Technical Memorandum

Date:	May 5, 2022	Kittelson Project No: 23021.041
To:	Project Advisory Committee	DOT&PF Agreement No: 20455
From:	Matt Kittelson, PE, Miranda Barrus, PE, and Daniel Bowers	
Subject:	Final TM #4: Existing Transportation Conditions	

Introduction

The existing transportation conditions is an assessment of the City of Winston's transportation system as it exists today and provides a baseline understanding of existing needs and deficiencies. Information summarized in this technical memorandum was obtained and assembled using available Geographic Information System (GIS) data and aerial imagery, measured traffic data, and historical crash rates provide or produced by the City, Douglas County, and the Oregon Department of Transportation (ODOT).

This memorandum is organized in two primary sections:

1. An inventory of the existing transportation system in Winston documenting elements such as current land uses and population trends and multimodal characteristics of the street network; and,
2. A summary of how the existing transportation system performs in terms of intersection traffic operations, crash history, and multimodal conditions.

Much of the inventory and analysis results are presented in figures and tables and are supplemented with text. 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 TSP addresses transportation needs for people walking, rolling, taking transit, biking, and driving within the City's Urban Growth Boundary (UGB), namely, the project study area. The geographic extents of the UGB are illustrated in Figure 1.

The following executive summary outlines the key findings identified through the existing transportation conditions assessment.

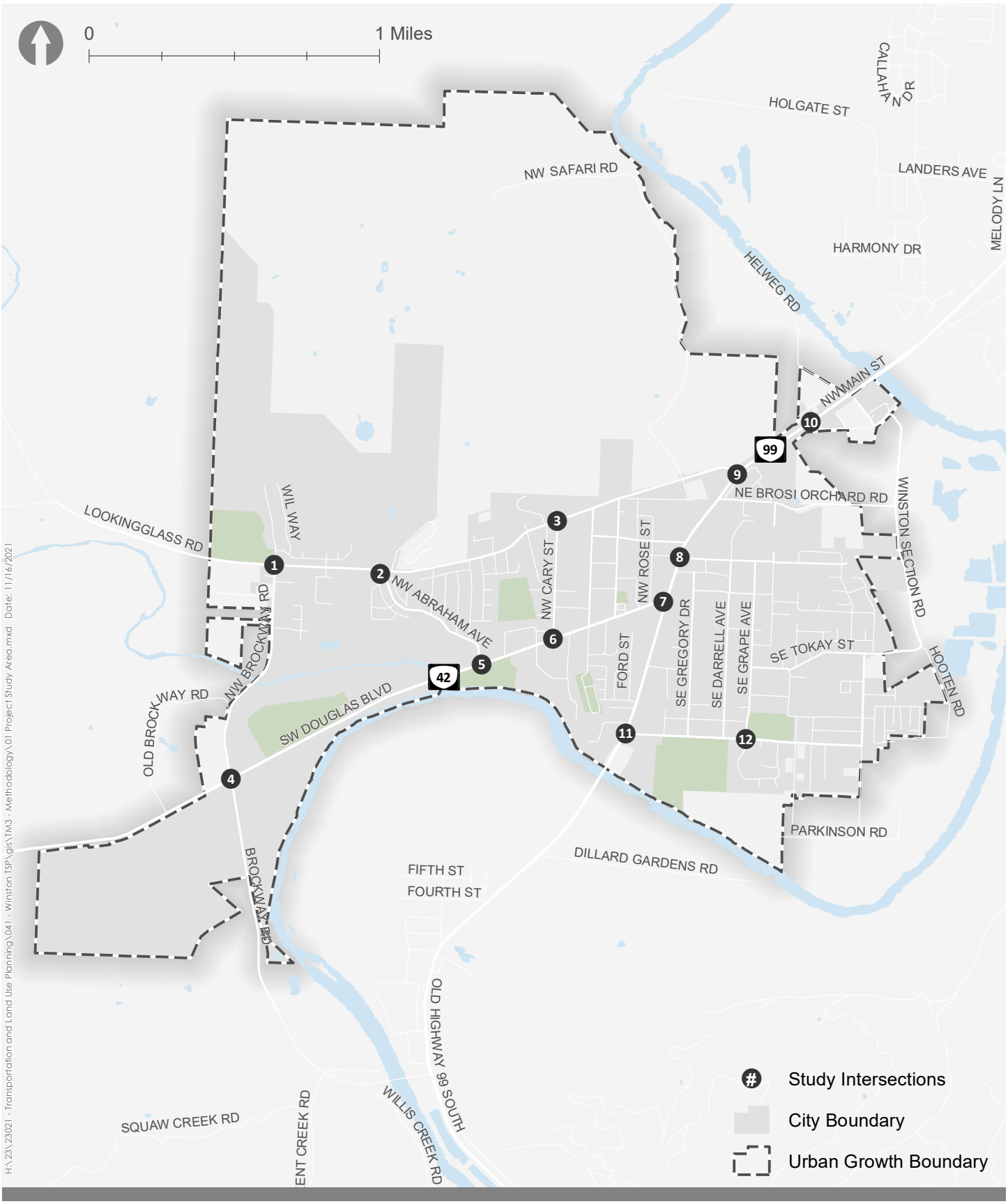


Figure 1

Project Study Area
Winston, Oregon

Executive Summary

Key findings from the existing transportation conditions assessment presented within this memorandum are summarized below:

- Most major activity centers are located along OR 42, Main Street, and Thompson Avenue.
- Important local resources include the Wildlife Safari, which is a notable local attraction, the Brockway Store, which is listed on the State of Oregon Inventory of Historic Sites and Buildings, and an archaeologically significant site located along the South Umpqua River.
- The highest percentage of people who may be transportation disadvantaged reside north of Lookingglass Road. The highest overall population reside south of Lookingglass Road and west of OR 99/Main Street.
- The City owns and maintains most streets within Winston with some exceptions. ODOT owns and maintains OR 42. Douglas County owns and operates several collector roads within the community, including Lookingglass Road.
- Many City streets are not built to standard lacking sidewalks, curb and gutter, and/or bike lanes, and in some cases, centerline or edge line striping.
- Limited continuous higher order east-west connections exist today across OR 42 which creates a reliance on the highways for local travel.
- OR 42 is a Statewide Highway and Oregon Highway Plan (OHP) designated freight route through Winston, and an Expressway east of Lookingglass Road; Trucks account for approximately seven to ten percent of highway traffic.
- OR 42 can be a barrier to people walking and biking, especially in areas of higher posted speeds.
- Two bridges are identified for reviewing Special Haul Vehicle (SHV) loads; four bridges are Scour Critical bridges; and one bridge has a sufficiency rating below 50.
- Bus stops stop in Winston have limited amenities, including signs. Some bus stops along major streets lack walking and biking facilities in the vicinity.
- No capacity constraints were identified at the 12 study intersections based on applicable mobility standards. Side-street drivers using OR 42/Lookingglass Road experience high delays when turning onto the state highway.
- Eight serious injury crashes and five crashes involving people walking or biking were reported between 2015 and 2019 (most recent five years of available crash data)
- The OR 42/Brockway Road study intersection exceeds the applicable 90th percentile crash rate; the OR 42/Lookingglass Road study intersection exceeds its critical crash rate and exhibits an excess proportion of turning movement crashes.
- No Safety Priority Index System (SPIS) sites were identified in the study area

- Pedestrians are at the highest risk of being involved in vehicle crashes on
- OR 42 between Sherry Street and the eastern UGB limit was identified as a high-risk corridor for pedestrians based on statewide analysis.; The length of OR 42 throughout Winston was identified as a high-risk corridor for bicycles.
- Streets with Pedestrian Level of Traffic Stress (PLTS) and Bicycle Level of Traffic Stress (BLTS) scores higher than two (2) exist throughout much of the transportation system evaluated within Winston, meaning walking or biking may be uncomfortable for most users.

Existing Transportation System Inventory

The existing transportation system inventory evaluates current land uses and population and employment estimates within the project study area to understand how the transportation system is used by the people using it. The inventory also assesses the current characteristics of the arterial and collector roadway network to understand how it is serving these users today.

Lands and Population

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 help articulate the City's vision for an enhanced multimodal transportation network as well as prioritize projects, programs, and policies that support economic development consistent with the existing Comprehensive Plan. The following section describes current land uses in Winston – including activity centers, natural resources, and environmental barriers – as well as population demographics and employment estimates.

Land Use

The City of Winston is surrounded by primarily agricultural and forested lands but is also located near other urbanized areas to the northeast, including Green and Roseburg. Much of Winston's UGB borders the South Umpqua River. Within the UGB, land uses range between open land/agriculture, residential, commercial, and others. Land uses designated by the City of Winston's Comprehensive Plan are illustrated in Figure 2 and defined in Table 1. Generally, higher-density land uses are designated along primary corridors and the more central part of the city and lower-density land uses are designated closer to the UGB limits.

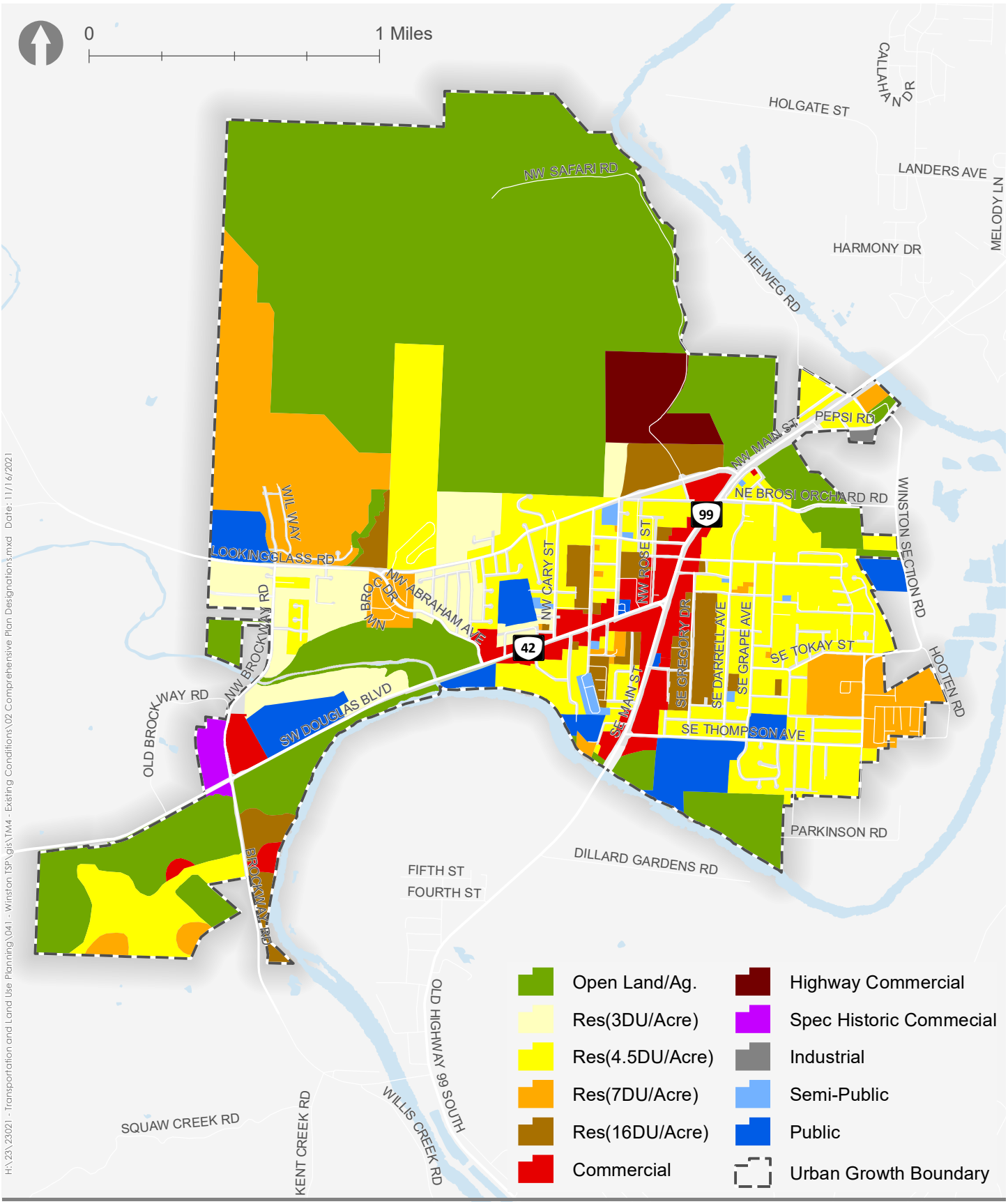


Figure 2

Comprehensive Plan Designations
Winston, Oregon

Table 1: Comprehensive Plan Designations by Definition

Designation	Purpose
Residential Low A (RLA)	Single family residences with some surrounding private open space (up to 4.5 units/acre)
Residential Low B (RLB)	Large lot residences with community services in a rural community environment (up to 3 units/acre)
Residential Low C (RLC)	Large lot residences with community services in a rural community environment (up to 2 units/acre)
Residential Medium (RM)	Lower density multifamily developments
Residential High (RH)	Greatest concentrations of population
Open Land/Agriculture	Primarily Wildlife Safari and Cow Creek Band of Umpqua Tribe of Indians land; some open spaces and agricultural lands
General Commercial	Recognizes existing commercial activity found principally along OR 42 and County Road 387, including the auto-dependent development pattern. Allows any type of retail commercial activity
Highway Commercial	Includes only those uses which serves highway travelers, tourists, or recreation users, such as hotels, motels, restaurants, and automobile service stations
Special Historic Commercial	An area designated to maintain the structure of a building of historic value, such as the Brockway Store, and promote the commercial use and preservation of the store
Office/Professional Commercial	Provides locations for professional and general offices in a commercial-residential environment. Will bring uses more compatible with their surrounding areas and support their integration with residential development (e.g., medical, dental, finance, insurance, real estate, legal, and governmental offices and services)
Industrial	Corporate and administrative functions of large business and industries, and in some cases, government, research, and development activities, data processing centers, and professional offices, which have minor public service functions
Semi-Public	Adds variety to residential development pattern (e.g., churches, golf courses, recreational clubs, etc.)
Public	Contributes to the livability of residential areas and drives development (e.g., schools, parks, fire stations, community buildings, etc.)

ACTIVITY CENTERS

Local activity centers that generate multimodal traffic within Winston are shown in Figure 3. Some of the major centers include:

- Wildlife Safari
- Winston Fire and Police departments
- Winston City Hall
- Post Office
- Brockway and McGovern elementary schools
- Winston Middle School
- Douglas High School
- Winston Public Works
- Winston Community Center and Library
- Historic Brockway Store

Most of these activity centers are located in the central part of Winston along OR 42, Main Street, and Thompson Avenue. Providing safe and efficient multimodal connections to, from, and between major activity centers is important for creating an equitable transportation system.

NATURAL RESOURCES AND ENVIRONMENTAL BARRIERS

Potential environmental considerations or constraints within the project study area related to future transportation improvements were identified from a review of Winston's Comprehensive Plan (last revised in 2007) and are summarized below.

Slope, Geologic, and Flood Hazards

- Slopes exceeding 25 percent that require a licensed engineering geologist for development are located north of Lookingglass Road, including Wildlife Safari; some areas within the UGB are in the 12 to 25 percent range, which require extra engineering and design work for development.
- Major flood hazards occur along the South Umpqua River, Lookingglass Creek, Applegate Creek, and Brockway Creek.

Air, Land, and Water Quality

- No significant air pollution is present; air-shed meets Federal and State ambient air quality standards.
- The only major noise sources are highways including OR 42 and County Road 387 (Main Street), although no formal noise survey has been conducted; lands adjacent to these highways are designated as primarily retail commercial, which can likely provide a buffer for more noise-sensitive residential areas.
- No hazardous sites have been identified.

Vegetation and Wildlife Habitat

- No unique or significant habitat areas are designated for protection or conservation, nor does the project study area contain waterways or wetlands designated by the Federal or State inventories.
- Native wildlife is present, but the project study area does not provide for any endangered or threatened species.
- Wildlife Safari is considered an important resource to the area and should be protected and enhanced.

Historic Sites

While available information on these resources is limited, there is high potential for the presence of both cultural and historic resources within Winston and this will be emphasized throughout the TSP Update.

- The Brockway Store on the southwest corner of the OR 42/Brockway Road intersection is listed on the State of Oregon Inventory of Historic Sites and Buildings. Shown in Figure 3, this site and its historic value is protected by the Special Historic Commercial designation.

