIS TCD | DISREGARDED OTHER TRAFFIC CONTROL DEVICE |
| 15 | WRNG WAY | WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED ROi |
| 16 | FATIGUE | DRIVER DROWSY/FATIGUED/SLEEPY |
| 17 | ILLNESS | PHYSICAL ILLNESS |
| 18 | IN RDWY | NON-MOTORIST ILLEGALLY IN ROADWAY |
| 19 | NT VISBL | NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN |
| 20 | IMP PKNG | VEHICLE IMPROPERLY PARKED |
| 21 | DEF STER | DEFECTIVE STEERING MECHANISM |
| 22 | DEF BRKE | INADEQUATE OR NO BRAKES |
| 24 | LOADSHFT | VEHICLE LOST LOAD OR LOAD SHIFTED |
| 25 | TIREFAIL | TIRE FAILURE |
| 26 | PHANTOM | PHANTOM / NON-CONTACT VEHICLE |
| 27 | INATTENT | INATTENTION |
| 28 | NM INATT | NON-MOTORIST INATTENTION |
| 29 | FAVOID | FAILED TO AVOID VEHICLE AHEAD |
| 30 | SPEED | DRIVING IN EXCESS OF POSTED SPEED |
| 31 | RACING | SPEED RACING (PER PAR) |
| 32 | CARELESS | CARELESS DRIVING (PER PAR) |
| 33 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 34 | AGGRESV | AGGRESSIVE DRIVING (PER PAR) |
| 35 | RDRAGE | ROAD RAGE (PER PAR) |
| 40 | VIEW OBS | VIEW OBSCURED |
| 50 | USED MDN | IMPROPER USE OF MEDIAN OR SHOULDER |
| 51 | FAIL LN | FAILED TO MAINTAIN LANE |
| 52 | OFF RD | RAN OFF ROAD |


| \& | OTH | MISCELL |
| :--- | :--- | :--- |
| - | BACK | BACKING |
| 0 | PED |  |


| 1 | ANGL | PEDESTRIA |
| :--- | :--- | :--- |
| 2 | HEAD | ANGLE |


| 2 | HEAD | HEAD-ON |
| :--- | :--- | :--- |
| 3 | REAR | REAR |

3 REAR REAR-END

| 4 | SS-M | SIDESWIPE - MEETING |
| :--- | :--- | :--- |

5 SS-O SIDESWIPE - OVERTAKIng
6 TURN TURNING MOVEMENT
PARK PARKING MANEUVER
8 NCOL NON-COLLISION
9 FIX FIXED OBJECT OR OTHER OBJECT

## CRASH TYPE CODE TRANSLATION LIST

CRASH SHORT
TYPE DESCRIPTION LONG DESCRIPTION

| $\&$ | OVERTURN | OVERTURNED |
| :--- | :--- | :--- |
| 0 | NON-COLL | OTHER NON-COLLISIO |


| 0 | NON-COLL | OTHER NON-COLLISION |
| :--- | :--- | :--- |
| 1 | OTH RDWY | MOTOR VEHICLE ON OTHER ROADWAY |


| 1 | OTH RDWY | MOTOR VEHICLE ON OTH |
| :--- | :--- | :--- |
| 2 | PRKD MV | PARKED MOTOR VEHICLE |


| LIC | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NOT LICENSED (HAD NEVER BEEN LICENSED) |
| 1 | OR-Y | VALID OREGON LICENSE |
| 2 | OTH-Y | VALID LICENSE, OTHER STATE OR COUNTRY |
| 3 | SUSP | SUSPENDED/REVOKED |
| 4 | EXP | EXPIRED |
| 8 | N-VAL | OTHER NON-VALID LICENSE |
| 9 | UNK | UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH |


| RES <br> CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :---: | :--- |

## ERROR CODE TRANSLATION LIST

| ERROR CODE | SHORT <br> DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 000 | NONE | NO ERROR |
| 001 | WIDE TRN | WIDE TURN |
| 002 | CUT CORN | CUT CORNER ON TURN |
| 003 | FAIL TRN | FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS |
| 004 | L IN TRF | LEFT TURN IN FRONT OF ONCOMING TRAFFIC |
| 005 | L PROHIB | LEFT TURN WHERE PROHIBITED |
| 006 | FRM WRng | TURNED FROM WRONG LANE |
| 007 | TO WRONG | TURNED INTO WRONG LANE |
| 008 | ILLEG U | U-TURNED ILLEGALLY |
| 009 | IMP STOP | IMPROPERLY STOPPED IN TRAFFIC LANE |
| 010 | IMP SIG | IMPROPER SIGNAL OR FAILURE TO SIGNAL |
| 011 | IMP BACK | BACKING IMPROPERLY (NOT PARKING) |
| 012 | IMP PARK | IMPROPERLY PARKED |
| 013 | UNPARK | Improper Start leaving Parked position |
| 014 | IMP STRT | IMPROPER START FROM STOPPED POSITION |
| 015 | IMP LGHT | IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC) |
| 016 | InAttent | INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97) |
| 017 | UNSF VEH | DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT) |
| 018 | Oth PARK | ENTERING/EXITING PARKED POSITION W/ InSufficient Clearance; other improper Parking maneuver |
| 019 | DIS DRIV | DISREGARDED OTHER DRIVER'S SIGNAL |
| 020 | DIS SGNL | DISREGARDED TRAFFIC SIGNAL |
| 021 | RAN Stop | DISREGARDED Stop Sign or flashing red |
| 022 | DIS SIGN | DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER |
| 023 | DIS OFCR | DISREGARDED POLICE OFFICER OR FLAGMAN |
| 024 | DIS EMER | DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE |
| 025 | DIS RR | DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN |
| 026 | REAR-END | FAILED TO AVOID Stopped or parked vehicle ahead other than School bus |
| 027 | BIKE ROW | DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST |
| 028 | No Row | DID NOT HAVE RIGHT-OF-WAY |
| 029 | PED ROW | FAILED TO YIELD RIGHT-OF-WAY to pedestrian |
| 030 | PAS CURV | PASSING ON A CURVE |
| 031 | PAS WRng | PASSING ON THE WRONG SIDE |
| 032 | PAS tANG | PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS |
| 033 | PAS X -WK | PASSED VEHICLE Stopped at crosswalk for pedestrian |
| 034 | PAS INTR | PASSING AT INTERSECTION |
| 035 | PAS HILL | PASSING ON CREST Of hill |
| 036 | N/PAS ZN | PASSING IN "NO PASSING" ZONE |
| 037 | PAS TRAF | PASSING In FRONT OF ONCOMING TRAFFIC |
| 038 | CUT-IN | CUtting in (TWO LANES - TWO WAY OnLy) |
| 039 | WRNGSIDE | DRIVING ON WRONG SIDE Of the road (2-WAY UNDIVIDED ROADWAYS) |


| ERROR | SHORT DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 040 | THRU MED | DRIVING THROUGH SAFETY ZONE OR OVER ISLAND |
| 041 | F/ST BUS | FAILED TO STOP FOR SCHOOL BUS |
| 042 | F/SLO MV | FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE |
| 43 | too Close | FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT) |
| 044 | STRDL LN | STRADDLING OR DRIVING ON WRONG LANES |
| 045 | IMP CHG | ImPROPER CHANGE OF TRAFFIC LANES |
| 046 | WRNG WAY | WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD |
| 047 | BASCRULE | DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED) |
| 048 | OPN DOOR | OPENED DOOR INTO ADJACENT TRAFFIC LANE |
| 049 | Impeding | IMPEDING TRAFFIC |
| 050 | SPEED | DRIVING In EXCESS OF POSTED SPEED |
| 051 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 052 | CARELESS | CARELESS DRIVING (PER PAR) |
| 053 | RACING | SPEED RACING (PER PAR) |
| 054 | X N/SGNL | CROSSING AT Intersection, NO TRAFFIC SIGNAL PRESENT |
| 055 | X W/SGNL | CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT |
| 056 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 057 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 059 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 060 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 061 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 062 | A/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 063 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 064 | PUSH MV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 065 | WORK IN RD | WORKING IN ROADWAY OR ALONG SHOULDER |
| 070 | LAY ON RD | Standing Or Lying in roadway |
| 071 | NM IMP USE | IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST |
| 073 | ELUDING | ELUding / Attempt to elude |
| 079 | F NEG CURV | FAILED TO NeGotiate a curve |
| 080 | FAIL LN | FAILED TO MAINTAIN LANE |
| 081 | OFF RD | RAN OFF ROAD |
| 082 | No CLEAR | DRIVER MISJUDGED CLEARANCE |
| 083 | OVRSTEER | OVER-CORRECTING |
| 084 | NOT USED | CODE NOT IN USE |
| 085 | OVRLOAD | OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS |
| 97 | UNA DIS TC | UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE |

EVENT SHORT
CODE DESCRIPTION

| 001 | FEL/JUMP | OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEhICLE |
| :---: | :---: | :---: |
| 002 | INTERFER | PASSENGER INTERFERED WITH DRIVER |
| 003 | bug inte | ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER |
| 004 | INDRCT PED | PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK) |
| 005 | SUB-PED | "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC. |
| 006 | INDRCT BIK | PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK) |
| 007 | HITCHIKR | HITCHHIKER (SOLICITING A RIDE) |
| 008 | PSNGR TOW | PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE |
| 009 | ON/OFF V | GEtting On/OFF Stopped/parked vehicle (OCCUPANTS Only; must have physical contact w/ vehic |
| 010 | SUB OTRN | OVERTURNED AFTER FIRST HARMFUL EVENT |
| 011 | MV PUSHD | VEHICLE BEING PUSHED |
| 012 | MV TOWED | VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE |
| 013 | FORCED | VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN |
| 014 | SET MOTN | VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.) |
| 015 | RR ROW | AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL) |
| 016 | LT RL Row | AT OR ON LIGHT-RAIL RIGHT-OF-WAY |
| 017 | RR HIT V | TRAIN STRUCK VEhicle |
| 018 | V HIT RR | VEhicle struck train |
| 019 | HIT RR CAR | vehicle struck railroad car on roadway |
| 020 | JACKNIFE | JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE |
| 021 | TRL OTRN | TRAILER OR TOWED VEHICLE OVERTURNED |
| 022 | CN BROKE | TRAILER CONNECTION BROKE |
| 023 | DETACH TRL | DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT |
| 024 | V DOOR OPN | VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE |
| 025 | WHEELOFF | WHEEL CAME OFF |
| 026 | HOOD UP | HOOD FLEW UP |
| 028 | LOAD SHIFT | LOST LOAD, LOAD MOVED OR Shifted |
| 029 | TIREFAIL | TIRE FAILURE |
| 030 | PET | PET: CAT, DOG AND SIMILAR |
| 031 | LVSTOCK | STOCK: COW, CALF, BULL, STEER, SHEEP, ETC. |
| 032 | HORSE | HORSE, MULE, OR DONKEY |
| 033 | HRSE\&RID | HORSE AND RIDER |
| 034 | GAME | WILD AnIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK) |
| 035 | DEER ELK | DEER OR ELK, WAPITI |
| 036 | AnML Veh | ANIMAL-DRAWN VEHICLE |
| 037 | CULVERT | CULVERT, OPEN LOW OR HIGH MANHOLE |
| 038 | Atenuatn | IMPACT ATTENUATOR |
| 039 | PK METER | PARKING METER |
| 040 | CURB | CURB (ALSO NARROW SIDEWALKS ON BRIDGES) |
| 041 | JIGGLE | JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION |
| 042 | GDRL END | LEADING EDGE OF GUARDRAIL |
| 043 | GARDRAIL | GUARD RAIL (NOT METAL MEDIAN BARRIER) |
| 044 | BARRIER | MEDIAN BARRIER (RAISED OR METAL) |
| 045 | WALL | REtAINING WALL OR TUNNEL WALL |
| 046 | BR RAIL | BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH) |
| 047 | BR ABUTMNT | BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013) |
| 048 | BR COLMN | BRIDGE PILLAR OR COLUMN |
| 049 | BR GIRDR | BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD) |
| 050 | ISLAND | TRAFFIC RAISED ISLAND |
| 051 | GORE | GORE |
| 052 | POLE UNK | POLE - TYPE UNKNOWN |
| 053 | POLE UTL | POLE - POWER OR TELEPHONE |
| 054 | ST LIGHT | POLE - Street light only |
| 055 | TRF SGNL | POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY |
| 056 | SGN BRDG | POLE - SIGN BRIDGE |
| 057 | STOPSIGN | Stop OR YIELD SIGN |

## EVENT CODE TRANSLATION LIST

| CODE | DESCRIPTION | LONG DESCRIPTION |
| :---: | :---: | :---: |
| 058 | OTH SIGN | OTHER SIGN, INCLUDING STREET SIGNS |
| 059 | HYDRANT | HYDRANT |
| 060 | MARKER | DELINEATOR OR MARKER (REFLECTOR POSTS) |
| 061 | MAILBOX | MAILBOX |
| 062 | tree | tree, Stump or shrubs |
| 063 | VEG OHED | tree branch or other vegetation overhead, etc. |
| 064 | WIRE/CBL | WIRE OR CABLe ACROSS OR OVER THE ROAD |
| 065 | TEMP SGN | TEMPORARY SIGN OR BARRICADE IN ROAD, ETC. |
| 066 | PERM SGN | PERMANENT SIGN OR BARRICADE IN/OFF ROAD |
| 067 | SLIDE | SLIDES, FALLEN OR FALLING ROCKS |
| 068 | FRGN OBJ | FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL) |
| 069 | EQP WORK | EQUIPMENT WORKING IN/OFF ROAD |
| 070 | OTH EQP | OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT) |
| 071 | MAIN EQP | WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT |
| 072 | OTHER WALL | ROCK, BRICK OR OTHER SOLID WALL |
| 073 | IRRGL PVMT | OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR) |
| 074 | OVERHD OBJ | OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE |
| 075 | CAVE IN | BRIDGE OR ROAD CAVE IN |
| 076 | HI WAter | HIGH WATER |
| 077 | SNO BANK | SNOW BANK |
| 078 | LO-HI EDGE | Low OR HIGH Shoulder at Pavement edge |
| 079 | DITCH | CUT SLOPE OR DITCH EMBANKMENT |
| 080 | OBJ FRM MV | STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS) |
| 081 | FLY-OBJ | STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE) |
| 082 | VEH HID | VEhicle ObSCURED view |
| 083 | VEG HID | VEGETATION OBSCURED VIEW |
| 084 | BLDG HID | VIEW OBSCURED BY Fence, Sign, Phone booth, etc. |
| 085 | WIND GUST | WIND GUST |
| 086 | IMMERSED | VEHICLE IMMERSED IN BODY OF WATER |
| 087 | FIRE/EXP | FIRE OR EXPLOSION |
| 088 | FENC/BLD | FENCE OR BUILDING, ETC. |
| 089 | OTHR CRASH | CRASH RELATED TO ANOTHER SEPARATE CRASH |
| 090 | TO 1 SIDE | TWO-WAY traffic on divided roadway all routed to one side |
| 091 | BUILDING | BUILDING OR OTHER STRUCTURE |
| 092 | PHANTOM | OTHER (PHANTOM) NON-CONTACT VEHICLE |
| 093 | CELL PHONE | CELL PHONE (ON PAR OR DRIVER IN USE) |
| 094 | VIOL GDL | teenage driver in violation of graduated license pgm |
| 095 | GUY WIRE | GUY WIRE |
| 096 | BERM | BERM (EARTHEN OR GRAVEL MOUND) |
| 097 | GRAVEL | GRAVEL IN ROADWAY |
| 098 | ABR EDGE | ABRUPT EDGE |
| 099 | CELL WTNSD | CELL PHONE USE WITNESSED BY OTHER PARTICIPANT |
| 100 | UNK FIXD | FIXED OBJECT, UNKNOWN TYPE. |
| 101 | OTHER OBJ | NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE |
| 102 | TEXTING | TEXTING |
| 103 | WZ WORKER | WORK ZONE WORKER |
| 104 | ON VEhicle | PASSENGER RIDING ON VEhICLE EXTERIOR |
| 105 | PEDAL PSGR | PASSENGER RIDING ON PEDALCYCLE |
| 106 | MAN WHLCHR | PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR |
| 107 | MTR WHLCHR | PEDESTRIAN IN MOTORIZED Wheelchair |
| 108 | OFFICER | LAW ENFORCEMENT / POLICE OFFICER |
| 109 | SUB-BIKE | "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC. |
| 110 | N-MTR | NON-MOTORIST STRUCK VEHICLE |
| 111 | S CAR VS V | Street Car/Troliey (on Rails or overhead wire system) Struck vehicle |
| 112 | v VS S CAR | VEhicle struck street Car/trolley (on Rails or overhead wire system) |
| 113 | S CAR ROW | AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY |