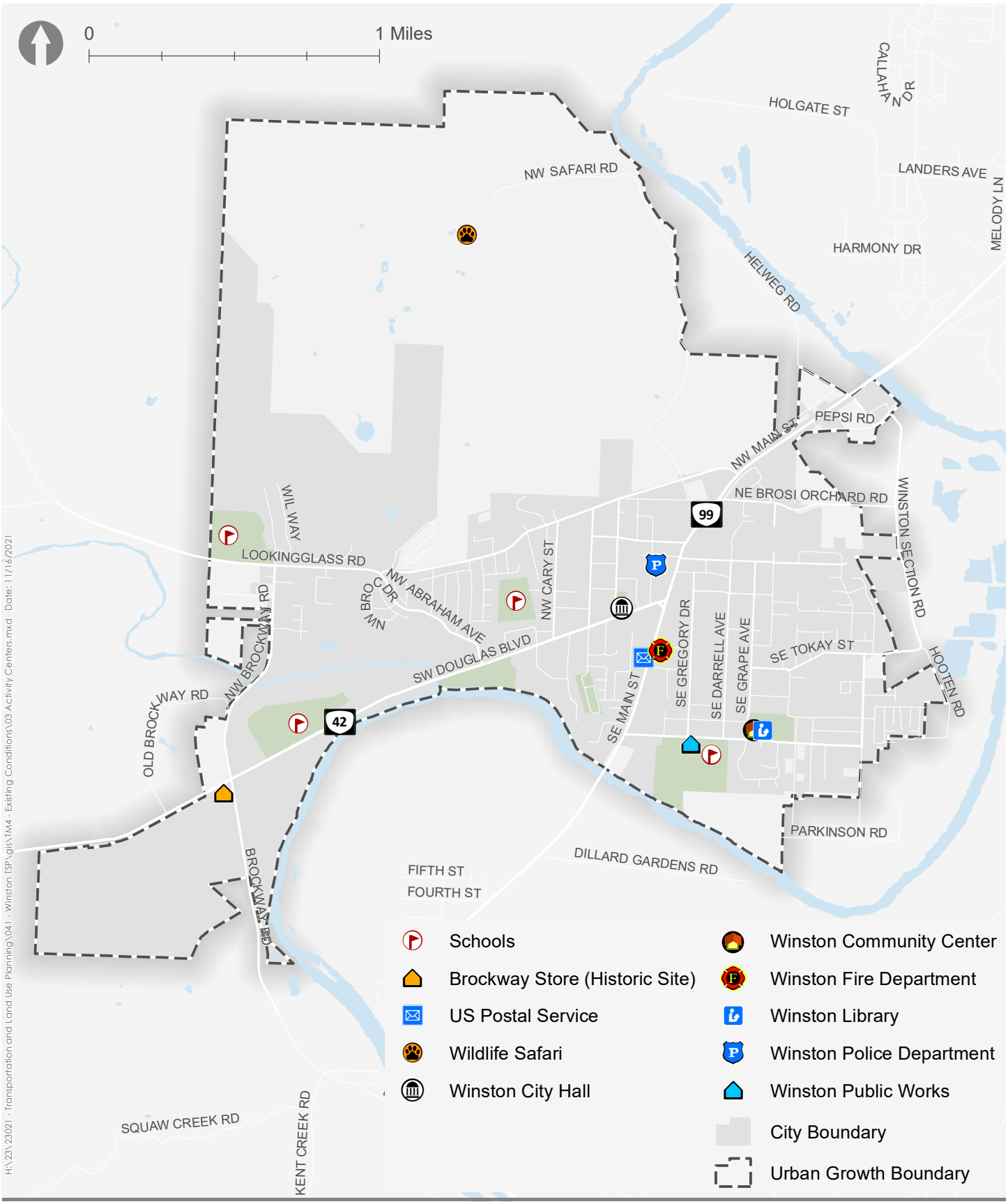


Figure 3

Activity Centers
Winston, Oregon

Population and Employment

The City of Winston is home to a little over 7,600 residents. The community profile is made up of people of all ages, abilities, and incomes with various needs for the transportation system. Table 2 summarizes key demographics about the city that can help inform these various needs, including the following:

- The highest percentage of people who may be transportation disadvantaged reside in the area north of Lookingglass Road.
- The highest total number of people who may be transportation disadvantaged reside in the area south of Lookingglass Road and west of OR 99/Main Street.
- Transit, biking, and walking are currently underutilized transportation options for people in Winston regardless of location within the city.

The block groups identified in Table 2 are illustrated in Figure 4.

Table 2: Key Winston Demographics (2019 American Community Survey)

Demographic	Block Group 1		Block Group 2	Block Group 3	Block Group 4
	North of OR 42	South of OR 42			
Population (Density)[1]	1,345 (69.2)	1,064 (20.4)	2,457 (2,615.5)	1,985 (1,233.0)	784 (4,316.3)
Age	14% are younger than 18; 42% are older than 65	20% are younger than 18; 32% are older than 65	27% are younger than 18; 19% are older than 65	25% are younger than 18; 25% are older than 65	24% are younger than 18; 12% are older than 65
Race	26% are minority populations	3% are minority populations	11% are minority populations	6% are minority populations	1% are minority populations
Employment Status[2]	62% are unemployed	58% are unemployed	41% are unemployed	46% are unemployed	17% are unemployed
Poverty Level	16% are families below poverty level	4% are families below poverty level	17% are families below poverty level	4% are families below poverty level	18% are families below poverty level
Mode[3]	9% carpooled; 0% rode transit or a bike or walked	5% carpooled; 0% rode transit or a bike or walked	5% carpooled; 2% rode transit or a bike or walked	19% carpooled; 0% rode transit or a bike or walked	0% carpooled; 0% rode transit or a bike or walked

[1]People per square mile, [2]Ages 16 years and older, [3]Means of transportation to work for workers 16 years and older

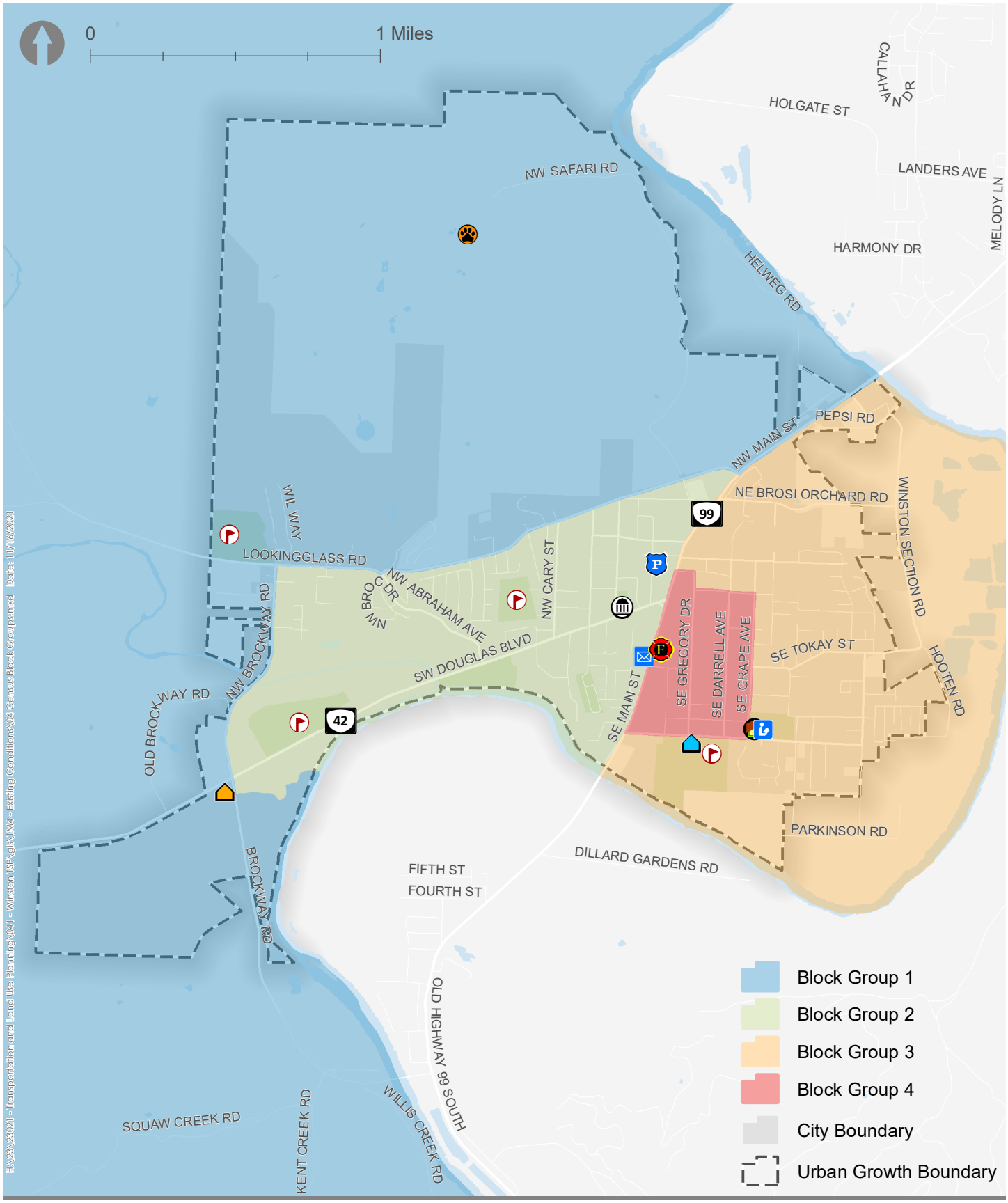


Figure 4

Census Block Groups
Winston, Oregon

Roadway System

Roadway systems are an important conveyance of personal travel, freight, transit, and emergency response. The City of Winston is located west of Interstate 5 (I-5) and approximately 70 miles east of the Oregon Coast Highway (US 101). OR 42 is the primary corridor through Winston that serves as a community thoroughfare and a regional connection between I-5, Roseburg, and the Pacific Coast. The following sections describe the project study area roadway system.

Roadway Jurisdiction

Roadways within the Winston UGB are under City, Douglas County, or ODOT jurisdiction. The City generally owns and operates streets within city limits, with some exceptions:

- ODOT has jurisdiction over OR 42 through Winston, including its shared alignment with OR 99. OR 42 is classified as a Statewide Highway within the Oregon Highway Plan (OHP) as well as designated as an Expressway east of Lookingglass Road.
- The County has jurisdiction over Lookingglass Road, Brockway Road, and Main Street.

The County also generally has jurisdiction over the few streets located inside the UGB but outside city limits, except for privately-owned roadways, such as those within Wildlife Safari. Each roadway shown in Figure 5 is subject to the operating and design standards of its jurisdiction.

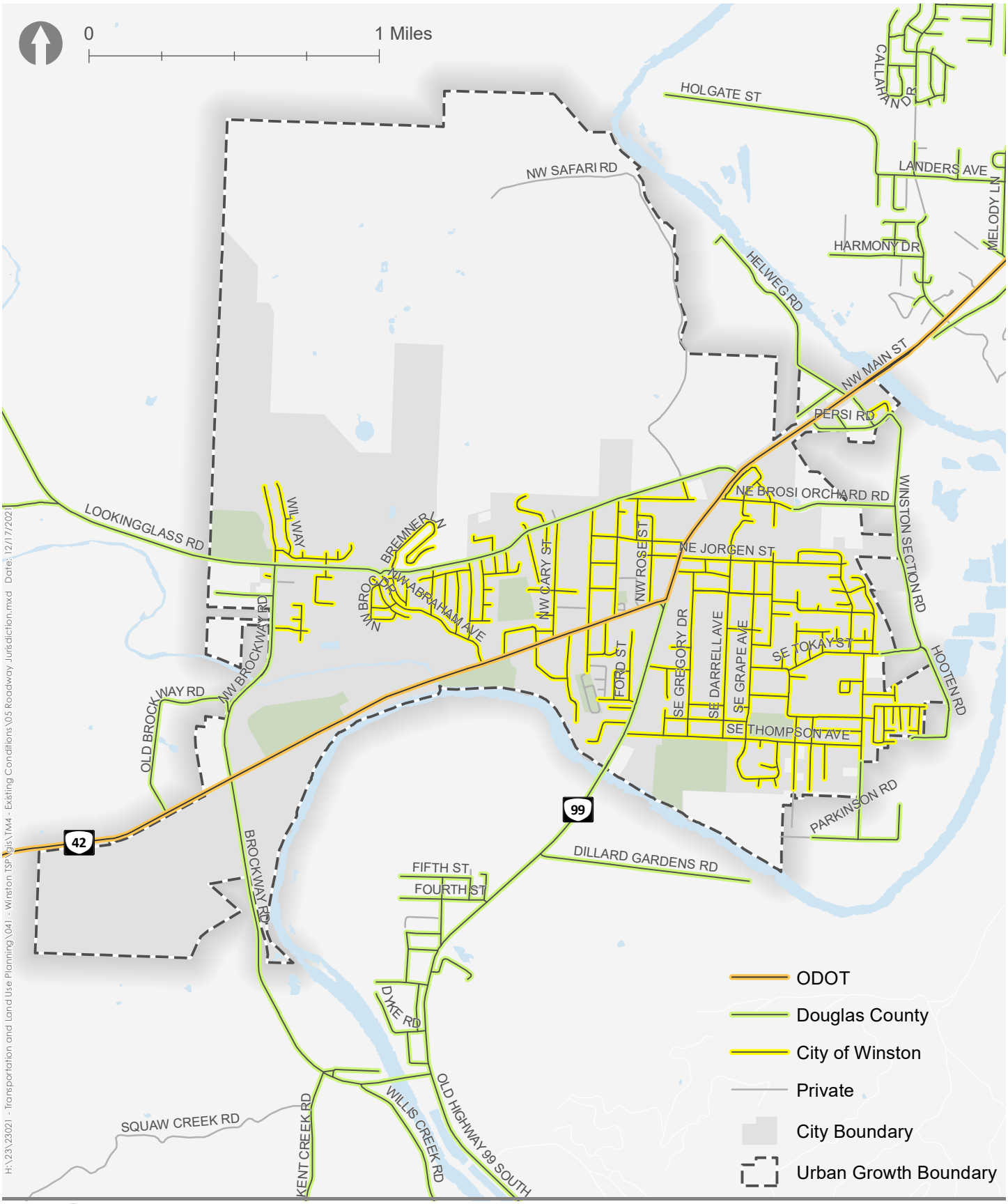


Figure 5

Roadway Jurisdiction
Winston, Oregon

Functional Classification

Roadway functional classifications organize the transportation system into a hierarchy of mobility and access to, through, and between different land uses. This hierarchy for Winston includes:

- **Arterials**: serve major centers of activity within the city, the highest traffic volume corridors, ; carry the major amount of traffic entering and leaving the urban area.
- **Major Collectors**: provide both land access service and traffic circulation between residential neighborhoods, commercial areas, and industrial areas.
- **Residential Collectors**: streets developed in certain residential areas that support enough traffic volume to be considered collectors; have a dual function of balancing livable streets with higher levels of traffic.
- **Residential Streets**: local streets that comprise all facilities not on the higher systems or local access ways; primarily provides direct access to abutting land and access to the collector and arterial street systems;.
- **Local Access Ways**: lowest order of roads in Winston; serve only private residences and are typically either narrower than required by City residential street standards.

Figure 6 illustrates the current street functional classifications within Winston. The existing street system is generally well connected in the areas east and west of the state highway but lacks continuous higher order east-west connections across the state highway between these areas.

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

Freight Routes

Like with many communities, freight is an important component to Winston's economy. OR 42 through the city is an OHP designated freight route that connects people to I-5, the Pacific Coast, and communities in between and beyond. OR 42 is also designated as a Reduction Review Route, which requires that ODOT consider load restriction and oversize-dimension load needs as part of planning, project development, development review, and maintenance. According to ODOT Over-Dimension Operations Route Maps, OR 42 currently has no movement restrictions within the project study area.

Based on the Annual Average Daily Traffic (AADT) report on ODOT's TransGIS online tool, trucks account for approximately seven percent of OR 42 traffic east of Glenhart Avenue and 10 percent to the west. Freight is also transported on Main Street to access businesses along this commercial corridor. Freight drivers commonly use the center turn lane on these facilities as temporary loading zones, resulting in potential conflicts when they have to cross vehicular traffic on foot to make their deliveries.

Figure 6

Functional Classification
Winston, Oregon

Roadway Improvement Standards

Roadway improvement standards are tied to the roadway functional classification hierarchy so that the way the transportation system looks, feels, and operates is consistent across street classes. The roadway improvement standards proposed for City streets in the current TSP are summarized in Table 3. County facilities within the UGB are also subject to these standards. Potential modifications to the City's street standards will be reviewed as part of the solutions analysis for the TSP Update.

Table 3: City Street Standards

Functional Classification	Right-of-Way	Sidewalks	Curb and Gutter	Bike Lanes	Travel Lanes	Center Turn Lane	On-Street Parking
Arterials	90'	6'	2'	6'	Four 12'	14'	N/A
	76'	6'	2'	6'	Four 12'	N/A	N/A
	66'	6'	2'	6'	Two 12'	14'	N/A
Major Collectors	68'	6'	2'	6'	Two 12'	N/A	8'
	56'	6'	2'	N/A	Two 12'	N/A	8'
	52'	6'	2'	6'	Two 12'	N/A	N/A
	44'	6'	2'	N/A	Two 14'	N/A	N/A
Residential Collectors	64'	6'	2'	6'	Two 10'	N/A	8'
	52'	6'	2'	N/A	Two 10'	N/A	8'
	48'	6'	2'	6'	Two 10'	N/A	N/A
	36'	6'	2'	N/A	Two 10'	N/A	N/A
Residential Streets	52'	6'	2'	N/A	Two 10'	N/A	8'
	36'	6'	2'	N/A	Two 10'	N/A	N/A
Local Access Ways	30'	6' (One Side)	2'	N/A	Two 10'	N/A	N/A

As a State facility, OR 42 is subject to state cross section standards described in the Highway Design Manual (HDM). Within the UGB, the cross-section elements considered in future OR 42 roadway improvements are summarized in Table 4 based on posted speed and urban context. 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.

The following sections describe the current roadway cross sections as compared to the standards in Table 3 and Table 4.