## event code translation list

SHORT
CODE DESCRIPTION LONG DESCRIPTION

| 114 | RR EQUIP | VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS |
| :--- | :--- | :--- |
| 115 | DSTRCT GPS | DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE |
| 116 | DSTRCT OTH | DISTRACTED BY OTHER ELECTRNIC DEVICE |



| CLASS | DESCRIPTION |
| :---: | :--- |
| 01 | RURAL PRINCIPAL ARTERIAL - INTERSTATE |
| 02 | RURAL PRINCIPAL ARTERIAL - OTHER |
| 06 | RURAL MINOR ARTERIAL |
| 07 | RURAL MAJOR COLLECTOR |
| 08 | RURAL MINOR COLLECTOR |
| 09 | RURAL LOCAL |
| 11 | URBAN PRINCIPAL ARTERIAL - INTERSTATE |
| 12 | URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP |
| 14 | URBAN PRINCIPAL ARTERIAL - OTHER |
| 16 | URBAN MINOR ARTERIAL |
| 17 | URAN MAJOR COLLETOR |
| 18 | URBAN MINOR COLLETTOR |
| 19 | URBAN LOCAL |
| 78 | UNKNOWN RURAL SYSTEM |
| 79 | UNKNOWN RURAL NON-SYSTEM |
| 98 | UNKNOWN URBAN SYSTEM |
| 99 | UNKNOWN URBAN NON-SYSTEM |

## INJURY SEVERITY CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- | :--- |
| 1 | KILL | FATAL INJURY (K) |
| 2 | INJA | SUSPECTED SERIOUS INJURY (A) |
| 3 | INJB | SUSPECTED MINOR INJURY (B) |
| 4 | INJC | POSSIBLE INJURY (C) |
| 5 | PRI | DIED PRIOR TO CRASH |
| 7 | NO<5 | NO INJURY- O TO 4 YEARS OF AGE |
| 9 | NONE | NO APPARENT INJURY (0) |

## MEDIAN TYPE CODE TRANSLATION LIST

|  | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NO MEDIAN |
| 1 | RSDMD | SOLID MEDIAN BARRIER |
| 2 | DIVMD | EARTH, GRASS OR PAVED MEDIAN |

## LIGHT CONDITION CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | DAY | DAYLIGHT |
| 2 | DLIT | DARKNESS - WITH STREET LIGHTS |
| 3 | DARK | DARKNESS - NO STREET LIGHTS |
| 4 | DAWN | DAWN (TWILIGHT) |

5 DUSK DUSK (TWILIGHT)
mileage type code translation list

| CODE | LONG DESCRIPTION |
| :---: | :--- |
| 0 | REGULAR MILEAGE |
| T | TEMPORARY |
| Y | SPUR |
| $Z$ | OVERLAPPING |

MOVEMENT TYPE CODE TRANSLATION LIST

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | STRGHT | STRAIGHT AHEAD |
| 2 | TURN-R | TURNING RIGHT |
| 3 | TURN-L | TUANING LEFT |
| 4 | U-TURN | MARING A U-TURN |
| 5 | BACK | BACKING |
| 6 | STOP | STOPPED IN TRAFFIC |
| 7 | PRKD-P | PARKED - PROPERLY |
| 8 | PRKD-I | PARKED - IMPROPRLY |
| 9 | PARKNG | PARKING MANEUVER |

PARTICIPANT TYPE CODE TRANSLATION LISI

| CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |

## traffic control device code translation list

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 000 | NONE | NO CONTROL |
| 001 | TRF SIGNAL | TRAFFIC SIGNALS |
| 002 | FLASHBCN-R | FLASHING BEACON - RED (STOP) |
| 003 | FLASHBCN-A | FLASHING BEACON - AMBER (SLOW) |
| 004 | STOP SIGN | STOP SIGN |
| 005 | SLOW SIGN | SLOW SIGN |
| 006 | REG-SIGN | REGULATORY SIGN |
| 007 | YIELD | YIELD SIGN |
| 008 | WARNING | WARNING SIGN |
| 009 | CURVE | CURVE SIGN |
| 010 | SCHL X-ING | SCHOOL CROSSING SIGN OR SPECIAL SIGNAL |
| 011 | OFCR/FLAG | POLICE OFFICER, FLAGMAN - SCHOOL PATROL |
| 012 | BRDG-GATE | BRIDGE GATE - BARRIER |
| 013 | TEMP-BARR | TEMPORARY BARRIER |
| 014 | NO-PASS-ZN | NO PASSING ZONE |
| 015 | ONE-WAY | ONE-WAY STREET |
| 016 | CHANNEL | CHANNELIZATINN |
| 017 | MEDAN BAR | MEDIAN BARRIER |
| 018 | PILOT CAR | PILOT CAR |
| 019 | SP PED SIG | SPECIAL PEDESTRIAN SIGNAL |
| 020 | X-BUCK | CROSSBUCK |
| 021 | THR-GN-SIG | THROUGH GREEN ARROW OR SIGNAL |
| 022 | L-GRN-SIG | LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 023 | R-GRN-SIG | RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 024 | WIGNG | WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE |
| 025 | X-BUCK WRN | CROSSBUCK AND ADVANCE WARNING |
| 026 | WW W/ GATE | FLASHING LIGHTS WITH DROP-ARM GATES |
| 027 | OVRHD SGNL | SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY) |
| 028 | SP RR STOP | SPECIAL RR STOP SIGN |
| 029 | ILUM GRD X | ILLUMINATED GRADE CROSSING |
| 037 | RAMP METER | METERED RAMPS |
| 038 | RUMBLE STR | RUMBLE STRIP |
| 090 | L-TURN REF | LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED) |
| 091 | R-TURN ALL | RIGHT TURN AT ALL TIMES SIGN, ETC. |
| 092 | EMR SGN/FL | EMERGENCY SIGNS OR FLARES |
| 093 | ACCEL LANE | ACCELERATION OR DECELERATION LANES |
| 094 | R-TURN PRO | RIGHT TURN PROHIBITED ON RED AFTER STOPPING |
| 095 | BUS STPSGN | BUS STOP SIGN AND RED LIGHTS |
| 099 | UNKNOWN | UNKNOWN OR NOT DEFINITE |

## VEhICLE TYPE CODE TRANSLATION LIS

WEATHER CONDITION CODE TRANSLATION LIST

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 00 | PDO | NOT COLLECTED FOR PDO CRASHES |
| 01 | PSNGR CAR | PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC. |
| 02 | BOBTAIL | TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL) |
| 03 | FARM TRCTR | FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT |
| 04 | SEMI TOW | TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW |
| 05 | TRUCK | TRUCK WITH NON-DETACHABLE BED, PANEL, ETC. |
| 06 | MOPED | MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE |
| 07 | SCHL BUS | SCHOOL BUS (INCLUDES VAN) |
| 08 | OTH BUS | OTHER BUS |
| 09 | MTRCYCLE | MOTORCYCLE, DIRT BIKE |
| 10 | OTHER | OTHER: FORKLIFT, BACKHOE, ETC. |
| 11 | MOTRHOME | MOTORHOME |
| 12 | TROLLEY | MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES) |
| 13 | ATV | ATV |
| 14 | MTRSCTR | MOTORIZED SCOOTER (STANDING) |
| 15 | SNOWMOBILE | SNOWMOBILE |
| 99 | UNKNOWN | UNKNOWN VEHICLE TYPE |


| CODE | SHORT | DESC |
| :---: | :--- | :--- |
| 0 | LONG DESCRIPTION |  |
| 1 | CLR | UNKNOWN |
| 2 | CLD | CLEAR |
| 3 | RAIN | CLOUDY |
| 4 | RLT | SLEET |
| 5 | FOG | FOG |
| 6 | SNOW | SNOW |
| 7 | DUST | DUST |
| 8 | SMOK | SMOKE |
| 9 | ASH | ASH |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



# ACTION CODE TRANSLATION LIST 

## ACTION SHORT

CODE DESCRIPTION LONG DESCRIPTION

| 000 | NONE | NO ACTION OR NON-WARRANTED |
| :---: | :---: | :---: |
| 001 | SKIDDED | SkIDDED |
| 002 | on/off V | GEtting on or off stopped or parked vehicle |
| 003 | LOAD OVR | OVERHANGING LOAD Struck another vehicle, etc. |
| 006 | SLOW DN | SLOWED DOwn |
| 007 | Avoiding | AVOIDING MANEUVER |
| 008 | PAR PARK | PARALLEL PARKING |
| 009 | ANG PARK | Angle Parking |
| 010 | Interfere | PASSENGER Interfering with driver |
| 011 | Stopped | Stopped in traffic not waiting to make a left turn |
| 012 | STP/L TRN | Stopped because of left turn Signal or waiting, etc. |
| 013 | STP TURN | Stopped While executing A turn |
| 014 | EMR V PKD | Emergency vehicle legally parked in the roadway |
| 015 | GO A/Stop | PROCEED AFTER Stopping for a stop Sign/flashing red. |
| 016 | TRN A/RED | TURNED ON RED AFTER STOPPING |
| 017 | LOSTCTRL | LOST CONTROL OF VEHICLE |
| 018 | EXIT DWY | Entering Street or highway from alley or dilveway |
| 019 | ENTR DWY | Entering Alley or driveway from street or highway |
| 020 | STR ENTR | before entering roadway, Struck pedestrian, etc. on Sidewalk or shoulder |
| 021 | NO DRVR | CAR RAN AWAY - NO DRIVER |
| 022 | PREV COL | Struck, OR WAS Struck by, vehicle or pedestrian in prior collision before acc. Stabilized |
| 023 | STALLED | VEHICLE STALLED OR DISABLED |
| 024 | DRVR DEAD | DEAD BY UNASSOCIATED CAUSE |
| 025 | FAtigue | fatigued, Sleepy, Asleep |
| 026 | SUN | DRIVER BLINDED BY SUN |
| 027 | HDLGHTS | DRIVER BLINDED BY HEADLIGHTS |
| 028 | ILLNESS | PHYSICALLY ILL |
| 029 | THRU MED | VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER |
| 030 | PURSUIT | PURSUING OR ATTEMPTING TO STOP A VEhICLE |
| 031 | PASSING | PASSING SITUATION |
| 032 | PRKOFFRD | VEHICLE PARKED BEYOND CURB OR SHOULDER |
| 033 | CROS MED | VEHICLE CROSSED EARTH OR GRASS MEDIAN |
| 034 | $\mathrm{X} \mathrm{N} / \mathrm{SGNL}$ | Crossing at intersection - no traffic signal present |
| 035 | X W/ SGNL | CROSSING AT Intersection - traffic signal present |
| 036 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 037 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 038 | DISTRACT | DRIVER'S Attention distracted |
| 039 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 040 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 041 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 042 | A/traf-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 043 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 044 | puSh mV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 045 | WORK ON | WORKING IN ROADWAY OR ALONG SHOULDER |
| 046 | W/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WIth traffic |
| 047 | A/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC |
| 050 | LAY ON RD | StANDING OR LYING IN ROADWAY |
| 051 | ENT Offrd | Entering / Starting in traffic lane from off road |
| 052 | MERGING | MERGING |

## ACTION CODE TRANSLATION LIST

| 00 | NO CODE | NO CAUSE ASSOCIATED AT THIS LEVEL |
| :--- | :--- | :--- |
| 01 | TOO-FAST | TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED. |
| 02 | NO-YIELD | DID NOT YIELD RIGHT-OF-WAY |
| 03 | PAS-STOP | PASSED STOP SIGN OR RED FLASHER |
| 04 | DIS SIG | DISREGARDED TRAFFIC SIGNAL |
| 05 | LEFT-CTR | DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING |
| 06 | IMP-OVER | IMPROPER OVERTAKING |
| 07 | TOO-CLOS | FOLLOWED TOO CLOSELY |
| 08 | IMP-TURN | MADE IMPROPER TURN |
| 09 | DRINKING | ALCOHOL OR DRUG INVOLVED |
| 10 | OTHR-IMP | OTHER IMPROPER DRIVING |
| 11 | MECH-DEF | MECHANICAL DEFECT |
| 12 | OTHER | OTHER (NOT IMPROPER DRIVING) |
| 13 | IMP LNC | IMPROPER CHANGE OF TRAFFIC LANES |
| 14 | DIS TCD | DISREGARDED OTHER TRAFFIC CONTROL DEVICE |
| 15 | WRNG WAY | WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED ROi |
| 16 | FATIGUE | DRIVER DROWSY/FATIGUED/SLEEPY |
| 17 | ILLNESS | PHYSICAL ILLNESS |
| 18 | IN RDWY | NON-MOTORIST ILLEGALLY IN ROADWAY |
| 19 | NT VISBL | NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN |
| 20 | IMP PKNG | VEHICLE IMPROPERLY PARKED |
| 21 | DEF STER | DEFECTIVE STEERING MECHANISM |
| 22 | DEF BRKE | INADEQUATE OR NO BRAKES |
| 24 | LOADSHFT | VEHICLE LOST LOAD OR LOAD SHIFTED |
| 25 | TIREFAIL | TIRE FAILURE |
| 26 | PHANTOM | PHANTOM / NON-CONTACT VEHICLE |
| 27 | INATTENT | INATTENTION |
| 28 | NM INATT | NON-MOTORIST INATTENTION |
| 29 | FAVOID | FAILED TO AVOID VEHICLE AHEAD |
| 30 | SPEED | DRIVING IN EXCESS OF POSTED SPEED |
| 31 | RACING | SPEED RACING (PER PAR) |
| 32 | CARELESS | CARELESS DRIVING (PER PAR) |
| 33 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 34 | AGGRESV | AGGRESSIVE DRIVING (PER PAR) |
| 35 | RDRAGE | ROAD RAGE (PER PAR) |
| 40 | VIEW OBS | VIEW OBSCURED |
| 50 | USED MDN | IMPROPER USE OF MEDIAN OR SHOULDER |
| 51 | FAIL LN | FAILED TO MAINTAIN LANE |
| 52 | OFF RD | RAN OFF ROAD |


| \& | OTH | MISCELL |
| :--- | :--- | :--- |
| - | BACK | BACKING |
| 0 | PED |  |


| 1 | ANGL | PEDESTRIA |
| :--- | :--- | :--- |
| 2 | HEAD | ANGLE |


| 2 | HEAD | HEAD-ON |
| :--- | :--- | :--- |
| 3 | REAR | REAR |

3 REAR REAR-END

| 4 | SS-M | SIDESWIPE - MEETING |
| :--- | :--- | :--- |

5 SS-O SIDESWIPE - OVERTAKIng
6 TURN TURNING MOVEMENT
PARK PARKING MANEUVER
8 NCOL NON-COLLISION
9 FIX FIXED OBJECT OR OTHER OBJECT