Table 4: HDM Standards for OR 42

Posted Speed	Travel Lanes	Right Side Shoulder/ Bike Lane	Median				Bicycle Facility	Curbside or Separated Sidewalk	On-Street Parking
			Concrete Barrier	Striped (Multi-Lane)	Continuous Left Turn Lane	Raised Curb Median			
55 MPH[1]	12'	8'	10' (4 lane) 18' (6 lane)	10'	N/A	20'	Undesignated, Shoulder Designated, Separated Path or Parallel Streets	6' (separated)	N/A
45 MPH[1]	12'	8'	10' (4 lane) 18' (6 lane)	10'	N/A	18'		8' / 6'	N/A
55 MPH[2]	12'	8'	8'	4'	14'	19'	Bike Lanes, Buffered Bike Lanes, or Separated Pathway	6'	N/A
45 MPH[2]	12'	6'	N/A	2'	14'	16'		6'	N/A
45 MPH[3]	12'	6'	N/A	2'	14'	16'	6'	6'	N/A
30 MPH[3]	12'	6'	N/A	2'	14'	15'	6'	6'	N/A

[1]HDM Table 6-1: Urban Expressways
[2]HDM Table 6-4: Urban Fringe/Suburban Area
[3]HDM Table 6-3: Urban Business Area

ROADWAY CHARACTERISTICS

The following sections provide a general inventory of roadway characteristics for existing arterial and collector streets, including general use, posted speed limits, pavement types and conditions, Intelligent Transportation Systems (ITS) infrastructure, and other key roadway elements. Over time, the City and ODOT will modify existing substandard streets to reflect City and ODOT specifications and guidance in the Blueprint for Urban Design.

City and County Streets

As described previously, both Winston and Douglas County own and maintain the collector street network within the community. Winston owns and operates the local street system within city limits with the exception of private roads. Although separately owned, City and County streets within city limits are subject to City street standards. Per agreements between the City and County, County streets inside the UGB but outside of city limits are subject to County roadway standards.

City and County streets within the project study area are generally two-lane paved roadways, except for sections of Brockway Road and OR 99/Main Street/County Road 387:

- Brockway Road, south of OR 42, has a southbound passing lane section reaching the project limits, and;
- OR 99/Main Street/County Road 387 is generally a five-lane roadway, with a continuous center turn lane through the city.

The current TSP reports that these streets have "fair" to "good" pavement conditions, except for Winston Section Road, which was rated as "poor." Current pavement conditions are not available.

Many of the streets are not built to the standards summarized in Table 3, lacking sidewalks, curb and gutter, and/or bike lanes, and in some cases, centerline or edge line striping. Enhanced crossings are provided on OR 99/Main Street/County Road 387 at Hart Avenue and across from the Winston Fire Department. On-street parking is clearly marked along certain collectors, including Cary Street, NW Glenhart Avenue, Jorgen Street, and Thompson Avenue. Many roads have wide pavement widths, including undesignated shoulder space that can be used for on-street parking or serve as an undesignated biking facility.

Most streets are posted at 25 miles per hour (MPH), except for Lookingglass Road, OR 99/Main Street/County Road 387, and Brockway Road, which range from 30 to 45 MPH. Where speed limits are not posted, it is assumed streets operate at 25 MPH. Exceptions include school zones that are posted at 20 MPH. Speeding in residential areas has been identified as an issue due to cut-through traffic.

State Highway

OR 42 is a paved highway with a two- to five-lane cross section that ranges from 30 to 55 MPH through Winston, as shown in Figure 7. As noted previously, OR 42 is designated as a Statewide Highway within the OHP, including an Expressway designation east of Lookingglass Road.

The highway has a continuous left-turn lane from Abraham Avenue to Pepsi Road. This type of median treatment is consistent with the standards detailed in Table 4 above for the section of OR 42 that is not designated as an Expressway. Concrete barriers, median striping, and raised curb medians are more appropriate for the Expressway designated section, as shown in Table 4.

As Figure 8 illustrates, the highway's pavement condition drops from a "good" rating in the western project limits to a "poor" rating near Abraham Avenue and eastward.

Separated and partially separated pathways are provided on the north side of the highway from Douglas High School to Abraham Avenue and from Lookingglass Road to the eastern project limits; no marked crossings are present in these areas. Dedicated eight-foot paved shoulders are present on OR 42 west of Douglas High School. Sidewalks and bike lanes are provided through the city between Abraham Avenue and Lookingglass, including enhanced crossings near Cary Street, Civil Bend Avenue, Rose Avenue, and Baker Street.

Although it provides an important mobility function for motorists and freight, the state highway can present a barrier to non-motorized transportation modes within the city, especially in areas of higher posted speeds.

The OR 42 / Main Street (OR 99) traffic signal contains ITS equipment. No other ITS infrastructure was identified along OR 42 in the project study area.

Access Management and Spacing

Providing adequate access to streets, land uses, and key destinations is a critical element of operating and planning an effective transportation system for all users. ODOT 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.

Figure 7

Posted Speeds
Winston, Oregon

Figure 8

OR 42 Pavement Condition
Winston, Oregon

LOCAL

The City does not have established access management spacing standards for its streets. Therefore, the solutions analysis will review the need for developing local standards as part of the TSP Update.

STATE

ODOT establishes access management spacing standards in the OHP and Oregon Administrative Rule (OAR) 734-051-4020(8). Those standards applicable to OR 42 within Winston are summarized in Table 5. These standards are based on AADT, posted speed limit, and street functional classification.

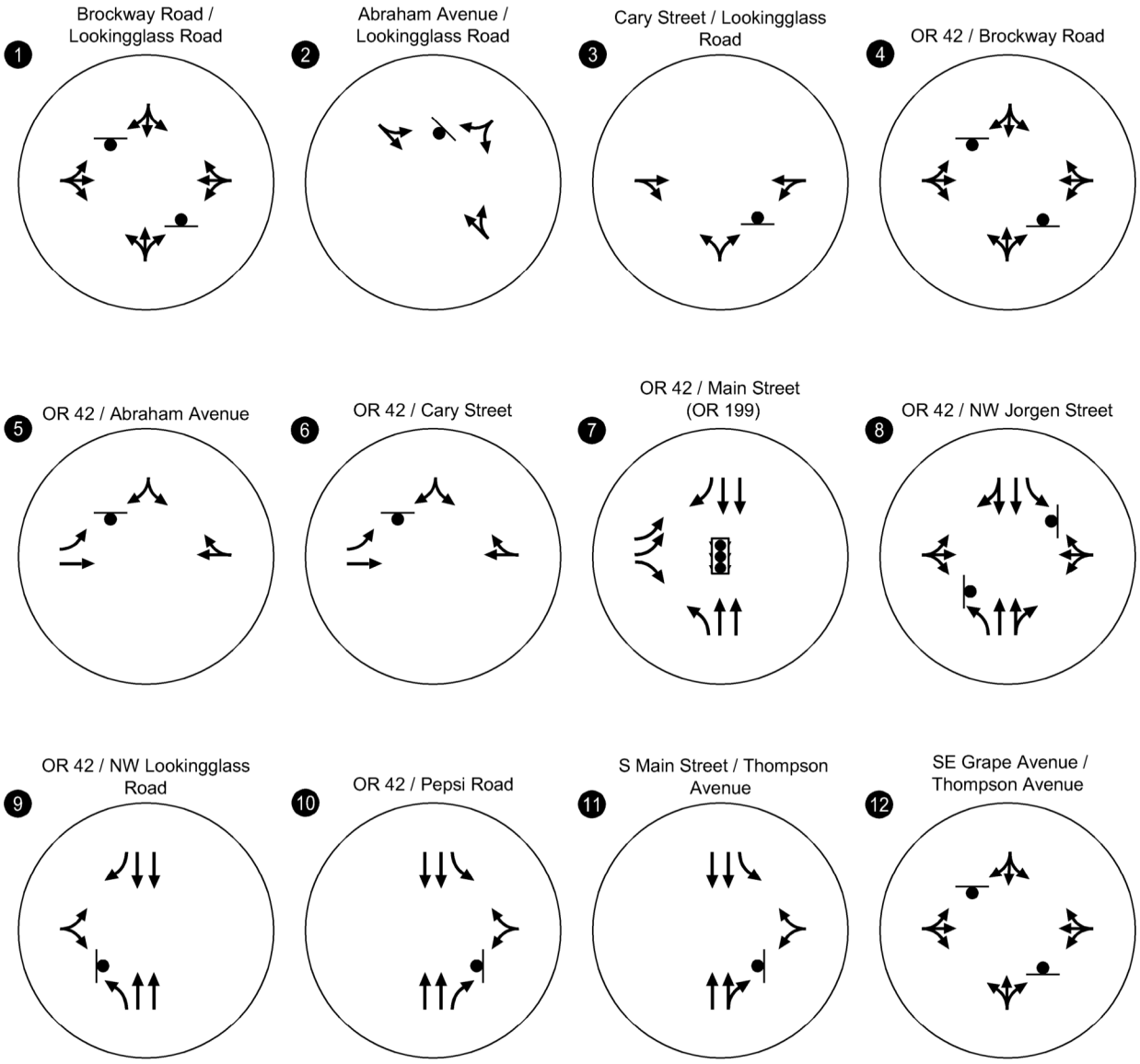
Table 5: ODOT Statewide Highway Access Management Spacing Standards for OR 42

Posted Speed (MPH)	Extents	Access Spacing Standard (Feet)
55	UGB to east of Brockway Rd	1,320
	East of Lookingglass Rd to UGB	2,640
45	Brockway Rd to west of Abraham Ave	800
	West of Brosi Orchard Rd to East of Lookingglass Rd	
30	West of Abraham Ave to west of Brosi Orchard Rd	500

OR 42 generally does not meet the identified access spacing standards through the city due to the existing built environment and the high number of access locations. The City and ODOT will coordinate through the TSP process to identify appropriate policies and outcomes to improve safety and mobility for all users along the OR 42 corridor. Outcomes could include policy recommendations, need for further study, or projects to address existing deficiencies.

Study Intersection Characteristics

As described in Technical Memorandum #3 (Analysis Methodology), the Winston TSP project study area includes the 12 study intersections identified in Figure 1. All study intersections are stop-controlled except for OR 42 / Main Street (OR 99), which is signalized. This is currently the only traffic signal within Winston. Seven of the intersections are under ODOT jurisdiction and the remaining five are locally owned and maintained. Figure 9 illustrates the existing lane configurations and traffic control devices of the study intersections.



- Stop Sign
- Signal

Existing Lane Configurations and Traffic Control Devices
Winston, OR

Figure 9

Bridges

Bridges are a critical element in the transportation system for continuous conveyance of multimodal traffic across barriers in the street network, such as rivers, streams, ditches, etc. The existing transportation system inventory included a review of current bridge locations and conditions (e.g., weight restrictions, sufficiency ratings, structural deficiency, functional obsolescence, etc.). Figure 10 shows the locations of the five bridges within the project study area and their key characteristics are summarized in Table 6.

All bridges are on the National Bridge Inventory System (NBIS), except for the ODOT bridge on OR 42 that crosses the South Umpqua River overflow west of Pepsi Road. No bridges are posted for weight restrictions, but these bridges are identified for reviewing Special Haul Vehicle (SHV) loads:

- OR 42 over Lower Lookingglass Creek
- Brockway Road over Lookingglass Creek

SHVs are closely spaced multi-axle single unit trucks that comply with Federal Bridge Formula B weights and are considered legal but result in higher loads concentrated over shorter distances (e.g., dump trucks, construction vehicles, etc.). These bridges should be reviewed based on applicable federal and ODOT standards.

According to ODOT's 2020 Bridge Condition Report, all new load ratings consider SHVs and emergency vehicles. Emergency vehicles are defined in the Fixing America's Surface Transportation (FAST) Act as vehicles typically operated by fire departments for firefighting but are also used for responding to other hazardous situations in an emergency.

Further, these bridges are identified as Scour Critical bridges:

- OR 42 over the South Umpqua River overflow
- OR 42 over Lower Lookingglass Creek
- Lookingglass road over Applegate Creek
- Brockway Road over Lookingglass Creek

Bridge inspectors rate bridges based on multiple criteria and assign them with scores referred to as a 'sufficiency ratings.' A 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 being 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 allowable maximum vehicle weight, rehabilitated, or replaced, depending on the reason for the low score.

A bridge with a sufficiency rating below 50 indicates that the bridge is in poor condition and is eligible for replacement. 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 and are not eligible for federal funding. As shown in Table 6, the most recent bridge inspection reports provided by ODOT show the following sufficiency ratings:

- Two bridges have sufficiency ratings above 80;
- Two bridges have sufficiency ratings between 50 and 80; and
- One bridge has a sufficiency rating below 50.

The OR 42 bridge over Lower Lookingglass Creek has a 45.1 sufficiency rating, deeming the bridge eligible for replacement.

Table 6: Bridge Characteristics

Bridge ID	Owner	Carries	Crosses	Milepost	Design/ Material	Sufficiency Rating
01986A	ODOT	OR 42	South Umpqua River Overflow	74.13	Concrete Slab	83.0
16256	ODOT	OR 42	South Umpqua River Overflow	74.07	Concrete Culver	83.0
00805C	ODOT	OR 42	Lower Lookingglass Creek	72.52	Concrete Tee Beam	45.1
19C199	City	Looking-glass Rd	Applegate Creek	N/A	Concrete Culvert	76.8
19C200	County	Brockway Rd	Lookingglass Creek	1.83	Steel Deck Truss	54.0

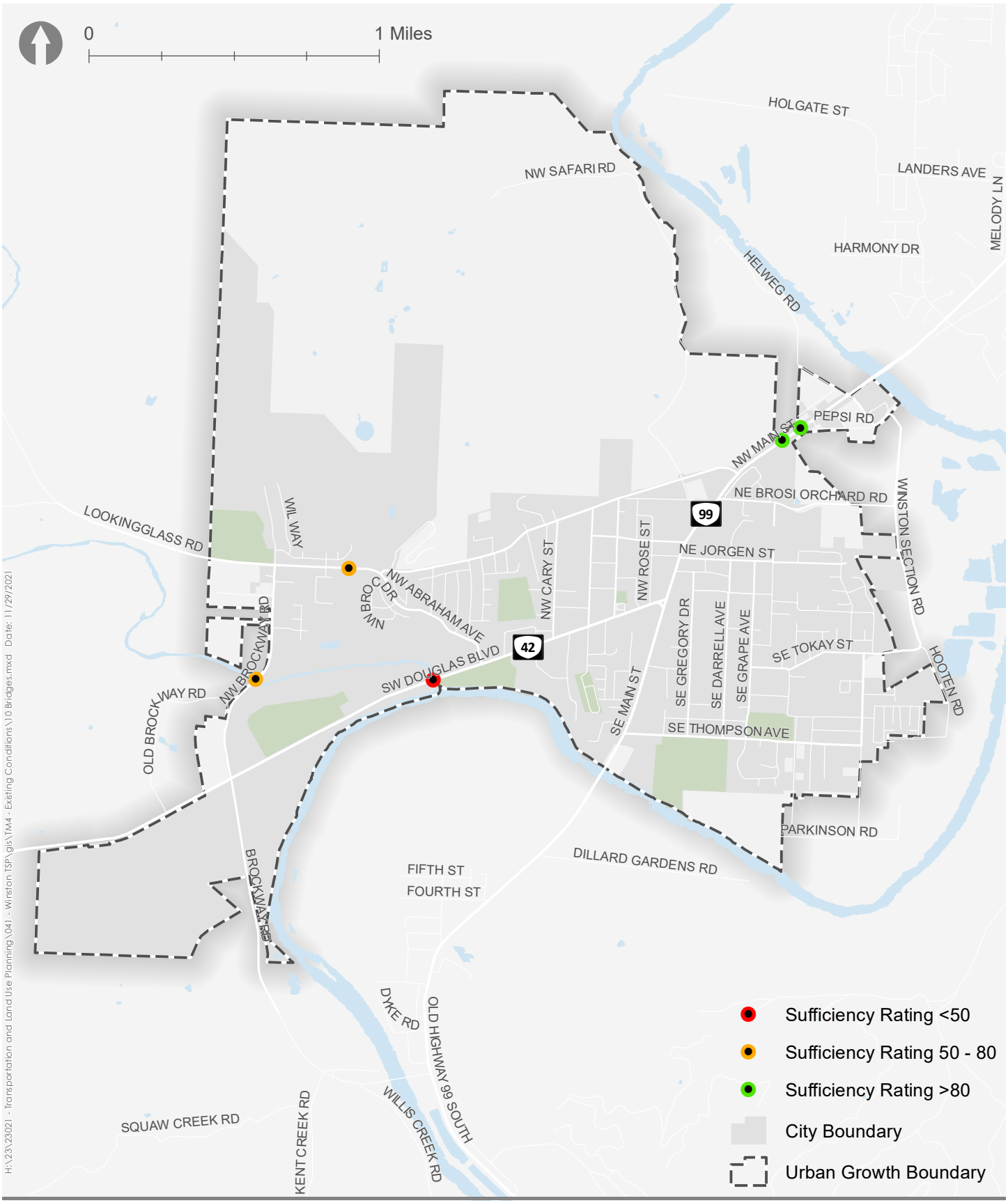


Figure 10

Bridges
Winston, Oregon

Public Transportation

Winston is served by two public transportation providers, Umpqua Public Transportation District (UPTD) – also known as UTrans – and Coos County Area Transportation District (CCAT). Both providers serve areas both inside and outside of Winston and throughout Douglas County. UPTD is in the process of updating its Transit Master Plan, with adoption anticipated in 2022. This section summarizes the existing system conditions specific to Winston that are described in ongoing master plan technical memorandum. The services and facilities described below are illustrated in Figure 11.

Services

UTrans operates two fixed routes in Winston – the Greyline and Route 99 – from 6:30AM to 7:30PM on weekdays and from 8:15AM to 6:30PM on Saturdays. Fares are $2.00 one-way, $5.00 for a day pass, and free for children aged 17 and under. A reduced fare of $1.00 one-way is available to passengers aged 60 or older, veterans, Medicare cardholders, and persons with a documented disability.

The Greyline runs between Winston and Roseburg and follows a loop route within the city along OR 42, Lookingglass Road, Abraham Avenue, Main Street, and a section of Thompson Avenue. The Route 99 line follows a loop between Roseburg and Canyonville, which includes OR 42 and Main Street on its route through Winston. Both routes connect to other UPTD lines that reach northern Douglas County and beyond to the City of Eugene.

UTrans also operates a demand-response service throughout Douglas County, referred to as Umpqua Rides. It is a door-to-door shared-ride service available to the general public; however, priority is given to older adults and people with disabilities. The service operates Mondays through Fridays and advance reservations are required. The service is free, but donations are accepted. Some trips outside of the county (e.g., to Cottage Grove) can be accommodated. UTrans served between 300 and 500+ rides in Winston per month from 2015 and 2020, except for during the first few months of the COVID-19 pandemic when rides dropped to about 100 to 200 per month.

The other public transportation provider, CCAT, operates the Roseburg Express between Coos Bay and Roseburg on Tuesday and Wednesdays with one round trip that includes a stop in Winston. The Roseburg Express connects to the Florence Express, which provides three round trips on weekdays (except for Wednesdays) between Coos Bay and Florence.

Facilities

A ½-mile walk shed around each bus stop along these routes in Winston captures most of the city's population, except for the very eastern edge and southwest corner where current housing and employment densities are lower. This indicates that most residents

within Winston can walk a reasonable distance to reach the bus stop nearest to them, especially people who may be transportation disadvantaged (see Table 2). Areas not within a reasonable walking distance of bus stops that may be considered underserve can be serviced by Umpqua Rides (demand-responsive) until the fixed-route network expands.

Limited amenities are provided at some bus stops, including signs. One stop, OR 42 near the OR 42/Main Street (OR 99) intersection, provides a shelter. As described in previous sections, while walking and biking facilities are available along public transportation service routes for accessing bus stops, many of the arterial and collector streets away from these routes within the bus stop walk sheds lack walking and biking facilities. The only formal park and ride facility is outside of Winston, in Myrtle Creek, and allows free parking at its 12 parking spaces. Informal park and rides may be available in Winston at local churches and businesses, but are not identified in this assessment.

Figure 11

Public Transportation
Winston, Oregon

Walking and Rolling Facilities

A combination of separated pathways, sidewalks, and enhanced crossings are provided along the state highway through the project study area; sidewalks and enhanced crossings are also available along Main Street. As noted previously, these facilities may require additional review and upgrades to meet current standards, including additional crossings and modifications to the roadway cross-section to meet applicable elements of ODOT's Blueprint for Urban Design.

Along the local system, many of the collector and local streets within the community currently lack facilities for people walking and rolling. Exceptions include sections of Lookingglass Road, Abraham Avenue, Thompson Avenue, Tokay Street, Glenhart Avenue, Grape Avenue, and Sherry Street where sidewalks are present along one or both sides of the street, as shown in aerial imagery. In general, most of the major activity centers identified in Figure 3 appear to be accessible by the existing sidewalk network. However, limited sidewalk inventory data makes a citywide assessment of overall network connectivity challenging.

The presence of walking and rolling facilities is an important element to a multimodal transportation system, but how they perform in their current environment is just as important. Pedestrian Level of Traffic Stress (PLTS) is a performance measure used to evaluate walking and rolling facilities and is covered in the Existing Transportation System Performance section of this memo.

Biking Facilities

A combination of separated pathways, enhanced crossings, wide shoulders, and striped bike lanes are provided along the state highway through Winston; bike lanes and enhanced crossings are also available along Main Street. Similar to walking and rolling facilities, the type and design of such facilities may require further evaluation to conform with current standards, including ODOT's Blueprint for Urban Design.

Like with walking and rolling facilities, many of the local collector and local streets currently lack dedicated biking facilities. Some exceptions include sections of Lookingglass Road, Grape Avenue, Gregory Drive, and Civil Bend Avenue where striped bike lanes are present on one or both sides of the street. Streets lacking dedicated biking facilities require that people biking share the road with people driving. Shared roadways are generally appropriate for streets posted at 25 MPH or lower, but higher-order streets with higher posted speeds likely need dedicated facilities.

Limited data of existing bike facilities makes a network wide evaluation challenging. Based on a high-level assessment, most of the major activity centers identified in Figure 3 seem to be accessible by bike. However, many existing facilities may need

enhancements depending on the type of activity center (e.g., elementary school) or many may need to be extended to reach activity centers on the outer edges of the project study area (e.g., wineries).

While the presence of biking facilities is important for creating a multimodal transportation system, how they perform in their current biking environment is just as important. Bicycle Level of Traffic Stress (BLTS) is a performance measure used to evaluate biking facilities and is covered in the Existing Transportation System Performance section of this memo.

Air Transportation

The Roseburg Regional Airport in Roseburg, Oregon is the closest airport to Winston, about less than 10 miles north of the project study area. This is a general aviation airport owned by the City of Roseburg offering traditional airport services and has a Fixed Base Operator present each day. Airport services include telephone, restrooms, full-service fuel, maintenance, rentals, and sales, along with flight instruction, pilot supplies, tours, self-service fueling station, and tie-downs for transit parking. A transit-parking fee is charged per day and can be paid on-site, $3.00 for a single and $5.00 for a twin. The airport also leases t-hangers, corporate/commercial hangars, and tie-downs.

The Rogue Valley International-Medford Airport located in Medford, Oregon approximately 90 miles southeast of Winston is the closest international airport. This public airport owned by Jackson County serves the Southern Oregon/Northern California region operating approximately 43,000 flights in 2019. Commercial air service is provided by five airlines with about 56 arriving and departing flights daily to San Francisco, Portland, Seattle, Los Angeles, Denver, Las Vegas, Salt Lake City, and San Diego (people needing to travel further than these destinations would have to utilize the Portland International Airport in Portland, Oregon). The Rogue Valley International-Medford Airport also serves general aviation traffic, including extensive corporate and business travel. The airport also includes services such as rental cars, ride share, public transportation, conference rooms, a restaurant, gift shop, and self-guided tours.

Both airports are currently most accessible by personal vehicles. While residents can reach each airport with the help of public transportation, this type of travel to the Rogue Valley International-Medford Airport could take a rider 12 or more hours and several transfers to multiple providers.

Pipelines

A natural gas transmission pipeline operated by Northwest Pipeline LLC is east of Winston's UGB and runs from Grants Pass to Eugene. The pipeline has an east-west connection to the Roseburg Forest Products particleboard plant in Dillard just south of

the project study area, which is operated by the plant. No known pipelines exist within Winston.

Rail Transportation

No rail transportation is present within the project study area. Nearby, Central Oregon & Pacific Railroad (CORP) is a 362-mile Class II railroad between Black Butte, California and Springfield, Oregon that runs just east of Winston along the South Umpqua River. The railroad serves approximately 17,000 cars per year carrying primarily logs, lumber products, and plywood. It has interchanges with Flat Iron Rail in Montague, California, Rogue Valley Terminal Railroad in White City, Oregon, and Union Pacific in Eugene, Oregon and Black Butte, California. This railroad is an integral part of the Dillard Mill and Roseburg Forest Products in Dillard just south of Winston.

Existing Transportation System Performance

The existing transportation system performance is an evaluation of the traffic operations and crash history at the study intersections as well as the performance and safety risk of multimodal facilities along arterial and collector streets within the project study area. This evaluation creates a foundation for assessing possible solutions to any identified capacity or safety issues.

Traffic Operations

Existing peak period traffic operations were evaluated at the 12 study intersections shown in Figure 1. See Figure 9 for their lane configurations and traffic control devices.

Traffic Counts

Traffic counts were conducted at 10 of the 12 study intersections in September and October 2021 on a typical weekday over either a 4-hour (2:00 to 6:00 PM) or 16-hour (6:00 AM to 10:00 PM) period. ODOT provided historical traffic counts at the remaining two study intersections, which were collected in 2017 and 2019, respectively. All counts included the total number of pedestrians, bicyclists, and motor vehicles that entered the intersections in 15-minute intervals. *Attachment A contains the traffic count worksheets*.

Analysis Methodology and Performance Standards

All traffic operations analyses described in the following sections are in conformance with State, County, and City standard methodologies and guidelines. The study intersections were analyzed during the "30th highest hour," which generally corresponds

to the August PM peak hour. Applicable volume-to-capacity ratio (v/c) thresholds summarized in

Table 7 were compared with the operational results described in the following section. *More details on the analysis methodology can be found in Technical Memorandum #3 (Analysis Methodology), included in Attachment B.*[1]

Table 7: Study Intersection V/C Thresholds

ID	Intersection	V/C Threshold[1, 2]
1	Lookingglass Rd / Brockway Rd	0.90 / 1.00
2	Lookingglass Rd / Abraham Ave	
3	Lookingglass Rd / Cary St	
4	OR 42 / Brockway Rd	0.80 / 0.90
5	OR 42 / Abraham Ave	0.85 / 0.95
6	OR 42 / Cary St	0.85 / 0.95
7	OR 42 / Main St (OR 99)	0.85 / 0.95
8	OR 42 / NW Jorgen St	0.85 / 0.95
9	OR 42 NW Lookingglass Rd	0.80 / 0.90
10	OR 42 / Pepsi Rd	0.80 / 0.95
11	S Main St / Thompson Ave	0.85 / 1.00
12	SE Grape Ave / Thompson Ave	1.00

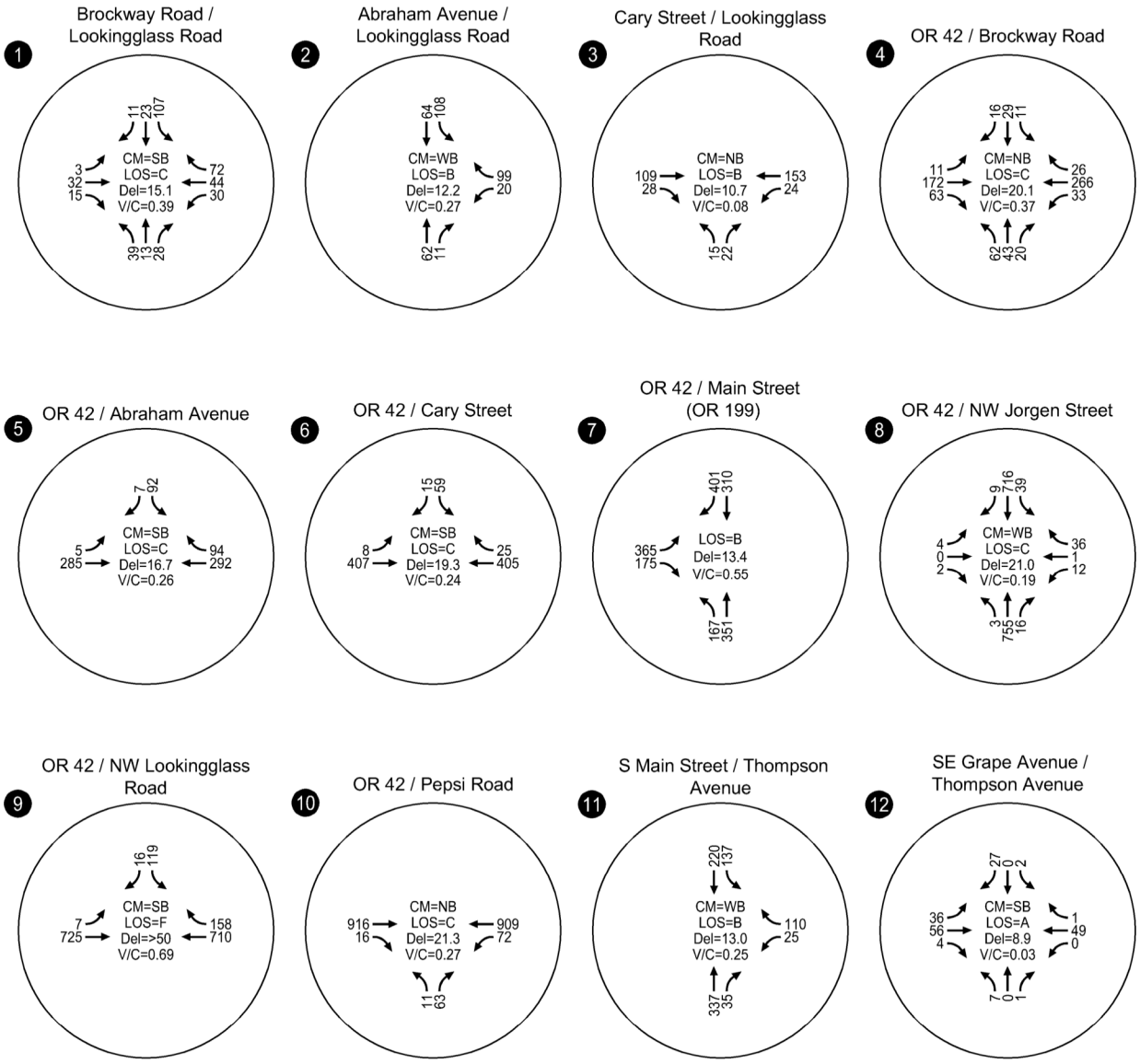
[1]Intersections #1-3 and 11: County threshold / City threshold (Note: Brockway Road south of Lookingglass Road is a County facility and is a City facility north of Brockway Road – the appropriate v/c threshold applies).
[2]Intersections #4-10: State Highway threshold / side-street threshold

Traffic Operations Analysis

The traffic operations analysis helps to identify study intersections that exceed their v/c thresholds today. The analysis used Vistro software and its Highway Capacity Manual (HCM) 6th Edition reports to summarize the intersection traffic operations as well as 95th percentile queues. Figure 12 summarizes the existing traffic volumes at the study intersections and the resultant traffic operations. The v/c's are reported for the critical movement at unsignalized intersections and for the overall intersection at signalized intersections.

[1]Note that this memo shows different v/c thresholds for intersection #1-3 and 11 due to updated information on roadway jurisdiction since developing the analysis methodology.

Table 8 summarizes the 95th percentile queues. As shown, all study intersections currently meet their v/c thresholds and all available vehicle storage is adequate to serve the current traffic volume queues. Notably, users of the OR 42/Lookingglass Road intersection experience high delays when turning from the side-street onto the state highway, but the intersection still operates within the applicable v/c target. *Attachment C contains the existing traffic operations worksheets.*



CM - CRITICAL MOVEMENT (UNSIGNALIZED)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

Existing Traffic Conditions
Weekday PM Peak Hour
Winston, OR

Figure 12

Table 8: 95th Percentile Queuing

ID	Intersection	Movement[1]	Storage Length (Feet)[2]	95th Percentile Queue (Feet)[3]	Adequate?
1	Brockway Rd / Lookingglass Rd	NBLTR	160	25	Yes
		SBLTR	215	50	Yes
2	Abraham Ave / Lookingglass Rd	WBLR	150	50	Yes
3	Cary St / Lookingglass Rd	NBLR	100	25	Yes
4	OR 42 / Brockway Rd	NBLTR	170	50	Yes
		SBLTR	1,110	25	Yes
5	OR 42 / Abraham Ave	SBLR	490	50	Yes
		EBL	100	25	Yes
6	OR 42 / Cary St	SBLR	90	25	Yes
		EBL	75	25	Yes
7	OR 42 / Main St (OR 99)	NBL	125	125	Yes
		SBR	220	100	Yes
		EBL	150	100	Yes
8	OR 42 / NW Jorgen St	NBL	80	25	Yes
		SBL	80	25	Yes
		EBLTR	25	25	Yes
		WBLTR	50	25	Yes
9	OR 42 NW Lookingglass Rd	SBLR	1,000	125	Yes
		EBL	170	25	Yes
		WBR	190	<25	Yes
10	OR 42 / Pepsi Rd	NBLR	200	50	Yes
		EBR	140	<25	Yes
		WBL	270	25	Yes
11	S Main St / Thompson Ave	WBLR	40	25	Yes
		SBL	120	25	Yes
12	SE Grape Ave / Thompson Ave	NBLTR	50	25	Yes
		SBLTR	50	25	Yes

[1]NB = northbound; SB = southbound; EB = eastbound; WB = westbound; L = left; T = through; 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 queues were rounded to the nearest 25 feet

Crash History

The project study area's crash history was reviewed to identify any potential safety focus locations to be considered as part of future solutions analyses. This review evaluated potential crash patterns throughout Winston (e.g., collision type, crash severity), analyzed crash rates and crashes in excess at the study intersections, and identified any Safety Priority Index System (SPIS) sites in the project study area.

Crash Data

The crash analysis summarized in the following sections is based on the most recent available five years of reported crash data (January 1, 2015 through December 31, 2019) obtained from ODOT's Crash Analysis and Reporting Unit. The data includes the location, type, and severity of all crashes that occurred along City, County, and ODOT facilities within the project study area.

Crash Patterns

A total of 145 crashes were reported within the Winston UGB between 2015 and 2019. Table 9 summarizes the reported crashes by severity. No fatalities were reported during the study period. Approximately 56 percent of all reported crashes resulted in injury and 80 percent of all reported crashes occurred along OR 42 and Main Street.

Table 9: Project Study Area Crash Severity (2015-2019)

	Fatality	Serious Injury (A)	Moderate Injury (B)	Minor Injury (C)	Property Damage Only (PDO)	Total
Number of Reported Crashes	0	8	24	49	64	145
Percentage of Total Crashes	0%	5%	17%	34%	44%	100%

Table 10 summarizes the collision types of the project study area crashes. Angle, rear-end, and turning movement crashes, typically associated with intersections, account for over 70 percent of reported crashes in the project study area.