## CRASH TYPE CODE TRANSLATION LIST

CRASH SHORT
TYPE DESCRIPTION LONG DESCRIPTION

| $\&$ | OVERTURN | OVERTURNED |
| :--- | :--- | :--- |
| 0 | NON-COLL | OTHER NON-COLLISIO |


| 0 | NON-COLL | OTHER NON-COLLISION |
| :--- | :--- | :--- |
| 1 | OTH RDWY | MOTOR VEHICLE ON OTHER ROADWAY |


| 1 | OTH RDWY | MOTOR VEHICLE ON OTH |
| :--- | :--- | :--- |
| 2 | PRKD MV | PARKED MOTOR VEHICLE |


| LIC | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NOT LICENSED (HAD NEVER BEEN LICENSED) |
| 1 | OR-Y | VALID OREGON LICENSE |
| 2 | OTH-Y | VALID LICENSE, OTHER STATE OR COUNTRY |
| 3 | SUSP | SUSPENDED/REVOKED |
| 4 | EXP | EXPIRED |
| 8 | N-VAL | OTHER NON-VALID LICENSE |
| 9 | UNK | UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH |


| RES <br> CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :---: | :--- |

## ERROR CODE TRANSLATION LIST

| ERROR CODE | SHORT <br> DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 000 | NONE | NO ERROR |
| 001 | WIDE TRN | WIDE TURN |
| 002 | CUT CORN | CUT CORNER ON TURN |
| 003 | FAIL TRN | FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS |
| 004 | L IN TRF | LEFT TURN IN FRONT OF ONCOMING TRAFFIC |
| 005 | L PROHIB | LEFT TURN WHERE PROHIBITED |
| 006 | FRM WRng | TURNED FROM WRONG LANE |
| 007 | TO WRONG | TURNED INTO WRONG LANE |
| 008 | ILLEG U | U-TURNED ILLEGALLY |
| 009 | IMP STOP | IMPROPERLY STOPPED IN TRAFFIC LANE |
| 010 | IMP SIG | IMPROPER SIGNAL OR FAILURE TO SIGNAL |
| 011 | IMP BACK | BACKING IMPROPERLY (NOT PARKING) |
| 012 | IMP PARK | IMPROPERLY PARKED |
| 013 | UNPARK | Improper Start leaving Parked position |
| 014 | IMP STRT | IMPROPER START FROM STOPPED POSITION |
| 015 | IMP LGHT | IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC) |
| 016 | InAttent | INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97) |
| 017 | UNSF VEH | DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT) |
| 018 | Oth PARK | ENTERING/EXITING PARKED POSITION W/ InSufficient Clearance; other improper Parking maneuver |
| 019 | DIS DRIV | DISREGARDED OTHER DRIVER'S SIGNAL |
| 020 | DIS SGNL | DISREGARDED TRAFFIC SIGNAL |
| 021 | RAN Stop | DISREGARDED Stop Sign or flashing red |
| 022 | DIS SIGN | DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER |
| 023 | DIS OFCR | DISREGARDED POLICE OFFICER OR FLAGMAN |
| 024 | DIS EMER | DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE |
| 025 | DIS RR | DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN |
| 026 | REAR-END | FAILED TO AVOID Stopped or parked vehicle ahead other than School bus |
| 027 | BIKE ROW | DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST |
| 028 | No Row | DID NOT HAVE RIGHT-OF-WAY |
| 029 | PED ROW | FAILED TO YIELD RIGHT-OF-WAY to pedestrian |
| 030 | PAS CURV | PASSING ON A CURVE |
| 031 | PAS WRng | PASSING ON THE WRONG SIDE |
| 032 | PAS tANG | PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS |
| 033 | PAS X -WK | PASSED VEHICLE Stopped at crosswalk for pedestrian |
| 034 | PAS INTR | PASSING AT INTERSECTION |
| 035 | PAS HILL | PASSING ON CREST Of hill |
| 036 | N/PAS ZN | PASSING IN "NO PASSING" ZONE |
| 037 | PAS TRAF | PASSING In FRONT OF ONCOMING TRAFFIC |
| 038 | CUT-IN | CUtting in (TWO LANES - TWO WAY OnLy) |
| 039 | WRNGSIDE | DRIVING ON WRONG SIDE Of the road (2-WAY UNDIVIDED ROADWAYS) |


| ERROR | SHORT DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 040 | THRU MED | DRIVING THROUGH SAFETY ZONE OR OVER ISLAND |
| 041 | F/ST BUS | FAILED TO STOP FOR SCHOOL BUS |
| 042 | F/SLO MV | FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE |
| 43 | too Close | FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT) |
| 044 | STRDL LN | STRADDLING OR DRIVING ON WRONG LANES |
| 045 | IMP CHG | ImPROPER CHANGE OF TRAFFIC LANES |
| 046 | WRNG WAY | WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD |
| 047 | BASCRULE | DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED) |
| 048 | OPN DOOR | OPENED DOOR INTO ADJACENT TRAFFIC LANE |
| 049 | Impeding | IMPEDING TRAFFIC |
| 050 | SPEED | DRIVING In EXCESS OF POSTED SPEED |
| 051 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 052 | CARELESS | CARELESS DRIVING (PER PAR) |
| 053 | RACING | SPEED RACING (PER PAR) |
| 054 | X N/SGNL | CROSSING AT Intersection, NO TRAFFIC SIGNAL PRESENT |
| 055 | X W/SGNL | CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT |
| 056 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 057 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 059 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 060 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 061 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 062 | A/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 063 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 064 | PUSH MV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 065 | WORK IN RD | WORKING IN ROADWAY OR ALONG SHOULDER |
| 070 | LAY ON RD | Standing Or Lying in roadway |
| 071 | NM IMP USE | IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST |
| 073 | ELUDING | ELUding / Attempt to elude |
| 079 | F NEG CURV | FAILED TO NeGotiate a curve |
| 080 | FAIL LN | FAILED TO MAINTAIN LANE |
| 081 | OFF RD | RAN OFF ROAD |
| 082 | No CLEAR | DRIVER MISJUDGED CLEARANCE |
| 083 | OVRSTEER | OVER-CORRECTING |
| 084 | NOT USED | CODE NOT IN USE |
| 085 | OVRLOAD | OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS |
| 97 | UNA DIS TC | UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE |

EVENT SHORT
CODE DESCRIPTION

| 001 | FEL/JUMP | OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEhICLE |
| :---: | :---: | :---: |
| 002 | INTERFER | PASSENGER INTERFERED WITH DRIVER |
| 003 | bug inte | ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER |
| 004 | INDRCT PED | PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK) |
| 005 | SUB-PED | "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC. |
| 006 | INDRCT BIK | PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK) |
| 007 | HITCHIKR | HITCHHIKER (SOLICITING A RIDE) |
| 008 | PSNGR TOW | PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE |
| 009 | ON/OFF V | GEtting On/OFF Stopped/parked vehicle (OCCUPANTS Only; must have physical contact w/ vehic |
| 010 | SUB OTRN | OVERTURNED AFTER FIRST HARMFUL EVENT |
| 011 | MV PUSHD | VEHICLE BEING PUSHED |
| 012 | MV TOWED | VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE |
| 013 | FORCED | VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN |
| 014 | SET MOTN | VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.) |
| 015 | RR ROW | AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL) |
| 016 | LT RL Row | AT OR ON LIGHT-RAIL RIGHT-OF-WAY |
| 017 | RR HIT V | TRAIN STRUCK VEhicle |
| 018 | V HIT RR | VEhicle struck train |
| 019 | HIT RR CAR | vehicle struck railroad car on roadway |
| 020 | JACKNIFE | JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE |
| 021 | TRL OTRN | TRAILER OR TOWED VEHICLE OVERTURNED |
| 022 | CN BROKE | TRAILER CONNECTION BROKE |
| 023 | DETACH TRL | DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT |
| 024 | V DOOR OPN | VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE |
| 025 | WHEELOFF | WHEEL CAME OFF |
| 026 | HOOD UP | HOOD FLEW UP |
| 028 | LOAD SHIFT | LOST LOAD, LOAD MOVED OR Shifted |
| 029 | TIREFAIL | TIRE FAILURE |
| 030 | PET | PET: CAT, DOG AND SIMILAR |
| 031 | LVSTOCK | STOCK: COW, CALF, BULL, STEER, SHEEP, ETC. |
| 032 | HORSE | HORSE, MULE, OR DONKEY |
| 033 | HRSE\&RID | HORSE AND RIDER |
| 034 | GAME | WILD AnIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK) |
| 035 | DEER ELK | DEER OR ELK, WAPITI |
| 036 | AnML Veh | ANIMAL-DRAWN VEHICLE |
| 037 | CULVERT | CULVERT, OPEN LOW OR HIGH MANHOLE |
| 038 | Atenuatn | IMPACT ATTENUATOR |
| 039 | PK METER | PARKING METER |
| 040 | CURB | CURB (ALSO NARROW SIDEWALKS ON BRIDGES) |
| 041 | JIGGLE | JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION |
| 042 | GDRL END | LEADING EDGE OF GUARDRAIL |
| 043 | GARDRAIL | GUARD RAIL (NOT METAL MEDIAN BARRIER) |
| 044 | BARRIER | MEDIAN BARRIER (RAISED OR METAL) |
| 045 | WALL | REtAINING WALL OR TUNNEL WALL |
| 046 | BR RAIL | BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH) |
| 047 | BR ABUTMNT | BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013) |
| 048 | BR COLMN | BRIDGE PILLAR OR COLUMN |
| 049 | BR GIRDR | BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD) |
| 050 | ISLAND | TRAFFIC RAISED ISLAND |
| 051 | GORE | GORE |
| 052 | POLE UNK | POLE - TYPE UNKNOWN |
| 053 | POLE UTL | POLE - POWER OR TELEPHONE |
| 054 | ST LIGHT | POLE - Street light only |
| 055 | TRF SGNL | POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY |
| 056 | SGN BRDG | POLE - SIGN BRIDGE |
| 057 | STOPSIGN | Stop OR YIELD SIGN |

## EVENT CODE TRANSLATION LIST

| CODE | DESCRIPTION | LONG DESCRIPTION |
| :---: | :---: | :---: |
| 058 | OTH SIGN | OTHER SIGN, INCLUDING STREET SIGNS |
| 059 | HYDRANT | HYDRANT |
| 060 | MARKER | DELINEATOR OR MARKER (REFLECTOR POSTS) |
| 061 | MAILBOX | MAILBOX |
| 062 | tree | tree, Stump or shrubs |
| 063 | VEG OHED | tree branch or other vegetation overhead, etc. |
| 064 | WIRE/CBL | WIRE OR CABLe ACROSS OR OVER THE ROAD |
| 065 | TEMP SGN | TEMPORARY SIGN OR BARRICADE IN ROAD, ETC. |
| 066 | PERM SGN | PERMANENT SIGN OR BARRICADE IN/OFF ROAD |
| 067 | SLIDE | SLIDES, FALLEN OR FALLING ROCKS |
| 068 | FRGN OBJ | FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL) |
| 069 | EQP WORK | EQUIPMENT WORKING IN/OFF ROAD |
| 070 | OTH EQP | OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT) |
| 071 | MAIN EQP | WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT |
| 072 | OTHER WALL | ROCK, BRICK OR OTHER SOLID WALL |
| 073 | IRRGL PVMT | OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR) |
| 074 | OVERHD OBJ | OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE |
| 075 | CAVE IN | BRIDGE OR ROAD CAVE IN |
| 076 | HI WAter | HIGH WATER |
| 077 | SNO BANK | SNOW BANK |
| 078 | LO-HI EDGE | Low OR HIGH Shoulder at Pavement edge |
| 079 | DITCH | CUT SLOPE OR DITCH EMBANKMENT |
| 080 | OBJ FRM MV | STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS) |
| 081 | FLY-OBJ | STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE) |
| 082 | VEH HID | VEhicle ObSCURED view |
| 083 | VEG HID | VEGETATION OBSCURED VIEW |
| 084 | BLDG HID | VIEW OBSCURED BY Fence, Sign, Phone booth, etc. |
| 085 | WIND GUST | WIND GUST |
| 086 | IMMERSED | VEHICLE IMMERSED IN BODY OF WATER |
| 087 | FIRE/EXP | FIRE OR EXPLOSION |
| 088 | FENC/BLD | FENCE OR BUILDING, ETC. |
| 089 | OTHR CRASH | CRASH RELATED TO ANOTHER SEPARATE CRASH |
| 090 | TO 1 SIDE | TWO-WAY traffic on divided roadway all routed to one side |
| 091 | BUILDING | BUILDING OR OTHER STRUCTURE |
| 092 | PHANTOM | OTHER (PHANTOM) NON-CONTACT VEHICLE |
| 093 | CELL PHONE | CELL PHONE (ON PAR OR DRIVER IN USE) |
| 094 | VIOL GDL | teenage driver in violation of graduated license pgm |
| 095 | GUY WIRE | GUY WIRE |
| 096 | BERM | BERM (EARTHEN OR GRAVEL MOUND) |
| 097 | GRAVEL | GRAVEL IN ROADWAY |
| 098 | ABR EDGE | ABRUPT EDGE |
| 099 | CELL WTNSD | CELL PHONE USE WITNESSED BY OTHER PARTICIPANT |
| 100 | UNK FIXD | FIXED OBJECT, UNKNOWN TYPE. |
| 101 | OTHER OBJ | NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE |
| 102 | TEXTING | TEXTING |
| 103 | WZ WORKER | WORK ZONE WORKER |
| 104 | ON VEhicle | PASSENGER RIDING ON VEhICLE EXTERIOR |
| 105 | PEDAL PSGR | PASSENGER RIDING ON PEDALCYCLE |
| 106 | MAN WHLCHR | PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR |
| 107 | MTR WHLCHR | PEDESTRIAN IN MOTORIZED Wheelchair |
| 108 | OFFICER | LAW ENFORCEMENT / POLICE OFFICER |
| 109 | SUB-BIKE | "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC. |
| 110 | N-MTR | NON-MOTORIST STRUCK VEHICLE |
| 111 | S CAR VS V | Street Car/Troliey (on Rails or overhead wire system) Struck vehicle |
| 112 | v VS S CAR | VEhicle struck street Car/trolley (on Rails or overhead wire system) |
| 113 | S CAR ROW | AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY |

## event code translation list

SHORT
CODE DESCRIPTION LONG DESCRIPTION

| 114 | RR EQUIP | VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS |
| :--- | :--- | :--- |
| 115 | DSTRCT GPS | DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE |
| 116 | DSTRCT OTH | DISTRACTED BY OTHER ELECTRNIC DEVICE |



| CLASS | DESCRIPTION |
| :---: | :--- |
| 01 | RURAL PRINCIPAL ARTERIAL - INTERSTATE |
| 02 | RURAL PRINCIPAL ARTERIAL - OTHER |
| 06 | RURAL MINOR ARTERIAL |
| 07 | RURAL MAJOR COLLECTOR |
| 08 | RURAL MINOR COLLECTOR |
| 09 | RURAL LOCAL |
| 11 | URBAN PRINCIPAL ARTERIAL - INTERSTATE |
| 12 | URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP |
| 14 | URBAN PRINCIPAL ARTERIAL - OTHER |
| 16 | URBAN MINOR ARTERIAL |
| 17 | URAN MAJOR COLLETOR |
| 18 | URBAN MINOR COLLETTOR |
| 19 | URBAN LOCAL |
| 78 | UNKNOWN RURAL SYSTEM |
| 79 | UNKNOWN RURAL NON-SYSTEM |
| 98 | UNKNOWN URBAN SYSTEM |
| 99 | UNKNOWN URBAN NON-SYSTEM |