Table 10: Project Study Area Collision Types (2015-2019)

Collision Type	Number of Reported Crashes	Percent of Total Crashes
Angle	16	11%
Bicycle	2	1%
Fixed-Object/Other Object	20	14%
Miscellaneous[1]	3	2%
Non-Collision[2]	2	1%
Pedestrian	3	2%
Rear-End	37	26%
Sideswipe (Meeting)	4	3%
Sideswipe (Overtaking)	8	5%
Turning Movement	50	35%
Total	**145**	**100%**

[1]Typically crashes with wildlife
[2]Typically overturned vehicles

Figure 13 illustrates the location of serious injury and pedestrian and bicycle crashes that were reported within the project study area. These crashes are described in the following sections.

SERIOUS INJURY CRASHES

Eight serious injury crashes were reported in the project study area between 2015 and 2019.

- Two crashes occurred at the OR 42/Brockway Road intersection:
    - The first took place at 4:00 PM on a Monday in June 2015 under clear, daylight conditions and on a dry roadway surface. This angle crash resulted from the driver not yielding the right-of-way. No speeding, drugs, or alcohol were reported as involved.
    - The second tool place at 6:00 PM on a Monday in November 2015 under cloudy, dark conditions (no street lights) and on a dry roadway surface. This turning movement crash resulted from the driver not yielding the right-of-way. No speeding, drugs, or alcohol were reported as involved.
- One crash occurred near the OR 42/Pepsi Road intersection at 10:00 PM on a Friday in November 2015 under cloudy, dark conditions (no street lights) and on a dry roadway surface. This turning movement crash resulted from the driver not yielding the right-of-way. No speeding, drugs, or alcohol were reported as involved.

- One crash occurred on OR 42 west of Rose Street at 6:00 PM on a Sunday in November 2018 under clear, dark conditions (with street lights) and on a dry roadway surface. This angle crash resulted from the driver not yielding the right-of-way. No speeding, drugs, or alcohol were reported as involved.
- One crash occurred near the OR 42/Baker Street intersection at 1:00 PM on a Sunday in June 2019 under clear, daylight conditions and on a dry roadway surface. This turning movement crash resulted from the driver not yielding the right-of-way. No speeding, drugs, or alcohol were reported as involved.
- One crash occurred on OR 42 in a school zone near Douglas High School at 1:00 PM on a Wednesday in December 2018 under cloudy, daylight conditions and on a dry roadway surface. This fixed-object crash resulted from the driver losing control of the vehicle, failing to maintain the lane, and running off the road. No speeding, drugs, or alcohol were reported as involved.
- One crash occurred near the OR 42/Helweg Road intersection at 5:00 AM on a Sunday in November 2019 under foggy, dark conditions (with street lights) and on a dry roadway surface. This fixed-object crash resulted from the driver losing control of the vehicle, failing to maintain the lane, and running off the road. No speeding, drugs, or alcohol were reported as involved.
- One crash occurred near the Lookingglass Road/Safari Road intersection at 12:00 PM on a Friday in April 2015 under clear, daylight conditions and on a dry roadway surface. This turning movement crash resulted from the driver making a left turn in front of oncoming traffic. No speeding, drugs, or alcohol were reported as involved.

PEDESTRIAN AND BICYCLE CRASHES

Five crashes involving people walking or biking were reported during the study period in the Winston UGB.

- Three pedestrian crashes occurred resulting various injury severities:
    - One crash took place near the OR 42/Baker Street intersection at 5:00 AM on a Monday in November 2015 under cloudy, dark conditions (with street lights) and on a dry roadway surface. The crash resulted from the driver not yielding the right-of-way to the pedestrian and careless driving. The pedestrian sustained minor injuries. No speeding, drugs, or alcohol were reported as involved.
    - One crash took place near the OR 42/Sherry Street intersection at 5:00 PM on a Sunday in December 2015 under rainy, dark conditions (with street lights) and on a wet roadway surface. The crash resulted from the pedestrian being in the roadway illegally and not wearing visible clothing. The pedestrian sustained minor injuries. No speeding, drugs, or alcohol were reported as involved.

  - One crash took place on Pepsi Road just east of OR 42 at 11:00 PM on a Wednesday in July 2016 under clear, dark conditions (no street lights) and on a dry roadway surface. The crash resulted from the pedestrian being in the roadway illegally and not wearing visible clothing as well as the driver using a cell phone. The pedestrian sustained moderate injuries. No speeding, drugs, or alcohol were reported as involved.

- Two bicyclist crashes occurred resulting in moderate injuries:
  - One crash took place on Grape Avenue near the entrance to the Winston Community Center at 1:00 PM on a Tuesday in August 2017 under clear, daylight conditions and on a dry roadway surface. This crash resulted from the cyclist riding through a stop sign while a vehicle was driving northbound through the intersection. No speeding, drugs, or alcohol were reported as involved.
  - One crash took place on OR 42 east of Civil Bend Avenue at 11:00 AM on a Tuesday in July 2018 under clear, daylight conditions and on a dry roadway surface. This crash resulted from the motorist not yielding the right-of-way to the cyclist as it turned off the highway. No speeding, drugs, or alcohol were reported as involved.

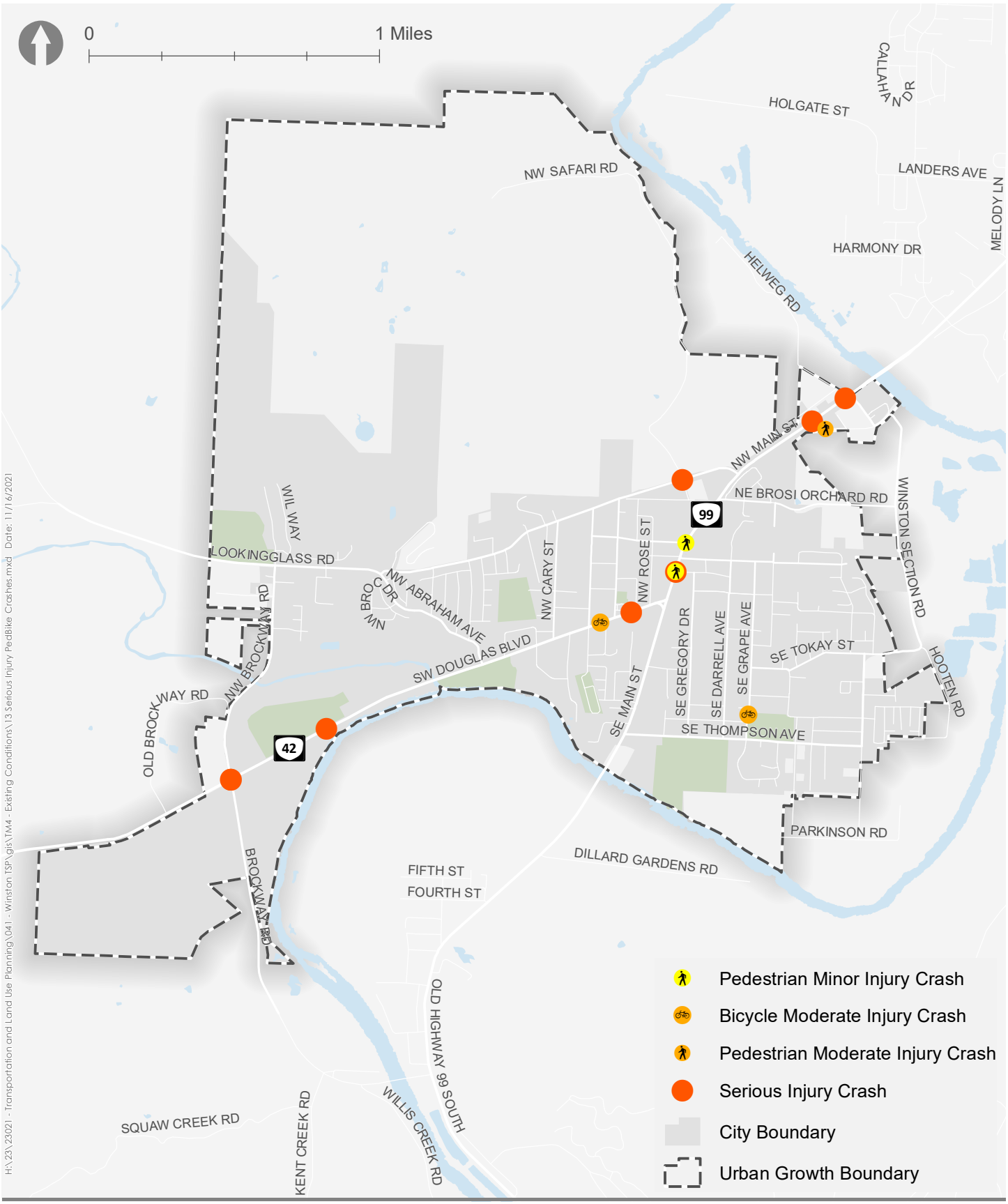


Figure 13

Serious Injury and Pedestrian and Bicycle Crashes (2015-2019)
Winston, Oregon

Intersection Safety Analysis

The state has identified several safety performance standards in assessing intersection safety. The intersection safety analysis evaluated crash rates against 90th percentile and critical crash rate statewide performance standards, per ODOT's Analysis Procedures Manual (APM), as well as crashes that may be occurring in excess at the study intersections. *Attachment D contains the crash data worksheets as well as the analysis worksheets.*

90TH PERCENTILE CRASH RATE

The 90th percentile crash rate performance standard is used to identify intersections exhibiting more crashes than expected based on traffic volume. Intersection crash rates are compared to the statewide 90th percentile crash rates for similar intersection types. Statewide 90th percentile crash rates were developed from a study of 500 intersections in Oregon and are organized by land type and traffic control. Table 11 compares the study intersection crash rates (calculated according to ODOT APM Chapter 4) with applicable statewide 90th percentile crash rates by intersection type.

Table 11: 90th Percentile Crash Rate Comparison

ID	Intersection	Total Crashes	Intersection Crash Rate[1]	90th Percentile Crash Rate[2]	Intersection Rate > 90th Rate?
1	Brockway Rd / Lookingglass Rd	1	0.13	0.41	No
2	Abraham Ave / Lookingglass Rd	1	0.15	0.29	No
3	Cary St / Lookingglass Rd	0	0.00	0.29	No
4	OR 42 / Brockway Rd	16	1.17	1.08	**Yes**
5	OR 42 / Abraham Ave	0	0.00	0.29	No
6	OR 42 / Cary St	0	0.00	0.29	No
7	OR 42 / Main St (OR 99)	12	0.37	0.51	No
8	OR 42 / NW Jorgen St	1	0.03	0.41	No
9	OR 42 NW Lookingglass Rd	7	0.22	0.29	No
10	OR 42 / Pepsi Rd	3	0.08	0.29	No
11	S Main St / Thompson Ave	2	0.13	0.29	No
12	SE Grape Ave / Thompson Ave	0	0.00	0.41	No

[1]ODOT APM Intersection Crash Rate per MEV equation; AADT determined using identified intersection peak hours
[2]ODOT APM Exhibit 4-1 for urban and rural intersections; urban rates were used for all intersections except for OR 42/Brockway Road

As shown, no crashes were reported at the intersections of Cary Street/Lookingglass Road, OR 42/Abraham Avenue, OR 42/Cary Street, or SE Grape Avenue/Thompson Avenue during the study period. Further, the OR 42/Brockway Road study intersection crash rate exceeds the applicable 90th percentile crash rate. The crashes reported at this study intersection included some of the following characteristics:

- 9 of 16 crashes (56%) resulted in some level of injury (no fatalities)
- 9 of 16 crashes (56%) were angle crashes
- 1 of 16 crashes (6%) involved speeding; no crashes (0%) involved drugs or alcohol
- 13 of 16 crashes (81%) occurred under clear, daylight conditions on dry roadway surfaces

CRITICAL CRASH RATE

Critical crash rates are also based on intersection type and volume, but are also determined based on sufficient reference populations. This method is only applicable where at least five to ten reference population sites are available for screening. Otherwise, the critical crash rate defaults to the 90th percentile crash rates outlined in Table 11. Critical crash rates were calculated using ODOT's Critical Crash Rate Calculator tool and compared to the study intersection crash rates, as shown in Table 12. Based on the results, the OR 42/Brockway Road and OR 42/Lookingglass Road study intersections exceed their critical crash rates.

The crashes reported at the OR 42/Lookingglass Road study intersection included some of the following characteristics:

- 6 of 7 crashes (86%) resulted in some level of injury (no fatalities)
- 7 of 7 crashes (100%) were angle crashes
- No crashes (0%) involved speeding, alcohol, or drugs
- 4 of 7 crashes (57%) occurred under rainy or cloudy conditions (3 of these crashes were on wet roadway surfaces); all 7 crashes happened during daylight

Table 12: Critical Crash Rate Comparison

ID	Intersection	Total Crashes	Intersection Crash Rate	Critical Crash Rate[1]	Intersection Rate > Critical Rate?
1	Brockway Rd / Lookingglass Rd	1	0.13	0.41	No
2	Abraham Ave / Lookingglass Rd	1	0.15	0.38	No
3	Cary St / Lookingglass Rd	0	0.00	0.39	No
4	OR 42 / Brockway Rd	16	1.17	1.08	**Yes**
5	OR 42 / Abraham Ave	0	0.00	0.28	No
6	OR 42 / Cary St	0	0.00	0.26	No
7	OR 42 / Main St (OR 99)	12	0.37	0.51	No
8	OR 42 / NW Jorgen St	1	0.03	0.41	No
9	OR 42 / NW Lookingglass Rd	7	0.22	0.21	**Yes**
10	OR 42 / Pepsi Rd	3	0.08	0.20	No
11	S Main St / Thompson Ave	2	0.13	0.27	No
12	SE Grape Ave / Thompson Ave	0	0.00	0.41	No

[1]Highlighted cells represent intersections that do not have sufficient reference population sites, therefore, the critical crash rate defaults to the 90th percentile crash rate in Table 11.

EXCESS PROPORTION

ODOT's Excess Proportions Calculator tool was used to identify study intersections with excess proportion of specific crash types. Specific intersection improvements to address these crashes in access will be evaluated as part of the solutions analysis. Table 13 summarizes the study intersections with a high probability (over 90 percent) that the expected proportion of certain crash types will be greater than the long-term expected proportion for that intersection type. The table also shows the "proportion of benefit," which is the likelihood that the site will benefit from a countermeasure targeted at the collision type under consideration.

Table 13: Intersections with Excess Proportion of Crashes

ID	Intersection	Intersection Type/Reference Population	Collision Type in Excess	Probability of Future Occurrence	Proportion of Benefit
9	OR 42/Lookingglass Rd	3ST	Turning Movement	0.99	0.31

Safety Priority Index System

ODOT's SPIS is a systemic scoring method that identifies potential safety problems on state highways. SPIS scores are based on three years of crash data and consider crash frequency, crash rate, and crash severity. A highway segment becomes a SPIS site if a location has three or more crashes – or one or more fatal crashes – over the three-year period. According to the 2019 SPIS report for Region 3, there are no SPIS sites within the project study area.

Multimodal Conditions

A review of multimodal conditions in the project study is presented in the following sections and included assessing traffic stress and safety risk for people walking, rolling, and biking within the current transportation system.

Level of Traffic Stress

ODOT's Level of Traffic Stress methodologies use four levels to describe and evaluate the stress that a person walking, rolling, or biking can experience on a roadway. These stresses range from one (little traffic stress) to four (high traffic stress) and depend on numerous characteristics of walking and biking facilities, as described in the following sections.

WALKING AND ROLLING FACILITIES

The Pedestrian Level of Traffic Stress (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 14 defines each PLTS rating. Per ODOT, PTLS 2 is generally considered reasonable for most adults and older children.

Due to limited inventory data, sidewalk conditions were assessed using available aerial imagery. Based on Exhibit 14-20 in ODOT's APM, sidewalks available in the project study area appear to be in primarily fair condition. These conditions were used for the PLTS evaluation. Figure 14 illustrates the results of the PLTS analysis for arterial and collector streets within the project study area.

Table 14: Pedestrian Level of Traffic Stress (PLTS) Definition

PLTS Rating	Definition of PLTS Segment, Suitability, and Condition
1	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 pedestrians and vehicular traffic.
2	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.
3	Represents moderate stress and is suitable for adults. An able-bodied adult would feel uncomfortable 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.
4	Represents high traffic stress. Only able-bodied adults with limited route choices would use this facility. Traffic speeds are moderate to high with narrow or no pedestrian facilities provided. Only the most confident users are willing to use this facility.

As shown, the following street segments have PLTS ratings of two or lower, meaning a facility is more comfortable for a person walking, on at least one side of the roadway:

- Abraham Avenue from Lookingglass Road to OR 42
- Thompson Avenue from Main Street to Edgewood Drive
- Tokay Street from Winston Road to the UGB
- Glenhart Avenue from Lookingglass Road to OR 42
- Grape Avenue from Hall Street to Thompson Avenue
- Sherry Street from OR 42 to Rose Avenue
- OR 42 from Douglas High School to Glenhart Avenue
- OR 42 from Lookingglass Road to the UGB

These low scores are primarily attributed to wider facilities with a buffer from vehicular traffic as well as lower posted speed limits.

Streets with higher PLTS scores either lack sidewalks or have sidewalks without a buffer between vehicular traffic.

Attachment E includes the PLTS analysis worksheet.