## INJURY SEVERITY CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- | :--- |
| 1 | KILL | FATAL INJURY (K) |
| 2 | INJA | SUSPECTED SERIOUS INJURY (A) |
| 3 | INJB | SUSPECTED MINOR INJURY (B) |
| 4 | INJC | POSSIBLE INJURY (C) |
| 5 | PRI | DIED PRIOR TO CRASH |
| 7 | NO<5 | NO INJURY- O TO 4 YEARS OF AGE |
| 9 | NONE | NO APPARENT INJURY (0) |

## MEDIAN TYPE CODE TRANSLATION LIST

|  | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NO MEDIAN |
| 1 | RSDMD | SOLID MEDIAN BARRIER |
| 2 | DIVMD | EARTH, GRASS OR PAVED MEDIAN |

## LIGHT CONDITION CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | DAY | DAYLIGHT |
| 2 | DLIT | DARKNESS - WITH STREET LIGHTS |
| 3 | DARK | DARKNESS - NO STREET LIGHTS |
| 4 | DAWN | DAWN (TWILIGHT) |

5 DUSK DUSK (TWILIGHT)
mileage type code translation list

| CODE | LONG DESCRIPTION |
| :---: | :--- |
| 0 | REGULAR MILEAGE |
| T | TEMPORARY |
| Y | SPUR |
| $Z$ | OVERLAPPING |

MOVEMENT TYPE CODE TRANSLATION LIST

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | STRGHT | STRAIGHT AHEAD |
| 2 | TURN-R | TURNING RIGHT |
| 3 | TURN-L | TUANING LEFT |
| 4 | U-TURN | MARING A U-TURN |
| 5 | BACK | BACKING |
| 6 | STOP | STOPPED IN TRAFFIC |
| 7 | PRKD-P | PARKED - PROPERLY |
| 8 | PRKD-I | PARKED - IMPROPRLY |
| 9 | PARKNG | PARKING MANEUVER |

PARTICIPANT TYPE CODE TRANSLATION LISI

| CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |

## traffic control device code translation list

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 000 | NONE | NO CONTROL |
| 001 | TRF SIGNAL | TRAFFIC SIGNALS |
| 002 | FLASHBCN-R | FLASHING BEACON - RED (STOP) |
| 003 | FLASHBCN-A | FLASHING BEACON - AMBER (SLOW) |
| 004 | STOP SIGN | STOP SIGN |
| 005 | SLOW SIGN | SLOW SIGN |
| 006 | REG-SIGN | REGULATORY SIGN |
| 007 | YIELD | YIELD SIGN |
| 008 | WARNING | WARNING SIGN |
| 009 | CURVE | CURVE SIGN |
| 010 | SCHL X-ING | SCHOOL CROSSING SIGN OR SPECIAL SIGNAL |
| 011 | OFCR/FLAG | POLICE OFFICER, FLAGMAN - SCHOOL PATROL |
| 012 | BRDG-GATE | BRIDGE GATE - BARRIER |
| 013 | TEMP-BARR | TEMPORARY BARRIER |
| 014 | NO-PASS-ZN | NO PASSING ZONE |
| 015 | ONE-WAY | ONE-WAY STREET |
| 016 | CHANNEL | CHANNELIZATINN |
| 017 | MEDAN BAR | MEDIAN BARRIER |
| 018 | PILOT CAR | PILOT CAR |
| 019 | SP PED SIG | SPECIAL PEDESTRIAN SIGNAL |
| 020 | X-BUCK | CROSSBUCK |
| 021 | THR-GN-SIG | THROUGH GREEN ARROW OR SIGNAL |
| 022 | L-GRN-SIG | LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 023 | R-GRN-SIG | RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 024 | WIGNG | WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE |
| 025 | X-BUCK WRN | CROSSBUCK AND ADVANCE WARNING |
| 026 | WW W/ GATE | FLASHING LIGHTS WITH DROP-ARM GATES |
| 027 | OVRHD SGNL | SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY) |
| 028 | SP RR STOP | SPECIAL RR STOP SIGN |
| 029 | ILUM GRD X | ILLUMINATED GRADE CROSSING |
| 037 | RAMP METER | METERED RAMPS |
| 038 | RUMBLE STR | RUMBLE STRIP |
| 090 | L-TURN REF | LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED) |
| 091 | R-TURN ALL | RIGHT TURN AT ALL TIMES SIGN, ETC. |
| 092 | EMR SGN/FL | EMERGENCY SIGNS OR FLARES |
| 093 | ACCEL LANE | ACCELERATION OR DECELERATION LANES |
| 094 | R-TURN PRO | RIGHT TURN PROHIBITED ON RED AFTER STOPPING |
| 095 | BUS STPSGN | BUS STOP SIGN AND RED LIGHTS |
| 099 | UNKNOWN | UNKNOWN OR NOT DEFINITE |

## VEhICLE TYPE CODE TRANSLATION LIS

WEATHER CONDITION CODE TRANSLATION LIST

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 00 | PDO | NOT COLLECTED FOR PDO CRASHES |
| 01 | PSNGR CAR | PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC. |
| 02 | BOBTAIL | TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL) |
| 03 | FARM TRCTR | FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT |
| 04 | SEMI TOW | TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW |
| 05 | TRUCK | TRUCK WITH NON-DETACHABLE BED, PANEL, ETC. |
| 06 | MOPED | MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE |
| 07 | SCHL BUS | SCHOOL BUS (INCLUDES VAN) |
| 08 | OTH BUS | OTHER BUS |
| 09 | MTRCYCLE | MOTORCYCLE, DIRT BIKE |
| 10 | OTHER | OTHER: FORKLIFT, BACKHOE, ETC. |
| 11 | MOTRHOME | MOTORHOME |
| 12 | TROLLEY | MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES) |
| 13 | ATV | ATV |
| 14 | MTRSCTR | MOTORIZED SCOOTER (STANDING) |
| 15 | SNOWMOBILE | SNOWMOBILE |
| 99 | UNKNOWN | UNKNOWN VEHICLE TYPE |


| CODE | SHORT | DESC |
| :---: | :--- | :--- |
| 0 | LONG DESCRIPTION |  |
| 1 | CLR | UNKNOWN |
| 2 | CLD | CLEAR |
| 3 | RAIN | CLOUDY |
| 4 | RLT | SLEET |
| 5 | FOG | FOG |
| 6 | SNOW | SNOW |
| 7 | DUST | DUST |
| 8 | SMOK | SMOKE |
| 9 | ASH | ASH |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



# ACTION CODE TRANSLATION LIST 

## ACTION SHORT

CODE DESCRIPTION LONG DESCRIPTION

| 000 | NONE | NO ACTION OR NON-WARRANTED |
| :---: | :---: | :---: |
| 001 | SKIDDED | SkIDDED |
| 002 | on/off V | GEtting on or off stopped or parked vehicle |
| 003 | LOAD OVR | OVERHANGING LOAD Struck another vehicle, etc. |
| 006 | SLOW DN | SLOWED DOwn |
| 007 | Avoiding | AVOIDING MANEUVER |
| 008 | PAR PARK | PARALLEL PARKING |
| 009 | ANG PARK | Angle Parking |
| 010 | Interfere | PASSENGER Interfering with driver |
| 011 | Stopped | Stopped in traffic not waiting to make a left turn |
| 012 | STP/L TRN | Stopped because of left turn Signal or waiting, etc. |
| 013 | STP TURN | Stopped While executing A turn |
| 014 | EMR V PKD | Emergency vehicle legally parked in the roadway |
| 015 | GO A/Stop | PROCEED AFTER Stopping for a stop Sign/flashing red. |
| 016 | TRN A/RED | TURNED ON RED AFTER STOPPING |
| 017 | LOSTCTRL | LOST CONTROL OF VEHICLE |
| 018 | EXIT DWY | Entering Street or highway from alley or dilveway |
| 019 | ENTR DWY | Entering Alley or driveway from street or highway |
| 020 | STR ENTR | before entering roadway, Struck pedestrian, etc. on Sidewalk or shoulder |
| 021 | NO DRVR | CAR RAN AWAY - NO DRIVER |
| 022 | PREV COL | Struck, OR WAS Struck by, vehicle or pedestrian in prior collision before acc. Stabilized |
| 023 | STALLED | VEHICLE STALLED OR DISABLED |
| 024 | DRVR DEAD | DEAD BY UNASSOCIATED CAUSE |
| 025 | FAtigue | fatigued, Sleepy, Asleep |
| 026 | SUN | DRIVER BLINDED BY SUN |
| 027 | HDLGHTS | DRIVER BLINDED BY HEADLIGHTS |
| 028 | ILLNESS | PHYSICALLY ILL |
| 029 | THRU MED | VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER |
| 030 | PURSUIT | PURSUING OR ATTEMPTING TO STOP A VEhICLE |
| 031 | PASSING | PASSING SITUATION |
| 032 | PRKOFFRD | VEHICLE PARKED BEYOND CURB OR SHOULDER |
| 033 | CROS MED | VEHICLE CROSSED EARTH OR GRASS MEDIAN |
| 034 | $\mathrm{X} \mathrm{N} / \mathrm{SGNL}$ | Crossing at intersection - no traffic signal present |
| 035 | X W/ SGNL | CROSSING AT Intersection - traffic signal present |
| 036 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 037 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 038 | DISTRACT | DRIVER'S Attention distracted |
| 039 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 040 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 041 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 042 | A/traf-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 043 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 044 | puSh mV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 045 | WORK ON | WORKING IN ROADWAY OR ALONG SHOULDER |
| 046 | W/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WIth traffic |
| 047 | A/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC |
| 050 | LAY ON RD | StANDING OR LYING IN ROADWAY |
| 051 | ENT Offrd | Entering / Starting in traffic lane from off road |
| 052 | MERGING | MERGING |

## ACTION CODE TRANSLATION LIST

| 00 | NO CODE | NO CAUSE ASSOCIATED AT THIS LEVEL |
| :--- | :--- | :--- |
| 01 | TOO-FAST | TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED. |
| 02 | NO-YIELD | DID NOT YIELD RIGHT-OF-WAY |
| 03 | PAS-STOP | PASSED STOP SIGN OR RED FLASHER |
| 04 | DIS SIG | DISREGARDED TRAFFIC SIGNAL |
| 05 | LEFT-CTR | DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING |
| 06 | IMP-OVER | IMPROPER OVERTAKING |
| 07 | TOO-CLOS | FOLLOWED TOO CLOSELY |
| 08 | IMP-TURN | MADE IMPROPER TURN |
| 09 | DRINKING | ALCOHOL OR DRUG INVOLVED |
| 10 | OTHR-IMP | OTHER IMPROPER DRIVING |
| 11 | MECH-DEF | MECHANICAL DEFECT |
| 12 | OTHER | OTHER (NOT IMPROPER DRIVING) |
| 13 | IMP LNC | IMPROPER CHANGE OF TRAFFIC LANES |
| 14 | DIS TCD | DISREGARDED OTHER TRAFFIC CONTROL DEVICE |
| 15 | WRNG WAY | WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED ROi |
| 16 | FATIGUE | DRIVER DROWSY/FATIGUED/SLEEPY |
| 17 | ILLNESS | PHYSICAL ILLNESS |
| 18 | IN RDWY | NON-MOTORIST ILLEGALLY IN ROADWAY |
| 19 | NT VISBL | NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN |
| 20 | IMP PKNG | VEHICLE IMPROPERLY PARKED |
| 21 | DEF STER | DEFECTIVE STEERING MECHANISM |
| 22 | DEF BRKE | INADEQUATE OR NO BRAKES |
| 24 | LOADSHFT | VEHICLE LOST LOAD OR LOAD SHIFTED |
| 25 | TIREFAIL | TIRE FAILURE |
| 26 | PHANTOM | PHANTOM / NON-CONTACT VEHICLE |
| 27 | INATTENT | INATTENTION |
| 28 | NM INATT | NON-MOTORIST INATTENTION |
| 29 | FAVOID | FAILED TO AVOID VEHICLE AHEAD |
| 30 | SPEED | DRIVING IN EXCESS OF POSTED SPEED |
| 31 | RACING | SPEED RACING (PER PAR) |
| 32 | CARELESS | CARELESS DRIVING (PER PAR) |
| 33 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 34 | AGGRESV | AGGRESSIVE DRIVING (PER PAR) |
| 35 | RDRAGE | ROAD RAGE (PER PAR) |
| 40 | VIEW OBS | VIEW OBSCURED |
| 50 | USED MDN | IMPROPER USE OF MEDIAN OR SHOULDER |
| 51 | FAIL LN | FAILED TO MAINTAIN LANE |
| 52 | OFF RD | RAN OFF ROAD |


| \& | OTH | MISCELL |
| :--- | :--- | :--- |
| - | BACK | BACKING |
| 0 | PED |  |


| 1 | ANGL | PEDESTRIA |
| :--- | :--- | :--- |
| 2 | HEAD | ANGLE |


| 2 | HEAD | HEAD-ON |
| :--- | :--- | :--- |
| 3 | REAR | REAR |

3 REAR REAR-END

| 4 | SS-M | SIDESWIPE - MEETING |
| :--- | :--- | :--- |

5 SS-O SIDESWIPE - OVERTAKIng
6 TURN TURNING MOVEMENT
PARK PARKING MANEUVER
8 NCOL NON-COLLISION
9 FIX FIXED OBJECT OR OTHER OBJECT

## CRASH TYPE CODE TRANSLATION LIST

CRASH SHORT
TYPE DESCRIPTION LONG DESCRIPTION

| $\&$ | OVERTURN | OVERTURNED |
| :--- | :--- | :--- |
| 0 | NON-COLL | OTHER NON-COLLISIO |


| 0 | NON-COLL | OTHER NON-COLLISION |
| :--- | :--- | :--- |
| 1 | OTH RDWY | MOTOR VEHICLE ON OTHER ROADWAY |


| 1 | OTH RDWY | MOTOR VEHICLE ON OTH |
| :--- | :--- | :--- |
| 2 | PRKD MV | PARKED MOTOR VEHICLE |


| LIC | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NOT LICENSED (HAD NEVER BEEN LICENSED) |
| 1 | OR-Y | VALID OREGON LICENSE |
| 2 | OTH-Y | VALID LICENSE, OTHER STATE OR COUNTRY |
| 3 | SUSP | SUSPENDED/REVOKED |
| 4 | EXP | EXPIRED |
| 8 | N-VAL | OTHER NON-VALID LICENSE |
| 9 | UNK | UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH |


| RES <br> CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :---: | :--- |

## ERROR CODE TRANSLATION LIST

| ERROR CODE | SHORT <br> DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 000 | NONE | NO ERROR |
| 001 | WIDE TRN | WIDE TURN |
| 002 | CUT CORN | CUT CORNER ON TURN |
| 003 | FAIL TRN | FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS |
| 004 | L IN TRF | LEFT TURN IN FRONT OF ONCOMING TRAFFIC |
| 005 | L PROHIB | LEFT TURN WHERE PROHIBITED |
| 006 | FRM WRng | TURNED FROM WRONG LANE |
| 007 | TO WRONG | TURNED INTO WRONG LANE |
| 008 | ILLEG U | U-TURNED ILLEGALLY |
| 009 | IMP STOP | IMPROPERLY STOPPED IN TRAFFIC LANE |
| 010 | IMP SIG | IMPROPER SIGNAL OR FAILURE TO SIGNAL |
| 011 | IMP BACK | BACKING IMPROPERLY (NOT PARKING) |
| 012 | IMP PARK | IMPROPERLY PARKED |
| 013 | UNPARK | Improper Start leaving Parked position |
| 014 | IMP STRT | IMPROPER START FROM STOPPED POSITION |
| 015 | IMP LGHT | IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC) |
| 016 | InAttent | INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97) |
| 017 | UNSF VEH | DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT) |
| 018 | Oth PARK | ENTERING/EXITING PARKED POSITION W/ InSufficient Clearance; other improper Parking maneuver |
| 019 | DIS DRIV | DISREGARDED OTHER DRIVER'S SIGNAL |
| 020 | DIS SGNL | DISREGARDED TRAFFIC SIGNAL |
| 021 | RAN Stop | DISREGARDED Stop Sign or flashing red |
| 022 | DIS SIGN | DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER |
| 023 | DIS OFCR | DISREGARDED POLICE OFFICER OR FLAGMAN |
| 024 | DIS EMER | DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE |
| 025 | DIS RR | DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN |
| 026 | REAR-END | FAILED TO AVOID Stopped or parked vehicle ahead other than School bus |
| 027 | BIKE ROW | DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST |
| 028 | No Row | DID NOT HAVE RIGHT-OF-WAY |
| 029 | PED ROW | FAILED TO YIELD RIGHT-OF-WAY to pedestrian |
| 030 | PAS CURV | PASSING ON A CURVE |
| 031 | PAS WRng | PASSING ON THE WRONG SIDE |
| 032 | PAS tANG | PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS |
| 033 | PAS X -WK | PASSED VEHICLE Stopped at crosswalk for pedestrian |
| 034 | PAS INTR | PASSING AT INTERSECTION |
| 035 | PAS HILL | PASSING ON CREST Of hill |
| 036 | N/PAS ZN | PASSING IN "NO PASSING" ZONE |
| 037 | PAS TRAF | PASSING In FRONT OF ONCOMING TRAFFIC |
| 038 | CUT-IN | CUtting in (TWO LANES - TWO WAY OnLy) |
| 039 | WRNGSIDE | DRIVING ON WRONG SIDE Of the road (2-WAY UNDIVIDED ROADWAYS) |


| ERROR | SHORT DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 040 | THRU MED | DRIVING THROUGH SAFETY ZONE OR OVER ISLAND |
| 041 | F/ST BUS | FAILED TO STOP FOR SCHOOL BUS |
| 042 | F/SLO MV | FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE |
| 43 | too Close | FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT) |
| 044 | STRDL LN | STRADDLING OR DRIVING ON WRONG LANES |
| 045 | IMP CHG | ImPROPER CHANGE OF TRAFFIC LANES |
| 046 | WRNG WAY | WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD |
| 047 | BASCRULE | DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED) |
| 048 | OPN DOOR | OPENED DOOR INTO ADJACENT TRAFFIC LANE |
| 049 | Impeding | IMPEDING TRAFFIC |
| 050 | SPEED | DRIVING In EXCESS OF POSTED SPEED |
| 051 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 052 | CARELESS | CARELESS DRIVING (PER PAR) |
| 053 | RACING | SPEED RACING (PER PAR) |
| 054 | X N/SGNL | CROSSING AT Intersection, NO TRAFFIC SIGNAL PRESENT |
| 055 | X W/SGNL | CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT |
| 056 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 057 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 059 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 060 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 061 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 062 | A/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 063 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 064 | PUSH MV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 065 | WORK IN RD | WORKING IN ROADWAY OR ALONG SHOULDER |
| 070 | LAY ON RD | Standing Or Lying in roadway |
| 071 | NM IMP USE | IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST |
| 073 | ELUDING | ELUding / Attempt to elude |
| 079 | F NEG CURV | FAILED TO NeGotiate a curve |
| 080 | FAIL LN | FAILED TO MAINTAIN LANE |
| 081 | OFF RD | RAN OFF ROAD |
| 082 | No CLEAR | DRIVER MISJUDGED CLEARANCE |
| 083 | OVRSTEER | OVER-CORRECTING |
| 084 | NOT USED | CODE NOT IN USE |
| 085 | OVRLOAD | OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS |
| 97 | UNA DIS TC | UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE |

EVENT SHORT
CODE DESCRIPTION

| 001 | FEL/JUMP | OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEhICLE |
| :---: | :---: | :---: |
| 002 | INTERFER | PASSENGER INTERFERED WITH DRIVER |
| 003 | bug inte | ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER |
| 004 | INDRCT PED | PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK) |
| 005 | SUB-PED | "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC. |
| 006 | INDRCT BIK | PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK) |
| 007 | HITCHIKR | HITCHHIKER (SOLICITING A RIDE) |
| 008 | PSNGR TOW | PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE |
| 009 | ON/OFF V | GEtting On/OFF Stopped/parked vehicle (OCCUPANTS Only; must have physical contact w/ vehic |
| 010 | SUB OTRN | OVERTURNED AFTER FIRST HARMFUL EVENT |
| 011 | MV PUSHD | VEHICLE BEING PUSHED |
| 012 | MV TOWED | VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE |
| 013 | FORCED | VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN |
| 014 | SET MOTN | VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.) |
| 015 | RR ROW | AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL) |
| 016 | LT RL Row | AT OR ON LIGHT-RAIL RIGHT-OF-WAY |
| 017 | RR HIT V | TRAIN STRUCK VEhicle |
| 018 | V HIT RR | VEhicle struck train |
| 019 | HIT RR CAR | vehicle struck railroad car on roadway |
| 020 | JACKNIFE | JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE |
| 021 | TRL OTRN | TRAILER OR TOWED VEHICLE OVERTURNED |
| 022 | CN BROKE | TRAILER CONNECTION BROKE |
| 023 | DETACH TRL | DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT |
| 024 | V DOOR OPN | VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE |
| 025 | WHEELOFF | WHEEL CAME OFF |
| 026 | HOOD UP | HOOD FLEW UP |
| 028 | LOAD SHIFT | LOST LOAD, LOAD MOVED OR Shifted |
| 029 | TIREFAIL | TIRE FAILURE |
| 030 | PET | PET: CAT, DOG AND SIMILAR |
| 031 | LVSTOCK | STOCK: COW, CALF, BULL, STEER, SHEEP, ETC. |
| 032 | HORSE | HORSE, MULE, OR DONKEY |
| 033 | HRSE\&RID | HORSE AND RIDER |
| 034 | GAME | WILD AnIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK) |
| 035 | DEER ELK | DEER OR ELK, WAPITI |
| 036 | AnML Veh | ANIMAL-DRAWN VEHICLE |
| 037 | CULVERT | CULVERT, OPEN LOW OR HIGH MANHOLE |
| 038 | Atenuatn | IMPACT ATTENUATOR |
| 039 | PK METER | PARKING METER |
| 040 | CURB | CURB (ALSO NARROW SIDEWALKS ON BRIDGES) |
| 041 | JIGGLE | JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION |
| 042 | GDRL END | LEADING EDGE OF GUARDRAIL |
| 043 | GARDRAIL | GUARD RAIL (NOT METAL MEDIAN BARRIER) |
| 044 | BARRIER | MEDIAN BARRIER (RAISED OR METAL) |
| 045 | WALL | REtAINING WALL OR TUNNEL WALL |
| 046 | BR RAIL | BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH) |
| 047 | BR ABUTMNT | BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013) |
| 048 | BR COLMN | BRIDGE PILLAR OR COLUMN |
| 049 | BR GIRDR | BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD) |
| 050 | ISLAND | TRAFFIC RAISED ISLAND |
| 051 | GORE | GORE |
| 052 | POLE UNK | POLE - TYPE UNKNOWN |
| 053 | POLE UTL | POLE - POWER OR TELEPHONE |
| 054 | ST LIGHT | POLE - Street light only |
| 055 | TRF SGNL | POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY |
| 056 | SGN BRDG | POLE - SIGN BRIDGE |
| 057 | STOPSIGN | Stop OR YIELD SIGN |

## EVENT CODE TRANSLATION LIST

| CODE | DESCRIPTION | LONG DESCRIPTION |
| :---: | :---: | :---: |
| 058 | OTH SIGN | OTHER SIGN, INCLUDING STREET SIGNS |
| 059 | HYDRANT | HYDRANT |
| 060 | MARKER | DELINEATOR OR MARKER (REFLECTOR POSTS) |
| 061 | MAILBOX | MAILBOX |
| 062 | tree | tree, Stump or shrubs |
| 063 | VEG OHED | tree branch or other vegetation overhead, etc. |
| 064 | WIRE/CBL | WIRE OR CABLe ACROSS OR OVER THE ROAD |
| 065 | TEMP SGN | TEMPORARY SIGN OR BARRICADE IN ROAD, ETC. |
| 066 | PERM SGN | PERMANENT SIGN OR BARRICADE IN/OFF ROAD |
| 067 | SLIDE | SLIDES, FALLEN OR FALLING ROCKS |
| 068 | FRGN OBJ | FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL) |
| 069 | EQP WORK | EQUIPMENT WORKING IN/OFF ROAD |
| 070 | OTH EQP | OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT) |
| 071 | MAIN EQP | WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT |
| 072 | OTHER WALL | ROCK, BRICK OR OTHER SOLID WALL |
| 073 | IRRGL PVMT | OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR) |
| 074 | OVERHD OBJ | OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE |
| 075 | CAVE IN | BRIDGE OR ROAD CAVE IN |
| 076 | HI WAter | HIGH WATER |
| 077 | SNO BANK | SNOW BANK |
| 078 | LO-HI EDGE | Low OR HIGH Shoulder at Pavement edge |
| 079 | DITCH | CUT SLOPE OR DITCH EMBANKMENT |
| 080 | OBJ FRM MV | STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS) |
| 081 | FLY-OBJ | STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE) |
| 082 | VEH HID | VEhicle ObSCURED view |
| 083 | VEG HID | VEGETATION OBSCURED VIEW |
| 084 | BLDG HID | VIEW OBSCURED BY Fence, Sign, Phone booth, etc. |
| 085 | WIND GUST | WIND GUST |
| 086 | IMMERSED | VEHICLE IMMERSED IN BODY OF WATER |
| 087 | FIRE/EXP | FIRE OR EXPLOSION |
| 088 | FENC/BLD | FENCE OR BUILDING, ETC. |
| 089 | OTHR CRASH | CRASH RELATED TO ANOTHER SEPARATE CRASH |
| 090 | TO 1 SIDE | TWO-WAY traffic on divided roadway all routed to one side |
| 091 | BUILDING | BUILDING OR OTHER STRUCTURE |
| 092 | PHANTOM | OTHER (PHANTOM) NON-CONTACT VEHICLE |
| 093 | CELL PHONE | CELL PHONE (ON PAR OR DRIVER IN USE) |
| 094 | VIOL GDL | teenage driver in violation of graduated license pgm |
| 095 | GUY WIRE | GUY WIRE |
| 096 | BERM | BERM (EARTHEN OR GRAVEL MOUND) |
| 097 | GRAVEL | GRAVEL IN ROADWAY |
| 098 | ABR EDGE | ABRUPT EDGE |
| 099 | CELL WTNSD | CELL PHONE USE WITNESSED BY OTHER PARTICIPANT |
| 100 | UNK FIXD | FIXED OBJECT, UNKNOWN TYPE. |
| 101 | OTHER OBJ | NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE |
| 102 | TEXTING | TEXTING |
| 103 | WZ WORKER | WORK ZONE WORKER |
| 104 | ON VEhicle | PASSENGER RIDING ON VEhICLE EXTERIOR |
| 105 | PEDAL PSGR | PASSENGER RIDING ON PEDALCYCLE |
| 106 | MAN WHLCHR | PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR |
| 107 | MTR WHLCHR | PEDESTRIAN IN MOTORIZED Wheelchair |
| 108 | OFFICER | LAW ENFORCEMENT / POLICE OFFICER |
| 109 | SUB-BIKE | "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC. |
| 110 | N-MTR | NON-MOTORIST STRUCK VEHICLE |
| 111 | S CAR VS V | Street Car/Troliey (on Rails or overhead wire system) Struck vehicle |
| 112 | v VS S CAR | VEhicle struck street Car/trolley (on Rails or overhead wire system) |
| 113 | S CAR ROW | AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY |

## event code translation list

SHORT
CODE DESCRIPTION LONG DESCRIPTION

| 114 | RR EQUIP | VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS |
| :--- | :--- | :--- |
| 115 | DSTRCT GPS | DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE |
| 116 | DSTRCT OTH | DISTRACTED BY OTHER ELECTRNIC DEVICE |



| CLASS | DESCRIPTION |
| :---: | :--- |
| 01 | RURAL PRINCIPAL ARTERIAL - INTERSTATE |
| 02 | RURAL PRINCIPAL ARTERIAL - OTHER |
| 06 | RURAL MINOR ARTERIAL |
| 07 | RURAL MAJOR COLLECTOR |
| 08 | RURAL MINOR COLLECTOR |
| 09 | RURAL LOCAL |
| 11 | URBAN PRINCIPAL ARTERIAL - INTERSTATE |
| 12 | URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP |
| 14 | URBAN PRINCIPAL ARTERIAL - OTHER |
| 16 | URBAN MINOR ARTERIAL |
| 17 | URAN MAJOR COLLETOR |
| 18 | URBAN MINOR COLLETTOR |
| 19 | URBAN LOCAL |
| 78 | UNKNOWN RURAL SYSTEM |
| 79 | UNKNOWN RURAL NON-SYSTEM |
| 98 | UNKNOWN URBAN SYSTEM |
| 99 | UNKNOWN URBAN NON-SYSTEM |

## INJURY SEVERITY CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- | :--- |
| 1 | KILL | FATAL INJURY (K) |
| 2 | INJA | SUSPECTED SERIOUS INJURY (A) |
| 3 | INJB | SUSPECTED MINOR INJURY (B) |
| 4 | INJC | POSSIBLE INJURY (C) |
| 5 | PRI | DIED PRIOR TO CRASH |
| 7 | NO<5 | NO INJURY- O TO 4 YEARS OF AGE |
| 9 | NONE | NO APPARENT INJURY (0) |

## MEDIAN TYPE CODE TRANSLATION LIST

|  | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NO MEDIAN |
| 1 | RSDMD | SOLID MEDIAN BARRIER |
| 2 | DIVMD | EARTH, GRASS OR PAVED MEDIAN |

## LIGHT CONDITION CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | DAY | DAYLIGHT |
| 2 | DLIT | DARKNESS - WITH STREET LIGHTS |
| 3 | DARK | DARKNESS - NO STREET LIGHTS |
| 4 | DAWN | DAWN (TWILIGHT) |

5 DUSK DUSK (TWILIGHT)
mileage type code translation list

| CODE | LONG DESCRIPTION |
| :---: | :--- |
| 0 | REGULAR MILEAGE |
| T | TEMPORARY |
| Y | SPUR |
| $Z$ | OVERLAPPING |

MOVEMENT TYPE CODE TRANSLATION LIST

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | STRGHT | STRAIGHT AHEAD |
| 2 | TURN-R | TURNING RIGHT |
| 3 | TURN-L | TUANING LEFT |
| 4 | U-TURN | MARING A U-TURN |
| 5 | BACK | BACKING |
| 6 | STOP | STOPPED IN TRAFFIC |
| 7 | PRKD-P | PARKED - PROPERLY |
| 8 | PRKD-I | PARKED - IMPROPRLY |
| 9 | PARKNG | PARKING MANEUVER |