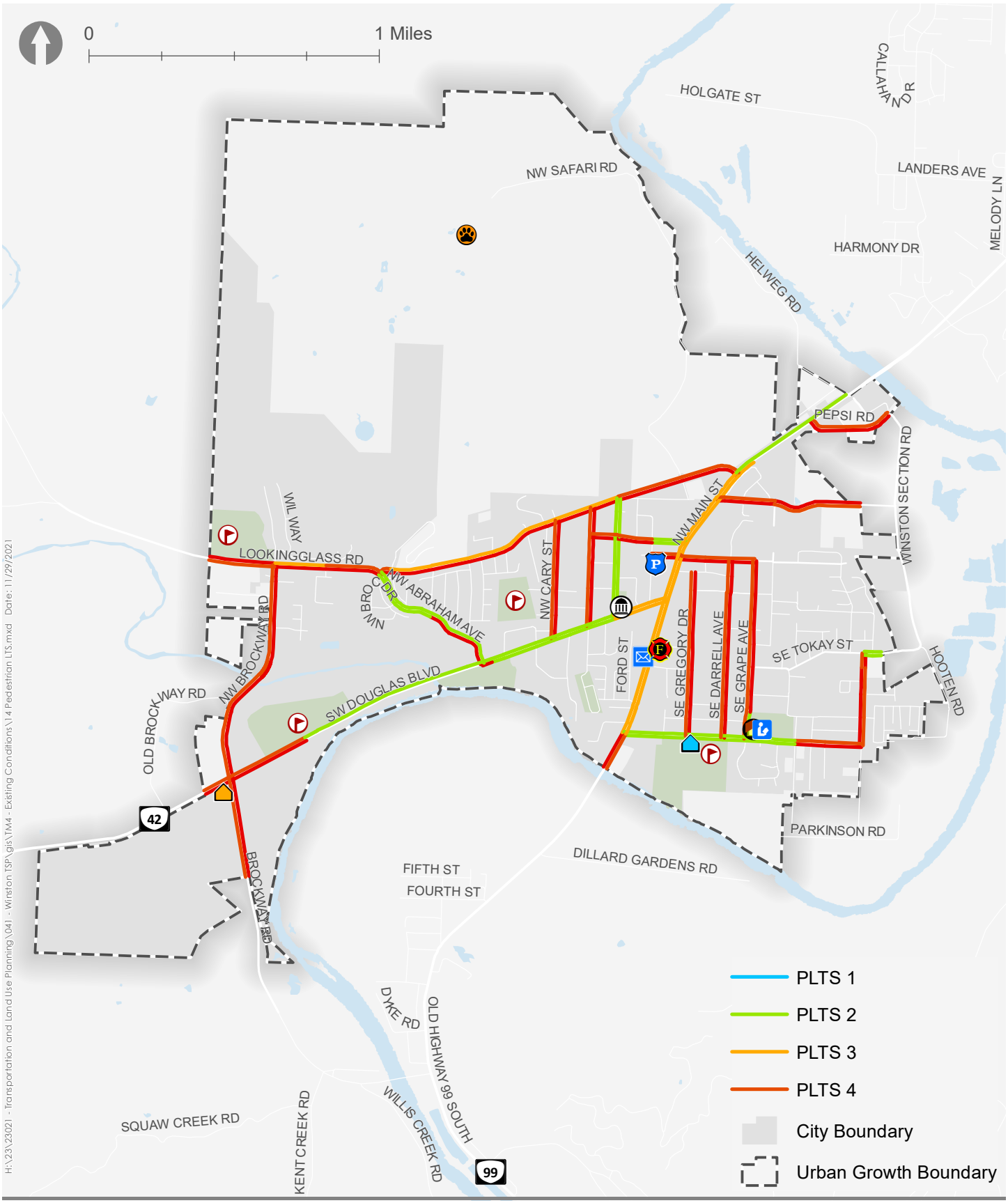


Figure 14

Pedestrian Level of Traffic Stress
Winston, Oregon

BIKING FACILITIES

The Bicycle Level of Traffic Stress (BLTS) score is determined based on vehicular speed, number of travel lanes per direction, and the presence and width of on-street bicycle facilities and/or adjacent parking lane. Table 15 defines each BLTS rating. Per ODOT, BLTS 2 is generally considered acceptable for most adults and older children.

Table 15: Bicycle Level of Traffic Stress (BLTS) Definition

BLTS Rating	Definition of BLTS Segment, Suitability, and Condition
1	Represents little to no traffic stress, suitable for all cyclists including children who are trained to safely cross intersections alone and children supervised by parents. Traffic speeds and volumes are low. Includes paths and lanes that are physically separated from motor vehicle traffic.
2	Represents little traffic stress but requires more attention than what young children can handle, so is suitable for teen and adult cyclists with bike handling skills. Traffic speeds and volumes are slightly higher than BLTS 1 streets, but speed differentials are still low.
3	Represents moderate stress and is suitable for most observant adult cyclists. Traffic speeds and volumes are moderate.
4	Represents high traffic stress and suitable for experienced and skilled cyclists. Traffic speeds and volumes are high.

Figure 15 illustrates the results of the BLTS analysis, which was only conducted for those arterials and collectors within the project study area where traffic volume data were available. As shown, many streets have BLTS scores of two or lower, meaning a facility is more comfortable for a person riding a bike, primarily due to the low posted speeds and low traffic volumes even without dedicated biking facilities. Conversely, most streets with BLTS scores higher than two are primarily attributed to higher traffic volumes and higher posted speeds, especially without dedicated biking facilities.

Attachment E includes the BLTS analysis worksheet.

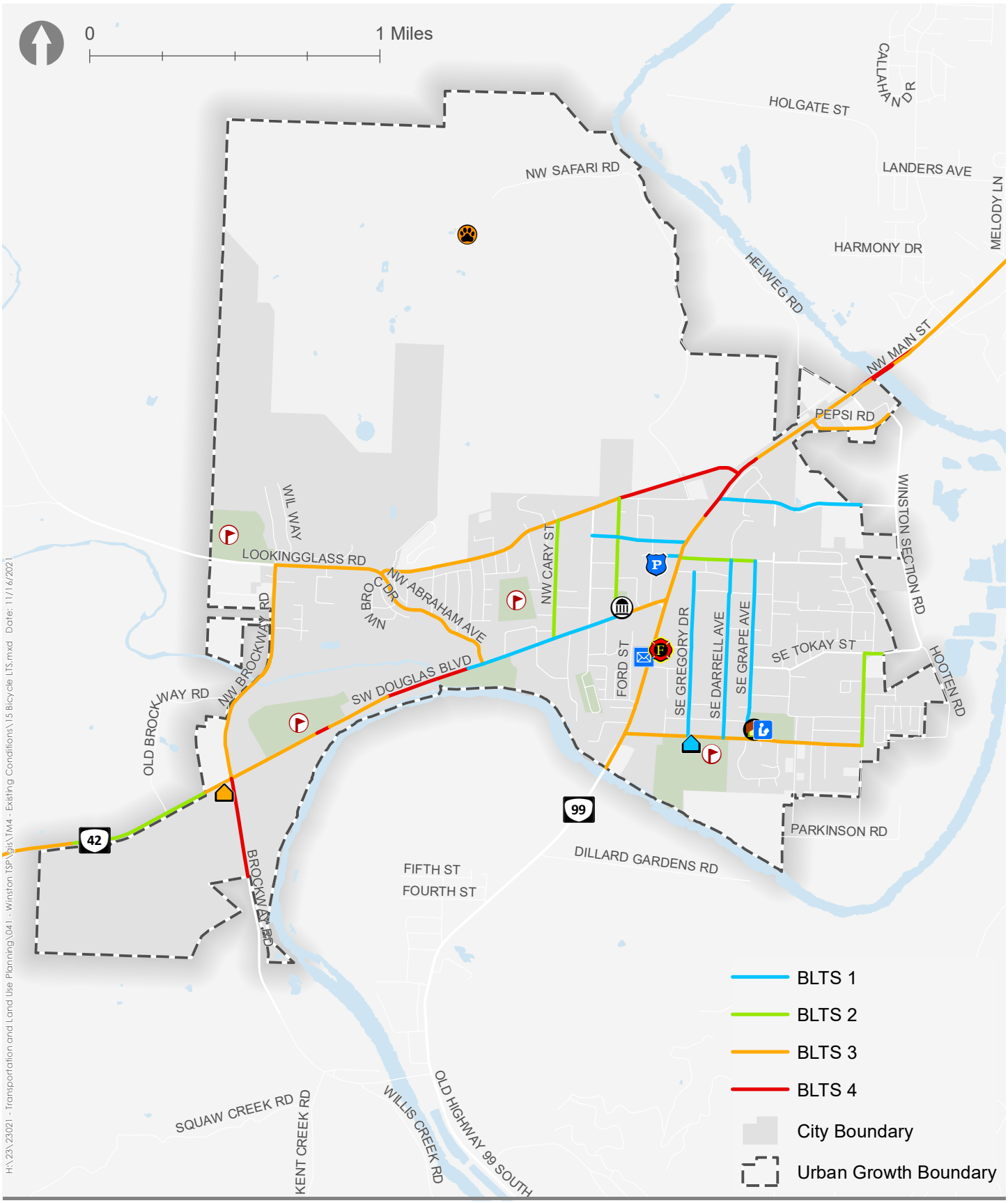


Figure 15

Bicycle Level of Traffic Stress
Winston, Oregon

Statewide Facility Safety Risk Assessment

The statewide bicycle and pedestrian safety risk assessment focuses on the safety of people walking, rolling, and biking along state highways (OR 42 within the project study area) and their risk of being involved in crashes. The State of Oregon has identified the following factors to assess safety risk of its highways:

- Roadway Classification
- Number of Lanes
- Access Density
- Presence of Sidewalks/Bike Lanes
- Posted Speed
- Zoning
- Proximity to Schools
- Proximity to Transit Stops
- Population over Age 64

Other characteristics not listed above that ODOT recommends should be investigated include high turning volumes at intersections, lack of lighting, and exposure to traffic volumes. Characteristics listed above were established through analyzing crash, traffic, infrastructure, land use, and demographic data across the State of Oregon. A weight is assigned to each factor based on its correlation to crash history: factors with higher weights have stronger correlations with severe crashes.

The application of risk factors was completed by ODOT on a statewide level, and therefore, highway segments are grouped to show how one segment might compare to others in Oregon. While these groupings highlight general safety needs along OR 42, they can also help with prioritizing improvements where safety risk may be higher in some OR 42 segments that in others.

Some of the state highway's characteristics that create the greatest safety risks to pedestrians include its four-lane sections, the areas where posted speeds are higher than 35 MPH, and locations with high access density. The four-lane sections and posted speeds over 35 MPH also serve as the greatest safety risk to bicyclists, as well as the highway's high-order functional classification.

Figure 16 and Figure 17 show the varying levels of safety risk for pedestrians and bicyclists in the project study area. Pedestrians experience the highest safety risk between Sherry Street and the eastern UGB limit, as well as in the vicinity of the Main Street traffic signal. For bicyclists, safety risk is relatively high throughout the OR 42 corridor in the project study area except for a short segment near the Abraham Avenue intersection.

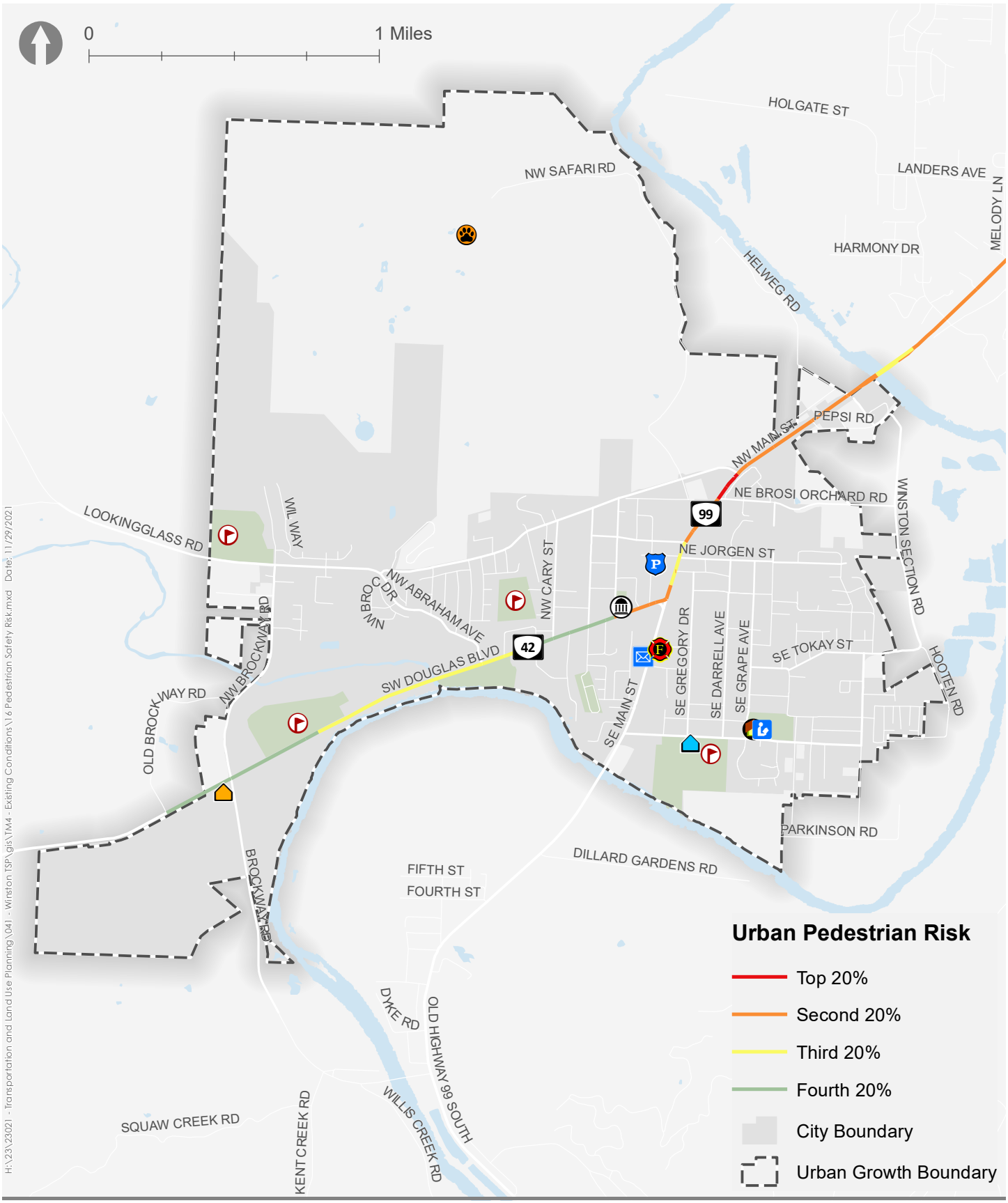


Figure 16

Pedestrian Safety Risk
Winston, Oregon

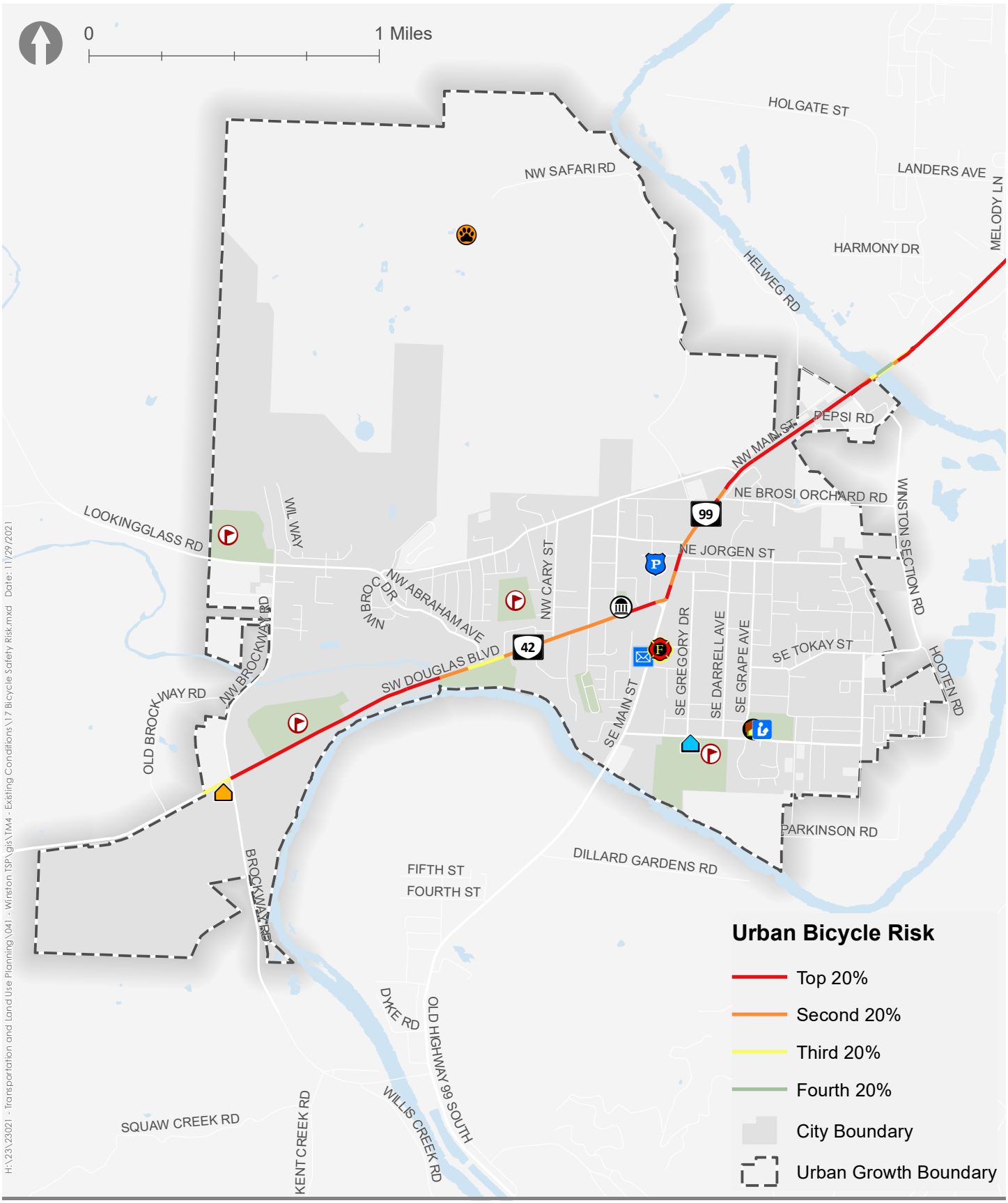


Figure 17

Bicycle Safety Risk
Winston, Oregon

References

1. Oregon Department of Transportation. Oregon Highway Plan, 2015.
2. Oregon Department of Transportation. Highway Design Manual, 2012.
3. Transportation Research Board. Highway Capacity Manual, 6th Edition, 2016.
4. Oregon Department of Transportation. Analysis Procedures Manual, 2018.
5. Oregon Department of Transportation. SPIS Brochure. 2009.