PARTICIPANT TYPE CODE TRANSLATION LISI

| CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |

## traffic control device code translation list

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 000 | NONE | NO CONTROL |
| 001 | TRF SIGNAL | TRAFFIC SIGNALS |
| 002 | FLASHBCN-R | FLASHING BEACON - RED (STOP) |
| 003 | FLASHBCN-A | FLASHING BEACON - AMBER (SLOW) |
| 004 | STOP SIGN | STOP SIGN |
| 005 | SLOW SIGN | SLOW SIGN |
| 006 | REG-SIGN | REGULATORY SIGN |
| 007 | YIELD | YIELD SIGN |
| 008 | WARNING | WARNING SIGN |
| 009 | CURVE | CURVE SIGN |
| 010 | SCHL X-ING | SCHOOL CROSSING SIGN OR SPECIAL SIGNAL |
| 011 | OFCR/FLAG | POLICE OFFICER, FLAGMAN - SCHOOL PATROL |
| 012 | BRDG-GATE | BRIDGE GATE - BARRIER |
| 013 | TEMP-BARR | TEMPORARY BARRIER |
| 014 | NO-PASS-ZN | NO PASSING ZONE |
| 015 | ONE-WAY | ONE-WAY STREET |
| 016 | CHANNEL | CHANNELIZATINN |
| 017 | MEDAN BAR | MEDIAN BARRIER |
| 018 | PILOT CAR | PILOT CAR |
| 019 | SP PED SIG | SPECIAL PEDESTRIAN SIGNAL |
| 020 | X-BUCK | CROSSBUCK |
| 021 | THR-GN-SIG | THROUGH GREEN ARROW OR SIGNAL |
| 022 | L-GRN-SIG | LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 023 | R-GRN-SIG | RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 024 | WIGNG | WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE |
| 025 | X-BUCK WRN | CROSSBUCK AND ADVANCE WARNING |
| 026 | WW W/ GATE | FLASHING LIGHTS WITH DROP-ARM GATES |
| 027 | OVRHD SGNL | SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY) |
| 028 | SP RR STOP | SPECIAL RR STOP SIGN |
| 029 | ILUM GRD X | ILLUMINATED GRADE CROSSING |
| 037 | RAMP METER | METERED RAMPS |
| 038 | RUMBLE STR | RUMBLE STRIP |
| 090 | L-TURN REF | LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED) |
| 091 | R-TURN ALL | RIGHT TURN AT ALL TIMES SIGN, ETC. |
| 092 | EMR SGN/FL | EMERGENCY SIGNS OR FLARES |
| 093 | ACCEL LANE | ACCELERATION OR DECELERATION LANES |
| 094 | R-TURN PRO | RIGHT TURN PROHIBITED ON RED AFTER STOPPING |
| 095 | BUS STPSGN | BUS STOP SIGN AND RED LIGHTS |
| 099 | UNKNOWN | UNKNOWN OR NOT DEFINITE |

## VEhICLE TYPE CODE TRANSLATION LIS

WEATHER CONDITION CODE TRANSLATION LIST

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 00 | PDO | NOT COLLECTED FOR PDO CRASHES |
| 01 | PSNGR CAR | PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC. |
| 02 | BOBTAIL | TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL) |
| 03 | FARM TRCTR | FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT |
| 04 | SEMI TOW | TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW |
| 05 | TRUCK | TRUCK WITH NON-DETACHABLE BED, PANEL, ETC. |
| 06 | MOPED | MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE |
| 07 | SCHL BUS | SCHOOL BUS (INCLUDES VAN) |
| 08 | OTH BUS | OTHER BUS |
| 09 | MTRCYCLE | MOTORCYCLE, DIRT BIKE |
| 10 | OTHER | OTHER: FORKLIFT, BACKHOE, ETC. |
| 11 | MOTRHOME | MOTORHOME |
| 12 | TROLLEY | MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES) |
| 13 | ATV | ATV |
| 14 | MTRSCTR | MOTORIZED SCOOTER (STANDING) |
| 15 | SNOWMOBILE | SNOWMOBILE |
| 99 | UNKNOWN | UNKNOWN VEHICLE TYPE |


| CODE | SHORT | DESC |
| :---: | :--- | :--- |
| 0 | LONG DESCRIPTION |  |
| 1 | CLR | UNKNOWN |
| 2 | CLD | CLEAR |
| 3 | RAIN | CLOUDY |
| 4 | RLT | SLEET |
| 5 | FOG | FOG |
| 6 | SNOW | SNOW |
| 7 | DUST | DUST |
| 8 | SMOK | SMOKE |
| 9 | ASH | ASH |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



# ACTION CODE TRANSLATION LIST 

## ACTION SHORT

CODE DESCRIPTION LONG DESCRIPTION

| 000 | NONE | NO ACTION OR NON-WARRANTED |
| :---: | :---: | :---: |
| 001 | SKIDDED | SkIDDED |
| 002 | on/off V | GEtting on or off stopped or parked vehicle |
| 003 | LOAD OVR | OVERHANGING LOAD Struck another vehicle, etc. |
| 006 | SLOW DN | SLOWED DOwn |
| 007 | Avoiding | AVOIDING MANEUVER |
| 008 | PAR PARK | PARALLEL PARKING |
| 009 | ANG PARK | Angle Parking |
| 010 | Interfere | PASSENGER Interfering with driver |
| 011 | Stopped | Stopped in traffic not waiting to make a left turn |
| 012 | STP/L TRN | Stopped because of left turn Signal or waiting, etc. |
| 013 | STP TURN | Stopped While executing A turn |
| 014 | EMR V PKD | Emergency vehicle legally parked in the roadway |
| 015 | GO A/Stop | PROCEED AFTER Stopping for a stop Sign/flashing red. |
| 016 | TRN A/RED | TURNED ON RED AFTER STOPPING |
| 017 | LOSTCTRL | LOST CONTROL OF VEHICLE |
| 018 | EXIT DWY | Entering Street or highway from alley or dilveway |
| 019 | ENTR DWY | Entering Alley or driveway from street or highway |
| 020 | STR ENTR | before entering roadway, Struck pedestrian, etc. on Sidewalk or shoulder |
| 021 | NO DRVR | CAR RAN AWAY - NO DRIVER |
| 022 | PREV COL | Struck, OR WAS Struck by, vehicle or pedestrian in prior collision before acc. Stabilized |
| 023 | STALLED | VEHICLE STALLED OR DISABLED |
| 024 | DRVR DEAD | DEAD BY UNASSOCIATED CAUSE |
| 025 | FAtigue | fatigued, Sleepy, Asleep |
| 026 | SUN | DRIVER BLINDED BY SUN |
| 027 | HDLGHTS | DRIVER BLINDED BY HEADLIGHTS |
| 028 | ILLNESS | PHYSICALLY ILL |
| 029 | THRU MED | VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER |
| 030 | PURSUIT | PURSUING OR ATTEMPTING TO STOP A VEhICLE |
| 031 | PASSING | PASSING SITUATION |
| 032 | PRKOFFRD | VEHICLE PARKED BEYOND CURB OR SHOULDER |
| 033 | CROS MED | VEHICLE CROSSED EARTH OR GRASS MEDIAN |
| 034 | $\mathrm{X} \mathrm{N} / \mathrm{SGNL}$ | Crossing at intersection - no traffic signal present |
| 035 | X W/ SGNL | CROSSING AT Intersection - traffic signal present |
| 036 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 037 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 038 | DISTRACT | DRIVER'S Attention distracted |
| 039 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 040 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 041 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 042 | A/traf-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 043 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 044 | puSh mV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 045 | WORK ON | WORKING IN ROADWAY OR ALONG SHOULDER |
| 046 | W/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WIth traffic |
| 047 | A/ TRAFIC | NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC |
| 050 | LAY ON RD | StANDING OR LYING IN ROADWAY |
| 051 | ENT Offrd | Entering / Starting in traffic lane from off road |
| 052 | MERGING | MERGING |

## ACTION CODE TRANSLATION LIST

| 00 | NO CODE | NO CAUSE ASSOCIATED AT THIS LEVEL |
| :--- | :--- | :--- |
| 01 | TOO-FAST | TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED. |
| 02 | NO-YIELD | DID NOT YIELD RIGHT-OF-WAY |
| 03 | PAS-STOP | PASSED STOP SIGN OR RED FLASHER |
| 04 | DIS SIG | DISREGARDED TRAFFIC SIGNAL |
| 05 | LEFT-CTR | DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING |
| 06 | IMP-OVER | IMPROPER OVERTAKING |
| 07 | TOO-CLOS | FOLLOWED TOO CLOSELY |
| 08 | IMP-TURN | MADE IMPROPER TURN |
| 09 | DRINKING | ALCOHOL OR DRUG INVOLVED |
| 10 | OTHR-IMP | OTHER IMPROPER DRIVING |
| 11 | MECH-DEF | MECHANICAL DEFECT |
| 12 | OTHER | OTHER (NOT IMPROPER DRIVING) |
| 13 | IMP LNC | IMPROPER CHANGE OF TRAFFIC LANES |
| 14 | DIS TCD | DISREGARDED OTHER TRAFFIC CONTROL DEVICE |
| 15 | WRNG WAY | WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED ROi |
| 16 | FATIGUE | DRIVER DROWSY/FATIGUED/SLEEPY |
| 17 | ILLNESS | PHYSICAL ILLNESS |
| 18 | IN RDWY | NON-MOTORIST ILLEGALLY IN ROADWAY |
| 19 | NT VISBL | NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN |
| 20 | IMP PKNG | VEHICLE IMPROPERLY PARKED |
| 21 | DEF STER | DEFECTIVE STEERING MECHANISM |
| 22 | DEF BRKE | INADEQUATE OR NO BRAKES |
| 24 | LOADSHFT | VEHICLE LOST LOAD OR LOAD SHIFTED |
| 25 | TIREFAIL | TIRE FAILURE |
| 26 | PHANTOM | PHANTOM / NON-CONTACT VEHICLE |
| 27 | INATTENT | INATTENTION |
| 28 | NM INATT | NON-MOTORIST INATTENTION |
| 29 | FAVOID | FAILED TO AVOID VEHICLE AHEAD |
| 30 | SPEED | DRIVING IN EXCESS OF POSTED SPEED |
| 31 | RACING | SPEED RACING (PER PAR) |
| 32 | CARELESS | CARELESS DRIVING (PER PAR) |
| 33 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 34 | AGGRESV | AGGRESSIVE DRIVING (PER PAR) |
| 35 | RDRAGE | ROAD RAGE (PER PAR) |
| 40 | VIEW OBS | VIEW OBSCURED |
| 50 | USED MDN | IMPROPER USE OF MEDIAN OR SHOULDER |
| 51 | FAIL LN | FAILED TO MAINTAIN LANE |
| 52 | OFF RD | RAN OFF ROAD |


| \& | OTH | MISCELL |
| :--- | :--- | :--- |
| - | BACK | BACKING |
| 0 | PED |  |


| 1 | ANGL | PEDESTRIA |
| :--- | :--- | :--- |
| 2 | HEAD | ANGLE |


| 2 | HEAD | HEAD-ON |
| :--- | :--- | :--- |
| 3 | REAR | REAR |

3 REAR REAR-END

| 4 | SS-M | SIDESWIPE - MEETING |
| :--- | :--- | :--- |

5 SS-O SIDESWIPE - OVERTAKIng
6 TURN TURNING MOVEMENT
PARK PARKING MANEUVER
8 NCOL NON-COLLISION
9 FIX FIXED OBJECT OR OTHER OBJECT

## CRASH TYPE CODE TRANSLATION LIST

CRASH SHORT
TYPE DESCRIPTION LONG DESCRIPTION

| $\&$ | OVERTURN | OVERTURNED |
| :--- | :--- | :--- |
| 0 | NON-COLL | OTHER NON-COLLISIO |


| 0 | NON-COLL | OTHER NON-COLLISION |
| :--- | :--- | :--- |
| 1 | OTH RDWY | MOTOR VEHICLE ON OTHER ROADWAY |


| 1 | OTH RDWY | MOTOR VEHICLE ON OTH |
| :--- | :--- | :--- |
| 2 | PRKD MV | PARKED MOTOR VEHICLE |


| LIC | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NOT LICENSED (HAD NEVER BEEN LICENSED) |
| 1 | OR-Y | VALID OREGON LICENSE |
| 2 | OTH-Y | VALID LICENSE, OTHER STATE OR COUNTRY |
| 3 | SUSP | SUSPENDED/REVOKED |
| 4 | EXP | EXPIRED |
| 8 | N-VAL | OTHER NON-VALID LICENSE |
| 9 | UNK | UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH |


| RES <br> CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :---: | :--- |

## ERROR CODE TRANSLATION LIST

| ERROR CODE | SHORT <br> DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 000 | NONE | NO ERROR |
| 001 | WIDE TRN | WIDE TURN |
| 002 | CUT CORN | CUT CORNER ON TURN |
| 003 | FAIL TRN | FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS |
| 004 | L IN TRF | LEFT TURN IN FRONT OF ONCOMING TRAFFIC |
| 005 | L PROHIB | LEFT TURN WHERE PROHIBITED |
| 006 | FRM WRng | TURNED FROM WRONG LANE |
| 007 | TO WRONG | TURNED INTO WRONG LANE |
| 008 | ILLEG U | U-TURNED ILLEGALLY |
| 009 | IMP STOP | IMPROPERLY STOPPED IN TRAFFIC LANE |
| 010 | IMP SIG | IMPROPER SIGNAL OR FAILURE TO SIGNAL |
| 011 | IMP BACK | BACKING IMPROPERLY (NOT PARKING) |
| 012 | IMP PARK | IMPROPERLY PARKED |
| 013 | UNPARK | Improper Start leaving Parked position |
| 014 | IMP STRT | IMPROPER START FROM STOPPED POSITION |
| 015 | IMP LGHT | IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC) |
| 016 | InAttent | INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97) |
| 017 | UNSF VEH | DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT) |
| 018 | Oth PARK | ENTERING/EXITING PARKED POSITION W/ InSufficient Clearance; other improper Parking maneuver |
| 019 | DIS DRIV | DISREGARDED OTHER DRIVER'S SIGNAL |
| 020 | DIS SGNL | DISREGARDED TRAFFIC SIGNAL |
| 021 | RAN Stop | DISREGARDED Stop Sign or flashing red |
| 022 | DIS SIGN | DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER |
| 023 | DIS OFCR | DISREGARDED POLICE OFFICER OR FLAGMAN |
| 024 | DIS EMER | DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE |
| 025 | DIS RR | DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN |
| 026 | REAR-END | FAILED TO AVOID Stopped or parked vehicle ahead other than School bus |
| 027 | BIKE ROW | DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST |
| 028 | No Row | DID NOT HAVE RIGHT-OF-WAY |
| 029 | PED ROW | FAILED TO YIELD RIGHT-OF-WAY to pedestrian |
| 030 | PAS CURV | PASSING ON A CURVE |
| 031 | PAS WRng | PASSING ON THE WRONG SIDE |
| 032 | PAS tANG | PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS |
| 033 | PAS X -WK | PASSED VEHICLE Stopped at crosswalk for pedestrian |
| 034 | PAS INTR | PASSING AT INTERSECTION |
| 035 | PAS HILL | PASSING ON CREST Of hill |
| 036 | N/PAS ZN | PASSING IN "NO PASSING" ZONE |
| 037 | PAS TRAF | PASSING In FRONT OF ONCOMING TRAFFIC |
| 038 | CUT-IN | CUtting in (TWO LANES - TWO WAY OnLy) |
| 039 | WRNGSIDE | DRIVING ON WRONG SIDE Of the road (2-WAY UNDIVIDED ROADWAYS) |


| ERROR | SHORT DESCRIPTION | FULL DESCRIPTION |
| :---: | :---: | :---: |
| 040 | THRU MED | DRIVING THROUGH SAFETY ZONE OR OVER ISLAND |
| 041 | F/ST BUS | FAILED TO STOP FOR SCHOOL BUS |
| 042 | F/SLO MV | FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE |
| 43 | too Close | FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT) |
| 044 | STRDL LN | STRADDLING OR DRIVING ON WRONG LANES |
| 045 | IMP CHG | ImPROPER CHANGE OF TRAFFIC LANES |
| 046 | WRNG WAY | WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD |
| 047 | BASCRULE | DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED) |
| 048 | OPN DOOR | OPENED DOOR INTO ADJACENT TRAFFIC LANE |
| 049 | Impeding | IMPEDING TRAFFIC |
| 050 | SPEED | DRIVING In EXCESS OF POSTED SPEED |
| 051 | RECKLESS | RECKLESS DRIVING (PER PAR) |
| 052 | CARELESS | CARELESS DRIVING (PER PAR) |
| 053 | RACING | SPEED RACING (PER PAR) |
| 054 | X N/SGNL | CROSSING AT Intersection, NO TRAFFIC SIGNAL PRESENT |
| 055 | X W/SGNL | CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT |
| 056 | DIAGONAL | CROSSING AT INTERSECTION - DIAGONALLY |
| 057 | BTWN INT | CROSSING BETWEEN INTERSECTIONS |
| 059 | W/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC |
| 060 | A/TRAF-S | WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC |
| 061 | W/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC |
| 062 | A/TRAF-P | WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC |
| 063 | PLAYINRD | PLAYING IN STREET OR ROAD |
| 064 | PUSH MV | PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER |
| 065 | WORK IN RD | WORKING IN ROADWAY OR ALONG SHOULDER |
| 070 | LAY ON RD | Standing Or Lying in roadway |
| 071 | NM IMP USE | IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST |
| 073 | ELUDING | ELUding / Attempt to elude |
| 079 | F NEG CURV | FAILED TO NeGotiate a curve |
| 080 | FAIL LN | FAILED TO MAINTAIN LANE |
| 081 | OFF RD | RAN OFF ROAD |
| 082 | No CLEAR | DRIVER MISJUDGED CLEARANCE |
| 083 | OVRSTEER | OVER-CORRECTING |
| 084 | NOT USED | CODE NOT IN USE |
| 085 | OVRLOAD | OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS |
| 97 | UNA DIS TC | UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE |

EVENT SHORT
CODE DESCRIPTION

| 001 | FEL/JUMP | OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEhICLE |
| :---: | :---: | :---: |
| 002 | INTERFER | PASSENGER INTERFERED WITH DRIVER |
| 003 | bug inte | ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER |
| 004 | INDRCT PED | PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK) |
| 005 | SUB-PED | "SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC. |
| 006 | INDRCT BIK | PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK) |
| 007 | HITCHIKR | HITCHHIKER (SOLICITING A RIDE) |
| 008 | PSNGR TOW | PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE |
| 009 | ON/OFF V | GEtting On/OFF Stopped/parked vehicle (OCCUPANTS Only; must have physical contact w/ vehic |
| 010 | SUB OTRN | OVERTURNED AFTER FIRST HARMFUL EVENT |
| 011 | MV PUSHD | VEHICLE BEING PUSHED |
| 012 | MV TOWED | VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE |
| 013 | FORCED | VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN |
| 014 | SET MOTN | VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.) |
| 015 | RR ROW | AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL) |
| 016 | LT RL Row | AT OR ON LIGHT-RAIL RIGHT-OF-WAY |
| 017 | RR HIT V | TRAIN STRUCK VEhicle |
| 018 | V HIT RR | VEhicle struck train |
| 019 | HIT RR CAR | vehicle struck railroad car on roadway |
| 020 | JACKNIFE | JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE |
| 021 | TRL OTRN | TRAILER OR TOWED VEHICLE OVERTURNED |
| 022 | CN BROKE | TRAILER CONNECTION BROKE |
| 023 | DETACH TRL | DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT |
| 024 | V DOOR OPN | VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE |
| 025 | WHEELOFF | WHEEL CAME OFF |
| 026 | HOOD UP | HOOD FLEW UP |
| 028 | LOAD SHIFT | LOST LOAD, LOAD MOVED OR Shifted |
| 029 | TIREFAIL | TIRE FAILURE |
| 030 | PET | PET: CAT, DOG AND SIMILAR |
| 031 | LVSTOCK | STOCK: COW, CALF, BULL, STEER, SHEEP, ETC. |
| 032 | HORSE | HORSE, MULE, OR DONKEY |
| 033 | HRSE\&RID | HORSE AND RIDER |
| 034 | GAME | WILD AnIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK) |
| 035 | DEER ELK | DEER OR ELK, WAPITI |
| 036 | AnML Veh | ANIMAL-DRAWN VEHICLE |
| 037 | CULVERT | CULVERT, OPEN LOW OR HIGH MANHOLE |
| 038 | Atenuatn | IMPACT ATTENUATOR |
| 039 | PK METER | PARKING METER |
| 040 | CURB | CURB (ALSO NARROW SIDEWALKS ON BRIDGES) |
| 041 | JIGGLE | JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION |
| 042 | GDRL END | LEADING EDGE OF GUARDRAIL |
| 043 | GARDRAIL | GUARD RAIL (NOT METAL MEDIAN BARRIER) |
| 044 | BARRIER | MEDIAN BARRIER (RAISED OR METAL) |
| 045 | WALL | REtAINING WALL OR TUNNEL WALL |
| 046 | BR RAIL | BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH) |
| 047 | BR ABUTMNT | BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013) |
| 048 | BR COLMN | BRIDGE PILLAR OR COLUMN |
| 049 | BR GIRDR | BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD) |
| 050 | ISLAND | TRAFFIC RAISED ISLAND |
| 051 | GORE | GORE |
| 052 | POLE UNK | POLE - TYPE UNKNOWN |
| 053 | POLE UTL | POLE - POWER OR TELEPHONE |
| 054 | ST LIGHT | POLE - Street light only |
| 055 | TRF SGNL | POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY |
| 056 | SGN BRDG | POLE - SIGN BRIDGE |
| 057 | STOPSIGN | Stop OR YIELD SIGN |

## EVENT CODE TRANSLATION LIST

| CODE | DESCRIPTION | LONG DESCRIPTION |
| :---: | :---: | :---: |
| 058 | OTH SIGN | OTHER SIGN, INCLUDING STREET SIGNS |
| 059 | HYDRANT | HYDRANT |
| 060 | MARKER | DELINEATOR OR MARKER (REFLECTOR POSTS) |
| 061 | MAILBOX | MAILBOX |
| 062 | tree | tree, Stump or shrubs |
| 063 | VEG OHED | tree branch or other vegetation overhead, etc. |
| 064 | WIRE/CBL | WIRE OR CABLe ACROSS OR OVER THE ROAD |
| 065 | TEMP SGN | TEMPORARY SIGN OR BARRICADE IN ROAD, ETC. |
| 066 | PERM SGN | PERMANENT SIGN OR BARRICADE IN/OFF ROAD |
| 067 | SLIDE | SLIDES, FALLEN OR FALLING ROCKS |
| 068 | FRGN OBJ | FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL) |
| 069 | EQP WORK | EQUIPMENT WORKING IN/OFF ROAD |
| 070 | OTH EQP | OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT) |
| 071 | MAIN EQP | WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT |
| 072 | OTHER WALL | ROCK, BRICK OR OTHER SOLID WALL |
| 073 | IRRGL PVMT | OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR) |
| 074 | OVERHD OBJ | OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE |
| 075 | CAVE IN | BRIDGE OR ROAD CAVE IN |
| 076 | HI WAter | HIGH WATER |
| 077 | SNO BANK | SNOW BANK |
| 078 | LO-HI EDGE | Low OR HIGH Shoulder at Pavement edge |
| 079 | DITCH | CUT SLOPE OR DITCH EMBANKMENT |
| 080 | OBJ FRM MV | STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS) |
| 081 | FLY-OBJ | STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE) |
| 082 | VEH HID | VEhicle ObSCURED view |
| 083 | VEG HID | VEGETATION OBSCURED VIEW |
| 084 | BLDG HID | VIEW OBSCURED BY Fence, Sign, Phone booth, etc. |
| 085 | WIND GUST | WIND GUST |
| 086 | IMMERSED | VEHICLE IMMERSED IN BODY OF WATER |
| 087 | FIRE/EXP | FIRE OR EXPLOSION |
| 088 | FENC/BLD | FENCE OR BUILDING, ETC. |
| 089 | OTHR CRASH | CRASH RELATED TO ANOTHER SEPARATE CRASH |
| 090 | TO 1 SIDE | TWO-WAY traffic on divided roadway all routed to one side |
| 091 | BUILDING | BUILDING OR OTHER STRUCTURE |
| 092 | PHANTOM | OTHER (PHANTOM) NON-CONTACT VEHICLE |
| 093 | CELL PHONE | CELL PHONE (ON PAR OR DRIVER IN USE) |
| 094 | VIOL GDL | teenage driver in violation of graduated license pgm |
| 095 | GUY WIRE | GUY WIRE |
| 096 | BERM | BERM (EARTHEN OR GRAVEL MOUND) |
| 097 | GRAVEL | GRAVEL IN ROADWAY |
| 098 | ABR EDGE | ABRUPT EDGE |
| 099 | CELL WTNSD | CELL PHONE USE WITNESSED BY OTHER PARTICIPANT |
| 100 | UNK FIXD | FIXED OBJECT, UNKNOWN TYPE. |
| 101 | OTHER OBJ | NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE |
| 102 | TEXTING | TEXTING |
| 103 | WZ WORKER | WORK ZONE WORKER |
| 104 | ON VEhicle | PASSENGER RIDING ON VEhICLE EXTERIOR |
| 105 | PEDAL PSGR | PASSENGER RIDING ON PEDALCYCLE |
| 106 | MAN WHLCHR | PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR |
| 107 | MTR WHLCHR | PEDESTRIAN IN MOTORIZED Wheelchair |
| 108 | OFFICER | LAW ENFORCEMENT / POLICE OFFICER |
| 109 | SUB-BIKE | "SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC. |
| 110 | N-MTR | NON-MOTORIST STRUCK VEHICLE |
| 111 | S CAR VS V | Street Car/Troliey (on Rails or overhead wire system) Struck vehicle |
| 112 | v VS S CAR | VEhicle struck street Car/trolley (on Rails or overhead wire system) |
| 113 | S CAR ROW | AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY |

## event code translation list

SHORT
CODE DESCRIPTION LONG DESCRIPTION

| 114 | RR EQUIP | VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS |
| :--- | :--- | :--- |
| 115 | DSTRCT GPS | DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE |
| 116 | DSTRCT OTH | DISTRACTED BY OTHER ELECTRNIC DEVICE |



| CLASS | DESCRIPTION |
| :---: | :--- |
| 01 | RURAL PRINCIPAL ARTERIAL - INTERSTATE |
| 02 | RURAL PRINCIPAL ARTERIAL - OTHER |
| 06 | RURAL MINOR ARTERIAL |
| 07 | RURAL MAJOR COLLECTOR |
| 08 | RURAL MINOR COLLECTOR |
| 09 | RURAL LOCAL |
| 11 | URBAN PRINCIPAL ARTERIAL - INTERSTATE |
| 12 | URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP |
| 14 | URBAN PRINCIPAL ARTERIAL - OTHER |
| 16 | URBAN MINOR ARTERIAL |
| 17 | URAN MAJOR COLLETOR |
| 18 | URBAN MINOR COLLETTOR |
| 19 | URBAN LOCAL |
| 78 | UNKNOWN RURAL SYSTEM |
| 79 | UNKNOWN RURAL NON-SYSTEM |
| 98 | UNKNOWN URBAN SYSTEM |
| 99 | UNKNOWN URBAN NON-SYSTEM |

## INJURY SEVERITY CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- | :--- |
| 1 | KILL | FATAL INJURY (K) |
| 2 | INJA | SUSPECTED SERIOUS INJURY (A) |
| 3 | INJB | SUSPECTED MINOR INJURY (B) |
| 4 | INJC | POSSIBLE INJURY (C) |
| 5 | PRI | DIED PRIOR TO CRASH |
| 7 | NO<5 | NO INJURY- O TO 4 YEARS OF AGE |
| 9 | NONE | NO APPARENT INJURY (0) |

## MEDIAN TYPE CODE TRANSLATION LIST

|  | SHORT |  |
| :---: | :--- | :--- |
| CODE | DESC | LONG DESCRIPTION |
| 0 | NONE | NO MEDIAN |
| 1 | RSDMD | SOLID MEDIAN BARRIER |
| 2 | DIVMD | EARTH, GRASS OR PAVED MEDIAN |

## LIGHT CONDITION CODE TRANSLATION LIST

## SHORT

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | DAY | DAYLIGHT |
| 2 | DLIT | DARKNESS - WITH STREET LIGHTS |
| 3 | DARK | DARKNESS - NO STREET LIGHTS |
| 4 | DAWN | DAWN (TWILIGHT) |

5 DUSK DUSK (TWILIGHT)
mileage type code translation list

| CODE | LONG DESCRIPTION |
| :---: | :--- |
| 0 | REGULAR MILEAGE |
| T | TEMPORARY |
| Y | SPUR |
| $Z$ | OVERLAPPING |

MOVEMENT TYPE CODE TRANSLATION LIST

| CODE | DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 0 | UNK | UNKNOWN |
| 1 | STRGHT | STRAIGHT AHEAD |
| 2 | TURN-R | TURNING RIGHT |
| 3 | TURN-L | TUANING LEFT |
| 4 | U-TURN | MARING A U-TURN |
| 5 | BACK | BACKING |
| 6 | STOP | STOPPED IN TRAFFIC |
| 7 | PRKD-P | PARKED - PROPERLY |
| 8 | PRKD-I | PARKED - IMPROPRLY |
| 9 | PARKNG | PARKING MANEUVER |

PARTICIPANT TYPE CODE TRANSLATION LISI

| CODE | SHORT <br> DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |

## traffic control device code translation list

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 000 | NONE | NO CONTROL |
| 001 | TRF SIGNAL | TRAFFIC SIGNALS |
| 002 | FLASHBCN-R | FLASHING BEACON - RED (STOP) |
| 003 | FLASHBCN-A | FLASHING BEACON - AMBER (SLOW) |
| 004 | STOP SIGN | STOP SIGN |
| 005 | SLOW SIGN | SLOW SIGN |
| 006 | REG-SIGN | REGULATORY SIGN |
| 007 | YIELD | YIELD SIGN |
| 008 | WARNING | WARNING SIGN |
| 009 | CURVE | CURVE SIGN |
| 010 | SCHL X-ING | SCHOOL CROSSING SIGN OR SPECIAL SIGNAL |
| 011 | OFCR/FLAG | POLICE OFFICER, FLAGMAN - SCHOOL PATROL |
| 012 | BRDG-GATE | BRIDGE GATE - BARRIER |
| 013 | TEMP-BARR | TEMPORARY BARRIER |
| 014 | NO-PASS-ZN | NO PASSING ZONE |
| 015 | ONE-WAY | ONE-WAY STREET |
| 016 | CHANNEL | CHANNELIZATINN |
| 017 | MEDAN BAR | MEDIAN BARRIER |
| 018 | PILOT CAR | PILOT CAR |
| 019 | SP PED SIG | SPECIAL PEDESTRIAN SIGNAL |
| 020 | X-BUCK | CROSSBUCK |
| 021 | THR-GN-SIG | THROUGH GREEN ARROW OR SIGNAL |
| 022 | L-GRN-SIG | LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 023 | R-GRN-SIG | RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL |
| 024 | WIGNG | WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE |
| 025 | X-BUCK WRN | CROSSBUCK AND ADVANCE WARNING |
| 026 | WW W/ GATE | FLASHING LIGHTS WITH DROP-ARM GATES |
| 027 | OVRHD SGNL | SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY) |
| 028 | SP RR STOP | SPECIAL RR STOP SIGN |
| 029 | ILUM GRD X | ILLUMINATED GRADE CROSSING |
| 037 | RAMP METER | METERED RAMPS |
| 038 | RUMBLE STR | RUMBLE STRIP |
| 090 | L-TURN REF | LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED) |
| 091 | R-TURN ALL | RIGHT TURN AT ALL TIMES SIGN, ETC. |
| 092 | EMR SGN/FL | EMERGENCY SIGNS OR FLARES |
| 093 | ACCEL LANE | ACCELERATION OR DECELERATION LANES |
| 094 | R-TURN PRO | RIGHT TURN PROHIBITED ON RED AFTER STOPPING |
| 095 | BUS STPSGN | BUS STOP SIGN AND RED LIGHTS |
| 099 | UNKNOWN | UNKNOWN OR NOT DEFINITE |