Attachment A: Traffic Count Worksheets

Summary of Traffic Count
Transportation Development Division

Site: 38422
County: Douglas
City:

Milepoint: 71.73
Count Number: 1.00

Date: 10/5/2017
Hours: 6:00 AM-10:00 PM
Highway #: 035
COOS BAY-ROSEBURG
Location: HIGHWAY NO. 35 at Brockway Rd
Weather: Clear

	Summary By Movements													Entering Volumes			
Time of Day	N-E	N-S	N-W	E-N	E-S	E-W	S-N	S-E	S-W	W-N	W-E	W-S	TOTAL	North	East	South	West
6:00	14	19	1	5	4	40	12	14	40	2	126	47	324	34	49	66	175
6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	11	3	1	5	5	25	4	12	10	2	40	4	122	15	35	26	46
7:15	5	2	2	8	2	27	3	5	10	0	42	8	114	9	37	18	50
7:30	0	7	0	2	3	16	3	7	14	3	42	7	104	7	21	24	52
7:45	3	3	2	2	5	25	10	6	9	2	37	9	113	8	32	25	48
8:00	2	14	5	0	3	26	9	5	6	7	41	15	133	21	29	20	63
8:15	3	2	3	3	5	28	2	2	5	2	45	8	108	8	36	9	55
8:30	1	2	0	2	1	21	1	3	13	5	49	11	109	3	24	17	65
8:45	5	2	0	2	3	25	8	5	12	1	37	18	118	7	30	25	56
9:00	7	16	8	13	5	118	8	10	40	4	175	39	443	31	136	58	218
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	6	19	4	17	12	111	5	15	48	5	179	57	478	29	140	68	241
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	14	8	3	15	24	149	14	9	54	3	183	51	527	25	188	77	237
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	9	13	6	11	14	167	11	17	43	7	159	50	507	28	192	71	216
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	11	14	4	16	20	158	12	23	45	2	194	31	530	29	194	80	227
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	11	22	8	15	30	206	21	27	49	8	187	62	646	41	251	97	257
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	1	4	3	9	11	67	14	5	13	3	33	16	179	8	87	32	52
15:15	6	7	6	6	5	48	9	5	18	3	43	16	172	19	59	32	62
15:30	1	9	3	5	7	47	7	4	15	3	39	10	150	13	59	26	52
15:45	2	7	3	4	7	64	9	4	11	1	31	16	159	12	75	24	48
16:00	3	2	3	9	3	64	8	5	11	0	40	12	160	8	76	24	52
16:15	3	1	3	6	5	60	6	6	13	2	38	7	150	7	71	25	47
16:30	1	6	0	2	5	49	6	6	8	1	49	9	142	7	56	20	59
16:45	2	4	3	1	3	62	4	2	8	0	62	15	166	9	66	14	77
17:00	11	16	13	14	21	251	16	9	47	4	142	48	592	40	286	72	194
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	9	18	6	13	20	219	13	16	32	4	146	29	525	33	252	61	179
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	5	4	6	8	14	135	7	8	33	3	85	27	335	15	157	48	115
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	1	4	5	4	9	89	7	1	22	4	67	15	228	10	102	30	86
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	7	4	4	3	61	2	2	24	3	49	18	177	11	68	28	70
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Count	147	235	105	201	249	2358	231	233	653	84	2360	655	7511	487	2808	1117	3099
24hr Factor	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
24hr Volume	162	259	116	222	274	2594	255	257	719	93	2596	721	8263	536	3089	1229	3409

Summary of Traffic Count
Transportation Development Division

Site: 49304
County: Douglas
City:
Milepoint: 73.88
Count Number: 1.00

Date: 7/29/2019
Hours: 6:00 AM-10:00 PM
Highway #: 035
Location: HIGHWAY NO. 35 (OR42) at NW Lookingglass Rd
Weather:

	Summary By Movements								Entering Volumes		
Time of Day	NE-SW	NE-NW	SW-NE	SW-NW	NW-NE	NW-SW		TOTAL	North-East	South-West	North-West
6:00	263	36	331	6	73	4		713	299	337	77
6:15	0	0	0	0	0	0		0	0	0	0
6:30	0	0	0	0	0	0		0	0	0	0
6:45	0	0	0	0	0	0		0	0	0	0
7:00	60	5	116	0	22	1		204	65	116	23
7:15	70	9	117	2	22	0		220	79	119	22
7:30	78	18	180	2	35	0		313	96	182	35
7:45	72	15	140	5	36	1		269	87	145	37
8:00	61	12	126	0	32	0		231	73	126	32
8:15	75	25	119	2	13	0		234	100	121	13
8:30	70	26	134	6	20	2		258	96	140	22
8:45	93	31	133	3	25	0		285	124	136	25
9:00	391	110	525	14	87	8		1135	501	539	95
9:15	0	0	0	0	0	0		0	0	0	0
9:30	0	0	0	0	0	0		0	0	0	0
9:45	0	0	0	0	0	0		0	0	0	0
10:00	432	129	532	13	87	5		1198	561	545	92
10:15	0	0	0	0	0	0		0	0	0	0
10:30	0	0	0	0	0	0		0	0	0	0
10:45	0	0	0	0	0	0		0	0	0	0
11:00	126	27	127	3	22	5		310	153	130	27
11:15	149	27	145	5	22	3		351	176	150	25
11:30	122	36	178	2	26	1		365	158	180	27
11:45	141	38	154	8	20	3		364	179	162	23
12:00	145	32	154	5	27	5		368	177	159	32
12:15	150	35	127	2	32	1		347	185	129	33
12:30	142	26	149	3	30	3		353	168	152	33
12:45	167	29	171	3	38	3		411	196	174	41
13:00	599	114	572	8	138	19		1450	713	580	157
13:15	0	0	0	0	0	0		0	0	0	0
13:30	0	0	0	0	0	0		0	0	0	0
13:45	0	0	0	0	0	0		0	0	0	0
14:00	160	28	156	2	30	4		380	188	158	34
14:15	157	35	141	4	27	3		367	192	145	30
14:30	174	38	144	1	28	4		389	212	145	32
14:45	150	35	131	3	28	4		351	185	134	32
15:00	176	33	157	2	26	1		395	209	159	27
15:15	174	37	149	3	31	6		400	211	152	37
15:30	164	37	200	0	22	2		425	201	200	24
15:45	159	44	181	2	35	6		427	203	183	41
16:00	179	40	141	4	41	4		409	219	145	45
16:15	149	31	138	0	41	5		364	180	138	46
16:30	172	38	148	2	23	3		386	210	150	26
16:45	191	47	152	3	27	7		427	238	155	34
17:00	178	33	155	1	32	1		400	211	156	33
17:15	219	48	137	1	39	7		451	267	138	46
17:30	190	34	98	1	23	3		349	224	99	26
17:45	120	38	105	4	22	7		296	158	109	29
18:00	484	118	358	2	82	9		1053	602	360	91
18:15	0	0	0	0	0	0		0	0	0	0
18:30	0	0	0	0	0	0		0	0	0	0
18:45	0	0	0	0	0	0		0	0	0	0
19:00	388	73	293	7	51	5		817	461	300	56
19:15	0	0	0	0	0	0		0	0	0	0
19:30	0	0	0	0	0	0		0	0	0	0
19:45	0	0	0	0	0	0		0	0	0	0
20:00	276	55	227	7	49	4		618	331	234	53
20:15	0	0	0	0	0	0		0	0	0	0
20:30	0	0	0	0	0	0		0	0	0	0
20:45	0	0	0	0	0	0		0	0	0	0
21:00	209	47	173	3	29	1		462	256	176	30
21:15	0	0	0	0	0	0		0	0	0	0
21:30	0	0	0	0	0	0		0	0	0	0
21:45	0	0	0	0	0	0		0	0	0	0
Total Count	7475	1669	7614	144	1493	150		18545	9144	7758	1643
24hr Factor	1.1	1.1	1.1	1.1	1.1	1.1		1.1	1.1	1.1	1.1
24hr Volume	8223	1836	8376	159	1643	165		20400	10059	8534	1808

Summary of Traffic Count
Transportation Development Division

Site: 49305 | Date: 7/31/2019
County: Douglas | Hours: 7:00 AM-7:00 PM
City: | Highway #: 035
COOS BAY-ROSEBURG
Milepoint: 74.19 | Location: HIGHWAY NO. 35
Count Number: 1.00 | Weather: Clear

	Summary By Movements								Entering Volumes		
Time of Day	NE-SE	NE-SW	SE-NE	SE-SW	SW-NE	SW-SE		TOTAL	North-East	South-East	South-West
7:00	2	63	15	1	141	0		222	65	16	141
7:15	6	97	13	0	132	1		249	103	13	133
7:30	2	91	18	2	213	2		328	93	20	215
7:45	7	102	18	2	177	0		306	109	20	177
8:00	5	82	12	3	160	1		263	87	15	161
8:15	0	91	16	0	151	1		259	91	16	152
8:30	6	113	10	2	164	1		296	119	12	165
8:45	6	125	13	0	137	3		284	131	13	140
9:00	22	490	53	7	642	8		1222	512	60	650
9:15	0	0	0	0	0	0		0	0	0	0
9:30	0	0	0	0	0	0		0	0	0	0
9:45	0	0	0	0	0	0		0	0	0	0
10:00	55	584	50	6	588	13		1296	639	56	601
10:15	0	0	0	0	0	0		0	0	0	0
10:30	0	0	0	0	0	0		0	0	0	0
10:45	0	0	0	0	0	0		0	0	0	0
11:00	12	166	10	1	164	0		353	178	11	164
11:15	13	154	19	2	179	2		369	167	21	181
11:30	19	150	17	3	162	3		354	169	20	165
11:45	12	167	14	5	174	4		376	179	19	178
12:00	12	198	17	1	159	5		392	210	18	164
12:15	19	200	15	1	156	4		395	219	16	160
12:30	17	178	14	4	198	2		413	195	18	200
12:45	20	189	17	2	210	5		443	209	19	215
13:00	60	691	69	9	687	13		1529	751	78	700
13:15	0	0	0	0	0	0		0	0	0	0
13:30	0	0	0	0	0	0		0	0	0	0
13:45	0	0	0	0	0	0		0	0	0	0
14:00	12	190	14	6	192	6		420	202	20	198
14:15	22	227	24	5	156	7		441	249	29	163
14:30	13	208	14	4	216	8		463	221	18	224
14:45	23	185	18	3	149	2		380	208	21	151
15:00	25	191	15	3	182	7		423	216	18	189
15:15	18	193	14	7	177	1		410	211	21	178
15:30	16	199	22	6	207	3		453	215	28	210
15:45	14	226	13	5	199	3		460	240	18	202
16:00	18	221	14	5	180	3		441	239	19	183
16:15	24	220	9	4	179	4		440	244	13	183
16:30	23	217	12	0	185	4		441	240	12	189
16:45	26	228	19	0	160	3		436	254	19	163
17:00	18	228	9	3	208	1		467	246	12	209
17:15	19	256	9	4	178	1		467	275	13	179
17:30	15	234	9	2	155	4		419	249	11	159
17:45	19	182	15	3	141	3		363	201	18	144
18:00	36	616	34	10	480	7		1183	652	44	487
18:15	0	0	0	0	0	0		0	0	0	0
18:30	0	0	0	0	0	0		0	0	0	0
18:45	0	0	0	0	0	0		0	0	0	0
Total Count	636	7952	674	121	7938	135		17456	8588	795	8073
24hr Factor	1.25	1.25	1.25	1.25	1.25	1.25		1.25	1.25	1.25	1.25
24hr Volume	795	9940	843	152	9923	169		21820	10735	994	10092

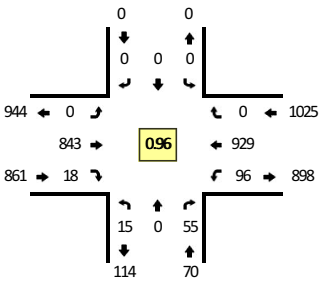
Type of peak hour being reported: Intersection Peak

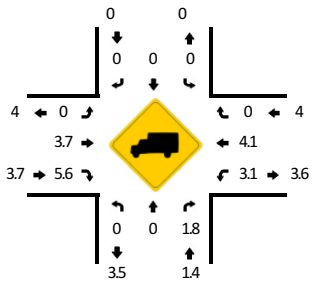
Method for determining peak hour: Total Entering Volume

LOCATION: Pepsi Rd -- OR 42
CITY/STATE: Winston, OR

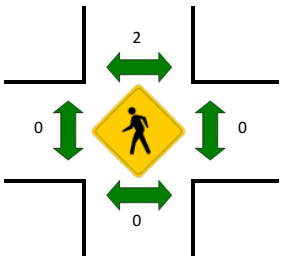
QC JOB #: 15385302
DATE: Thu, Sep 16 2021

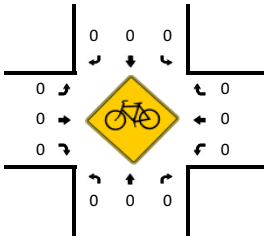
Peak-Hour: 3:25 PM -- 4:25 PM
Peak 15-Min: 4:05 PM -- 4:20 PM

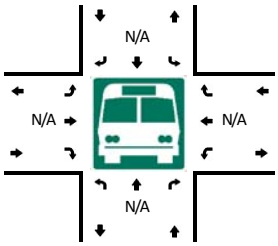


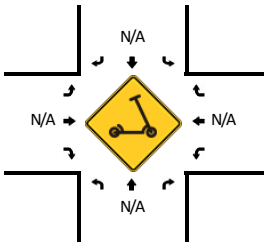


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	Pepsi Rd (Northbound)				Pepsi Rd (Southbound)				OR 42 (Eastbound)				OR 42 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	1	0	7	0	0	0	0	0	0	74	0	0	5	47	0	0	134	
2:05 PM	1	0	5	0	0	0	0	0	0	61	1	0	8	72	0	0	148	
2:10 PM	2	0	3	0	0	0	0	0	0	54	1	0	3	82	0	0	145	
2:15 PM	2	0	5	0	0	0	0	0	0	51	0	0	5	65	0	0	128	
2:20 PM	0	0	10	0	0	0	0	0	0	63	6	0	6	51	0	0	136	
2:25 PM	0	0	1	0	0	0	0	0	0	48	0	0	7	62	0	0	118	
2:30 PM	2	0	7	0	0	0	0	0	0	60	1	0	6	68	0	0	144	
2:35 PM	3	0	2	0	0	0	0	0	0	74	3	0	5	70	0	0	157	
2:40 PM	1	0	5	0	0	0	0	0	0	66	0	0	4	73	0	0	149	
2:45 PM	0	0	5	0	0	0	0	0	0	60	1	0	7	89	0	0	162	
2:50 PM	2	0	4	0	0	0	0	0	0	60	1	0	1	70	0	0	138	
2:55 PM	0	0	2	0	0	0	0	0	0	67	2	0	3	72	0	0	146	1705
3:00 PM	2	0	5	0	0	0	0	0	0	83	3	0	4	58	0	0	155	1726
3:05 PM	1	0	4	0	0	0	0	0	0	68	0	0	6	79	0	0	158	1736
3:10 PM	0	0	10	0	0	0	0	0	0	71	0	0	4	74	0	0	159	1750
3:15 PM	1	0	4	0	0	0	0	0	0	77	3	0	3	54	0	0	142	1764
3:20 PM	1	0	5	0	0	0	0	0	0	65	1	0	3	75	0	1	151	1779
3:25 PM	1	0	4	0	0	0	0	0	0	77	1	0	6	74	0	0	163	1824
3:30 PM	0	0	5	0	0	0	0	0	0	67	2	0	5	85	0	0	164	1844
3:35 PM	0	0	6	0	0	0	0	0	0	84	1	0	8	60	0	0	159	1846
3:40 PM	1	0	6	0	0	0	0	0	0	67	0	0	3	58	0	0	135	1832
3:45 PM	1	0	7	0	0	0	0	0	0	80	3	0	11	91	0	0	193	1863
3:50 PM	2	0	3	0	0	0	0	0	0	62	0	0	11	80	0	0	158	1883
3:55 PM	1	0	4	0	0	0	0	0	0	63	2	0	7	70	0	0	147	1884
4:00 PM	3	0	3	0	0	0	0	0	0	56	2	0	16	73	0	0	153	1882
4:05 PM	2	0	7	0	0	0	0	0	0	74	4	0	5	92	0	0	184	1908
4:10 PM	0	0	5	0	0	0	0	0	0	63	2	0	5	62	0	0	137	1886
4:15 PM	2	0	2	0	0	0	0	0	0	78	0	0	10	96	0	0	188	1932
4:20 PM	2	0	3	0	0	0	0	0	0	72	1	0	9	88	0	0	175	1956
4:25 PM	1	0	3	0	0	0	0	0	0	60	1	0	7	68	0	0	140	1933
4:30 PM	3	0	5	0	0	0	0	0	0	58	2	0	5	65	0	0	138	1907
4:35 PM	2	0	7	0	0	0	0	0	0	56	2	0	4	89	0	0	160	1908
4:40 PM	0	0	6	0	0	0	0	0	0	65	3	0	2	89	0	0	165	1938
4:45 PM	0	0	1	0	0	0	0	0	0	45	0	0	8	84	0	0	138	1883
4:50 PM	0	0	6	0	0	0	0	0	0	49	0	0	13	94	0	0	162	1887
4:55 PM	2	0	5	0	0	0	0	0	0	60	0	0	6	70	0	0	143	1883
5:00 PM	0	0	5	0	0	0	0	0	0	56	2	0	4	67	0	0	134	1864
5:05 PM	0	0	5	0	0	0	0	0	0	79	2	0	7	77	0	1	171	1851