## VEhICLE TYPE CODE TRANSLATION LIS

WEATHER CONDITION CODE TRANSLATION LIST

| CODE | SHORT DESC | LONG DESCRIPTION |
| :---: | :--- | :--- |
| 00 | PDO | NOT COLLECTED FOR PDO CRASHES |
| 01 | PSNGR CAR | PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC. |
| 02 | BOBTAIL | TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL) |
| 03 | FARM TRCTR | FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT |
| 04 | SEMI TOW | TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW |
| 05 | TRUCK | TRUCK WITH NON-DETACHABLE BED, PANEL, ETC. |
| 06 | MOPED | MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE |
| 07 | SCHL BUS | SCHOOL BUS (INCLUDES VAN) |
| 08 | OTH BUS | OTHER BUS |
| 09 | MTRCYCLE | MOTORCYCLE, DIRT BIKE |
| 10 | OTHER | OTHER: FORKLIFT, BACKHOE, ETC. |
| 11 | MOTRHOME | MOTORHOME |
| 12 | TROLLEY | MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES) |
| 13 | ATV | ATV |
| 14 | MTRSCTR | MOTORIZED SCOOTER (STANDING) |
| 15 | SNOWMOBILE | SNOWMOBILE |
| 99 | UNKNOWN | UNKNOWN VEHICLE TYPE |


| CODE | SHORT | DESC |
| :---: | :--- | :--- |
| 0 | LONG DESCRIPTION |  |
| 1 | CLR | UNKNOWN |
| 2 | CLD | CLEAR |
| 3 | RAIN | CLOUDY |
| 4 | RLT | SLEET |
| 5 | FOG | FOG |
| 6 | SNOW | SNOW |
| 7 | DUST | DUST |
| 8 | SMOK | SMOKE |
| 9 | ASH | ASH |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## ATTACHMENT E - SAFETY WORKSHEETS

| Location |  | Collision Type |  |  |  |  |  |  |  |  |  | Severity |  | Total Crashes | 90th Percentile Crash Rate | $\begin{aligned} & \text { Observed } \\ & \text { Crash } \\ & \text { Rate } \end{aligned}$ | DoesObserved Exceed 90th Rate? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rear-end | Turning | Angle | Fixed | Head | Ped | Side-Swipe | Backing | Non | Other | PDO | Injury |  |  |  |  |
| 1 | US 395/J St/Missouri Ave | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1.08 | 0.17 | No |
| 2 | Roberta Rd/OR 140 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1.08 | 0.33 | No |
| 3 | US 395/OR 140 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1.08 | 0.08 | No |
| 4 | US 395/5 7th St | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0.48 | 0.12 | No |
| 5 | US 395/S 9th St | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1.08 | 0.13 | No |
| 6 | Roberta Rd/S 3rd St | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.48 | 0.00 | No |
| 7 | L St/S 3rd St | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.48 | 0.00 | No |
|  |  | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 6 |  |  |  |

nut required
from ODOT report
excel calculated

| LD Location |  | PM Peak |  |  |  | EST AADT | EST SY TEV | Crash Rate | Intersection Class | $\begin{gathered} \text { 90th } \\ \text { Percentile } \\ \text { Rate } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Day one | Day Two | Day Three | AVG |  |  |  |  |  |
| 1 | US 395/J St/Missouri Ave |  |  |  | 316 | 3160 | 5767000 | 0.17 | Rural 4ST | 1.08 |
| 2 | Roberta Rd/OR 140 |  |  |  | 328 | 3280 | 5986000 | 0.33 | Rural 4ST | 1.08 |
| 3 | US 395/OR 140 |  |  |  | 687 | 6870 | 12537750 | 0.08 | Rural 4ST | 1.08 |
| 4 | US 395/5 7 th St |  |  |  | 453 | 4530 | 8267250 | 0.12 | Rural 3ST | 0.475 |
| 5 | US 395/S 9th St |  |  |  | 427 | 4270 | 7792750 | 0.13 | Rural 4ST | 1.08 |
| 6 | Roberta Rd/S 3rd St |  |  |  | 86 | 860 | 1569500 | 0.00 | Rural 3ST | 0.475 |
| 7 | L St/s 3rd St |  |  |  | 168 | 1680 | 3066000 | 0.00 | Rural 3ST | 0.475 |

Intersection Crash Rate per MEV $=$ Annual Number of Crashes $x 10^{6}$
The values shown in Exhibit 4-1 represent the $90^{\text {th }}$ percentile crash rates from a study of 500 intersections in Oregon. The crash rates are grouped by rural/urban, signalized/unsignalized, and three-leg/four-leg intersections. Intersections with crash rates that exceed the $90^{\text {th }}$ percentile values shown in the table should be flagged for further analysis. For more information on crash rates and using this table, see Section 4.3.4 Critical Crash Rate.

|  | Rural |  |  |  | Urban |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3SG | 3ST | 4SG | 4ST | 3SG | 3ST | 4SG | 4ST |
| No. of Intersections | 7 | 115 | 20 | 60 | 55 | 77 | 106 | 60 |
| Mean Crash Rate | 0.226 | 0.196 | 0.324 | 0.434 | 0.275 | 0.131 | 0.477 | 0.198 |
| Median Crash Rate | 0.163 | 0.092 | 0.320 | 0.267 | 0.252 | 0.105 | 0.420 | 0.145 |
| Standard Deviation | 0.185 | 0.314 | 0.223 | 0.534 | 0.155 | 0.121 | 0.273 | 0.176 |
| Coefficient of Variation | 0.819 | 1.602 | 0.688 | 1.230 | 0.564 | 0.924 | 0.572 | 0.889 |
| 90 ${ }^{\text {th }}$ Percentile Rate | 0.464 | 0.475 | 0.579 | 1.080 | 0.509 | 0.293 | 0.860 | 0.408 |

Source: Assessment of Statewide Intersection Safety Performance, FHWA-OR-RD-18, Portland State
,
Note: Traffic control types include
3SG (three-leg signalized),
3ST (three-leg minor stop-control),
-SG (four-leg signalized)
SST (four-leg minor stop-control).

https://www.oregon.gov/odot/Data/Documents/Crash Rate Tables 2018.pdf

## ATTACHMENT F - BLTS AND PLTS WORKSHEETS

Urban Application



Exhibit 14-6 BLTS Criteria for Urban/Suburban Mixed Traffic Segment - $\mathbf{3 5} \mathrm{mph}$ or

| Number of Lanes | ADT (vph) ${ }^{1}$ | Functional Class | Posted or Prevailing Speed (mph) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 35 | 40 | >45 |
| Unmarked Centerline | $\leq 750$ | Local | BLTS 2 | BLTS 3 | BLTS 3 |
|  | $750-\leq 1,500$ | Local/Collector | BLTS 3 | BLTS 3 | BLTS 4 |
|  | 1,500- $\leq 3,000$ | Collector | BLTS 3 | BLTS 4 | BLTS 4 |
|  | >3,000 | Arterial | BLTS 3 | BLTS 4 | BLTS 4 |
| 1 through lane per direction | $\leq 750$ | Local | BLTS 2 | BLTS 3 | BLTS 3 |
|  | $750-\leq 1,500$ | Local/Collector | BLTS 3 | BLTS 3 | BLTS 4 |
|  | 1,500- $\leq 3,000$ | Collector | BLTS 3 | BLTS 4 | BLTS 4 |
|  | >3,000 | Arterial | BLTS 3 | BLTS 4 | BLTS 4 |
| 2 through lanes per direction | <8,000 | Arterial | BLTS 3 | BLTS 4 | BLTS 4 |
|  | >8,000 | Arterial | BLTS 4 | BLTS 4 | BLTS 4 |
| 3+ though lanes per | Any ADT | Arterial | BLTS 4 | BLTS 4 | BLTS 4 |

[^1]Rural application

| Daily Volume (ypd) | Paved Shoulder Width |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $0-<2 \mathrm{ft}$ | $2-<4 \mathrm{ft}$ | $4-<6 \mathrm{ft}$ | $\geq 6 \mathrm{ft}$ |
| $<400$ | BLTS 2 | BLTS 2 | BLTS 2 | BLTS 2 |
| 400-1500 | BLTS 3 | BLTS 2 | BLTS 2 | BLTS 2 |
| 1500-7000 ${ }^{4}$ | BLTS 4 | BLTS 3 | BLTS 2 | BLTS 2 |
| $>7000$ | BLTS 4 | BLTS 4 | BLTS 3 | BLTS 3 |
| ${ }^{1}$ Based on pl-3 \& Table 1-2 from the Oregon Bicycle and Pedestrian Design Guide, 2011. |  |  |  |  |
|  |  |  |  |  |
| - Adequate stopping sight distances on curves and grades assummed. A high frequency of sharper curves and |  |  |  |  |
| Engineering judgment will be needed to determine what impact this will have on the BLTS level on a particular segment. |  |  |  |  |
| ${ }^{3}$ Segments with flashing warning beacons announcing presence of bicyclists (typically done on narrower |  |  |  |  |
|  |  |  |  |  |

October 2020 Revisions


| Bike_LTS_ID | Street | From | To | Context* | Bike_Lanes | Parking | Speed | Exhibit | Paved Shoulder Width |  |  |  | Func_Class | LTS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | ADT | Left | Right | Num_Lanes |  |  |  |
| 1 | US 395 | UGB | S 12th St | Rural | N/A | N/A | 45-55 | 14-16 | 1400 | 2-4' | 2-4' | N/A | N/A | R3 |  |
| 2 | US 395 | S 12th St | S 9th St | Urban | No | N/A | 35 | 14-6 | 1900-2000 | N/A | N/A | 1 Thru/Direction | Arterial | 3 |  |
| 3 | US 395 | S 9th St | OR 140 | Urban | No | N/A | 25 | 14-5 | 3100-4400 | N/A | N/A | 1 Thru/Direction | Arterial | 3 |  |
| 4 | US 395 | OR 140 | N 10th St | Urban | No | N/A | 35 | 14-6 | 1900-2100 | N/A | N/A | 1 Thru/Direction | Arterial |  |  |
| 5 | US 395 | N 10th St | UGB | Rural | N/A | N/A | 45-55 | 14-16 | 1300-1900 | 2-4' | 2-4' | N/A | N/A | R4 |  |
| 6 | OR 140 | UGB | Roberta Rd | Rural | N/A | N/A | 55 | 14-16 | 2100-2400 | 2-4' | 2-4' | N/A | N/A | R4 |  |
| 7 | OR 140 | Roberta Rd | Nast | Urban | No | N/A | 40 | 14-6 | 2900 | N/A | N/A | 1 Thru/Direction | Arterial | , |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ( NQSt to R×R) |
| 8 | OR 140 | NQSt | US 395 | Urban | No | N/A | 25 | 14-5 | 2800-3800 | N/A | N/A | 1 Thru/Direction | Arterial | 3 | (R×R to US 395) |
| 9 | Rabbit Hill Rd | Missouri Ave | UGB |  |  |  |  |  |  |  |  |  | Collector |  |  |
| 10 | Missouri Ave | Rabbit Hill Rd | Roberta Rd |  |  |  | 45 |  |  |  |  |  | Collector |  |  |
| 11 | Missouri Ave | Roberta Rd | US 395 | Urban | No | N/A | 25 | 14-5 | 320 | N/A | N/A | Unmarked Centerline | Collector | 1 |  |
| 12 | Roberta Rd | Stock Drive Ln | s 3rd St | Rural | Yes | No | 45 | 14-16 | 600 | $6^{\prime}$ | $6^{\prime}$ | 1 Thru/Direction | Collector | R2 |  |
| 24 | Roberta Rd | S 3rd St | OR 140 | Rural | No | N/A | 45 | 14-16 | 700 | 0-2' | 0-2' | 1 Thru/Direction | Collector | R3 |  |
| 25 | Roberta Rd | OR 140 | Missouri Ave | Rural | No | N/A | 25 | 14-5 | 770 | N/A | N/A | 1 Thru/Direction | Collector | R2 |  |
| 13 | NJSt | OR 140 | US 395 |  |  |  |  |  |  |  |  |  | Collector |  |  |
| 14 | NLSt | S 3rd St | OR 140 | Urban | No | N/A | 25 | 14-5 | 940 | N/A | N/A | Unmarked Centerline | Collector | 1 |  |
| 15 | HSt | s 9th St | US 395 |  |  |  |  |  |  |  |  |  | Collector |  |  |
| 16 | N 2nd St | N NSt | N D St |  |  |  |  |  |  |  |  |  | Collector |  |  |
| 17 | Center St | N NSt | NDSt |  |  |  |  |  |  |  |  |  | Collector |  |  |
| 18 | S 3rd St | S Roberta Rd | SLSt | Urban | Yes | No | 25 | 14-4 | 470 | $6^{\prime}$ | $6^{\prime}$ | 1 Thru/Direction | Collector | 1 |  |
| 19 | S 3rd St | Stst | US 395 | Urban | No | N/A | 25 | 14-5 | 470 | N/A | N/A | Unmarked Centerline | Collector | 1 |  |
| 20 | S 7 th St | SJst | US 395 | Urban | No | N/A | 25 | 14-5 | 520 | N/A | N/A | Unmarked Centerline | Collector | 1 |  |
| 21 | S 9th St | S Roberta Rd | RxR | Rural | Yes | No | 45 | 14-16 | 750 | 2-4' | 4-6' | 1 Thru/Direction | Collector | R2 |  |
| 22 | S 9th St | RxR | US 395 | Urban | No | N/A | 25 | 14-5 | 750 | N/A | N/A | Unmarked Centerline | Collector | 1 |  |
| 23 | SMSt | Kadrmas Rd | S 9th St |  |  |  |  |  |  |  |  |  | Collector |  |  |

*Driven by posted speed and/or availability of bike lanes



[^0]:    ${ }^{1} \mathrm{NB}=$ northbound; $\mathrm{SB}=$ southbound; $\mathrm{EB}=$ eastbound; $\mathrm{WB}=$ westbound; $\mathrm{L}=$ left; $\mathrm{T}=$ through; $\mathrm{R}=$ right
    ${ }^{2}$ Storage lengths reflect striped storage for each turn-lane pocket at the intersections or available storage to the upstream driveway or intersection. ${ }^{3}$ Vehicle queve lengths were rounded to the nearest 25 feet.

[^1]:    https://www.oregon.gov/odot/Planning/Documents/APMv2 Ch14.pdf