5-Min Count Period Beginning At	Pepsi Rd (Northbound)				Pepsi Rd (Southbound)				OR 42 (Eastbound)				OR 42 (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	8	0	0	0	0	0	0	83	1	0	5	66	0	0	163	1877
5:15 PM	0	0	7	0	0	0	0	0	0	60	1	0	7	93	0	0	168	1857
5:20 PM	0	0	10	0	0	0	0	0	0	68	0	0	9	105	0	0	192	1874
5:25 PM	0	0	3	0	0	0	0	0	0	60	0	0	3	87	0	1	154	1888
5:30 PM	1	0	0	0	0	0	0	0	0	67	3	0	3	68	0	0	142	1892
5:35 PM	1	0	11	0	0	0	0	0	0	55	1	0	5	58	0	0	131	1863
5:40 PM	2	0	1	0	0	0	0	0	0	45	1	0	5	77	0	0	131	1829
5:45 PM	0	0	4	0	0	0	0	0	0	49	0	0	8	57	0	0	118	1809
5:50 PM	1	0	5	0	0	0	0	0	0	44	2	0	3	68	0	0	123	1770
5:55 PM	1	0	2	0	0	0	0	0	0	55	1	1	2	64	0	0	126	1753

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	0	56	0	0	0	0	0	0	860	24	0	80	1000	0	0	2036
Heavy Trucks	0	0	4		0	0	0		0	44	0		4	28	0		80
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

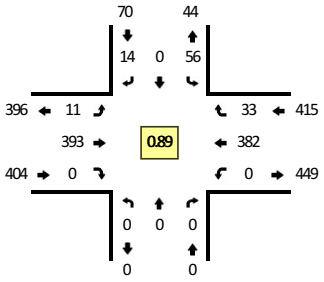
Type of peak hour being reported: Intersection Peak

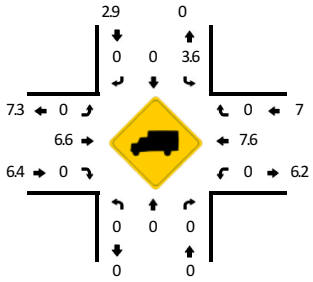
Method for determining peak hour: Total Entering Volume

LOCATION: Cary St -- OR 42
CITY/STATE: Winston, OR

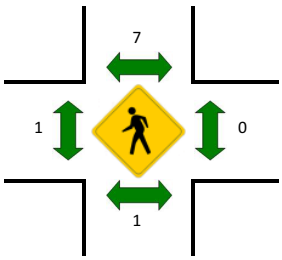
QC JOB #: 15385303
DATE: Thu, Sep 16 2021

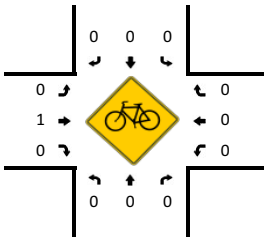
Peak-Hour: 2:40 PM -- 3:40 PM
Peak 15-Min: 2:50 PM -- 3:05 PM

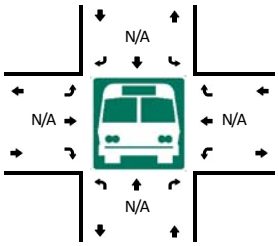


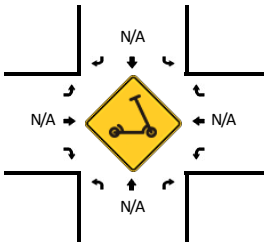


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	Cary St (Northbound)				Cary St (Southbound)				OR 42 (Eastbound)				OR 42 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	0	0	0	0	0	0	0	33	0	0	0	19	1	0	53	
2:05 PM	0	0	0	0	2	0	1	0	0	25	0	0	0	19	0	0	47	
2:10 PM	0	0	0	0	1	0	0	0	0	24	0	0	0	29	4	0	58	
2:15 PM	0	0	0	0	3	0	0	0	0	30	0	0	0	21	1	0	55	
2:20 PM	0	0	0	0	2	0	0	0	1	20	0	0	0	26	2	0	51	
2:25 PM	0	0	0	0	4	0	0	0	0	22	0	0	0	27	2	0	55	
2:30 PM	0	0	0	0	5	0	0	0	1	28	0	0	0	27	4	0	65	
2:35 PM	0	0	0	0	5	0	0	0	0	22	0	0	0	30	4	0	61	
2:40 PM	0	0	0	0	4	0	0	0	1	25	0	0	0	40	1	0	71	
2:45 PM	0	0	0	0	4	0	2	0	0	28	0	0	0	30	4	0	68	
2:50 PM	0	0	0	0	1	0	1	0	0	31	0	0	0	37	5	0	75	
2:55 PM	0	0	0	0	1	0	0	0	4	44	0	0	0	33	5	0	87	746
3:00 PM	0	0	0	0	4	0	0	0	2	52	0	0	0	29	2	0	89	782
3:05 PM	0	0	0	0	0	0	2	0	0	26	0	0	0	36	1	0	65	800
3:10 PM	0	0	0	0	2	0	0	0	1	36	0	0	0	30	6	0	75	817
3:15 PM	0	0	0	0	2	0	0	0	1	33	0	0	0	24	4	0	64	826
3:20 PM	0	0	0	0	11	0	2	0	1	45	0	0	0	24	0	0	83	858
3:25 PM	0	0	0	0	12	0	5	0	1	26	0	0	0	36	1	0	81	884
3:30 PM	0	0	0	0	13	0	2	0	0	22	0	0	0	30	1	0	68	887
3:35 PM	0	0	0	0	2	0	0	0	0	25	0	0	0	33	3	0	63	889
3:40 PM	0	0	0	0	4	0	0	0	1	25	0	0	0	27	3	0	60	878
3:45 PM	0	0	0	0	2	0	0	0	0	33	0	0	0	33	2	0	70	880
3:50 PM	0	0	0	0	7	0	2	0	0	32	0	0	0	39	2	0	82	887
3:55 PM	0	0	0	0	0	0	2	0	1	29	0	0	0	41	0	0	73	873
4:00 PM	0	0	0	0	1	0	0	0	0	36	0	0	0	29	2	0	68	852
4:05 PM	0	0	0	0	3	0	1	0	2	27	0	0	0	29	0	0	62	849
4:10 PM	0	0	0	0	6	0	2	0	0	27	0	0	0	32	3	0	70	844
4:15 PM	0	0	0	0	5	0	1	0	0	33	0	0	0	32	1	0	72	852
4:20 PM	0	0	0	0	5	0	0	0	0	30	0	0	0	28	1	0	64	833
4:25 PM	0	0	0	0	6	0	1	0	0	28	0	0	0	37	4	0	76	828
4:30 PM	0	0	0	0	1	0	0	0	0	36	0	0	0	28	3	0	68	828
4:35 PM	0	0	0	0	1	0	0	0	0	21	0	0	0	31	4	0	57	822
4:40 PM	0	0	0	0	1	0	0	0	0	27	0	0	0	39	0	0	67	829
4:45 PM	0	0	0	0	2	0	1	0	0	19	0	0	0	19	3	0	44	803
4:50 PM	0	0	0	0	4	0	0	0	0	32	0	0	0	31	0	0	67	788
4:55 PM	0	0	0	0	0	0	0	0	1	31	0	0	0	25	1	0	58	773
5:00 PM	0	0	0	0	0	0	1	0	0	32	0	0	0	27	0	0	60	765
5:05 PM	0	0	0	0	2	0	0	0	0	25	0	0	0	30	1	0	58	761

5-Min Count Period Beginning At	Cary St (Northbound)				Cary St (Southbound)				OR 42 (Eastbound)				OR 42 (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	0	31	0	0	0	29	0	0	62	753
5:15 PM	0	0	0	0	1	0	1	0	0	25	0	0	0	40	2	0	69	750
5:20 PM	0	0	0	0	3	0	0	0	1	16	0	0	0	45	2	0	67	753
5:25 PM	0	0	0	0	3	0	0	0	1	31	0	0	0	34	2	0	71	748
5:30 PM	0	0	0	0	1	0	1	0	1	23	0	0	0	34	0	0	60	740
5:35 PM	0	0	0	0	2	0	0	0	0	19	0	0	0	38	0	0	59	742
5:40 PM	0	0	0	0	0	0	0	0	1	24	0	0	0	31	2	0	58	733
5:45 PM	0	0	0	0	2	0	0	0	1	22	0	0	0	25	5	0	55	744
5:50 PM	0	0	0	0	2	0	0	0	0	19	0	0	0	20	0	0	41	718
5:55 PM	0	0	0	0	2	0	0	0	0	17	0	0	0	30	3	0	52	712

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	4	0	24	508	0	0	0	396	48	0	1004
Heavy Trucks	0	0	0		4	0	0		0	48	0		0	44	0		96
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

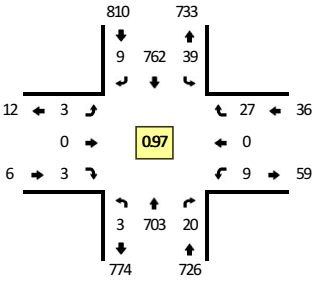
Type of peak hour being reported: Intersection Peak

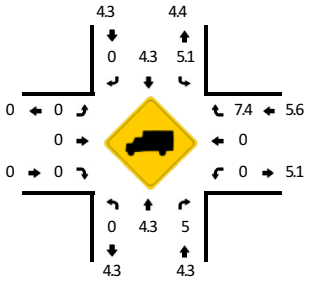
Method for determining peak hour: Total Entering Volume

LOCATION: OR 42 -- NW Jorgen St
CITY/STATE: Winston, OR

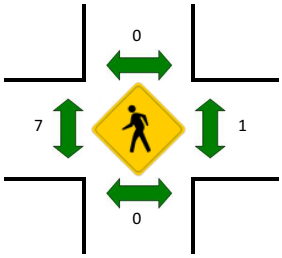
QC JOB #: 15385304
DATE: Thu, Sep 16 2021

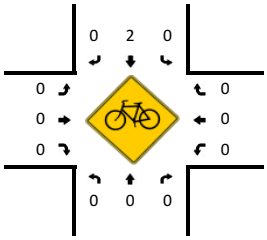
Peak-Hour: 3:25 PM -- 4:25 PM
Peak 15-Min: 3:45 PM -- 4:00 PM

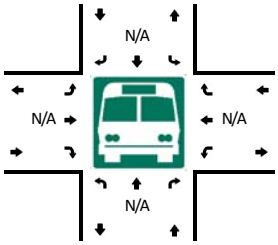


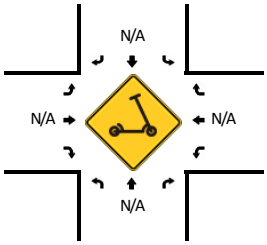


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	OR 42 (Northbound)				OR 42 (Southbound)				NW Jorgen St (Eastbound)				NW Jorgen St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	60	2	0	1	44	0	0	1	0	1	0	0	0	2	0	111	
2:05 PM	0	45	1	0	2	50	0	0	1	0	1	0	1	0	1	0	102	
2:10 PM	0	52	1	0	2	72	1	0	0	0	1	0	1	0	1	0	131	
2:15 PM	0	44	1	0	1	53	0	0	0	0	2	0	0	0	1	0	102	
2:20 PM	0	59	3	0	0	46	0	0	0	0	0	1	1	0	6	0	116	
2:25 PM	0	45	0	0	3	48	0	0	0	0	1	0	0	0	0	0	97	
2:30 PM	0	53	0	0	6	46	1	0	0	0	0	0	3	0	1	0	110	
2:35 PM	0	66	1	0	3	53	0	0	1	0	1	0	0	0	2	0	127	
2:40 PM	1	58	1	0	3	59	0	0	0	0	0	0	2	0	2	0	126	
2:45 PM	0	51	0	0	2	62	1	0	1	0	0	0	2	0	2	0	121	
2:50 PM	1	54	2	0	3	64	1	0	0	0	0	0	0	0	3	0	128	
2:55 PM	2	67	1	0	2	50	0	0	0	0	0	0	1	0	1	0	124	1395
3:00 PM	1	60	2	0	6	48	0	0	0	0	0	0	0	0	7	0	124	1408
3:05 PM	0	61	2	0	2	52	1	0	1	0	0	0	2	0	3	0	124	1430
3:10 PM	0	62	1	0	5	56	1	0	0	0	0	0	2	0	4	0	131	1430
3:15 PM	0	55	1	0	2	39	0	0	1	0	0	0	2	0	4	0	104	1432
3:20 PM	1	55	2	0	3	48	0	0	0	0	0	0	1	1	2	0	113	1429
3:25 PM	0	61	1	0	7	67	1	0	0	0	1	0	0	0	1	0	139	1471
3:30 PM	0	58	4	0	3	59	2	0	0	0	0	0	1	0	1	0	128	1489
3:35 PM	0	68	0	0	2	50	0	0	1	0	0	0	1	0	3	0	125	1487
3:40 PM	0	63	2	0	2	42	1	0	0	0	1	0	0	0	3	0	114	1475
3:45 PM	0	68	0	0	2	67	2	0	0	0	0	0	0	0	4	0	143	1497
3:50 PM	1	48	0	0	3	76	1	0	1	0	0	0	1	0	3	0	134	1503
3:55 PM	0	53	1	0	2	71	0	0	0	0	0	0	2	0	1	0	130	1509
4:00 PM	2	52	4	0	2	58	0	0	0	0	1	0	1	0	4	0	124	1509
4:05 PM	0	64	2	0	2	72	1	0	1	0	0	0	1	0	1	0	144	1529
4:10 PM	0	49	2	0	1	55	0	0	0	0	0	0	0	0	2	0	109	1507
4:15 PM	0	70	4	0	4	69	0	0	0	0	0	0	1	0	2	0	150	1553
4:20 PM	0	49	0	0	9	76	1	0	0	0	0	0	1	0	2	0	138	1578
4:25 PM	0	58	4	0	3	66	0	0	0	0	1	0	0	0	2	0	134	1573
4:30 PM	1	42	0	0	4	52	0	0	0	0	1	0	0	0	2	0	102	1547
4:35 PM	0	55	3	0	5	72	0	0	0	0	2	0	3	0	2	0	142	1564
4:40 PM	1	55	3	0	4	59	0	0	0	0	0	0	0	0	5	0	127	1577
4:45 PM	0	38	1	0	3	71	0	0	0	0	0	0	2	0	2	0	117	1551
4:50 PM	0	43	2	0	8	66	2	0	0	0	0	0	1	0	3	0	125	1542
4:55 PM	2	56	2	0	3	62	1	0	0	0	1	0	0	0	1	0	128	1540
5:00 PM	0	49	0	0	1	53	1	0	1	0	1	0	1	0	6	0	113	1529
5:05 PM	0	66	0	0	2	58	0	0	0	0	0	0	1	0	3	0	130	1515

5-Min Count Period Beginning At	OR 42 (Northbound)				OR 42 (Southbound)				NW Jorgen St (Eastbound)				NW Jorgen 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	69	0	0	3	71	0	0	0	0	1	0	3	0	4	0	152	1558
5:15 PM	0	41	5	0	6	68	1	0	0	0	1	0	3	0	2	0	127	1535
5:20 PM	2	61	2	0	7	80	0	0	0	0	1	0	0	0	2	0	155	1552
5:25 PM	0	54	5	0	2	67	0	0	0	0	1	0	1	0	1	0	131	1549
5:30 PM	0	58	1	0	1	52	0	0	0	0	0	0	0	0	3	0	115	1562
5:35 PM	0	44	3	0	4	52	0	0	1	0	0	0	0	0	2	0	106	1526
5:40 PM	0	34	0	0	3	62	1	0	0	0	0	0	2	0	1	0	103	1502
5:45 PM	0	38	2	0	6	47	0	0	0	0	0	0	2	0	0	0	95	1480
5:50 PM	0	36	1	0	0	58	1	0	0	0	1	0	1	0	4	0	102	1457
5:55 PM	0	39	2	0	3	54	2	0	0	0	0	0	3	0	1	0	104	1433

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	4	676	4	0	28	856	12	0	4	0	0	0	12	0	32	0	1628
Heavy Trucks	0	20	0		0	32	0		0	0	0		0	0	0		52
Buses																	
Pedestrians		0				0				12				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

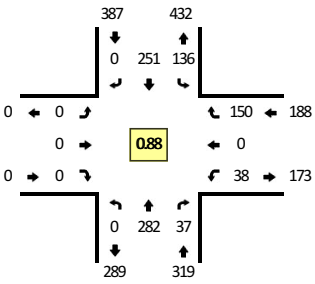
Type of peak hour being reported: Intersection Peak

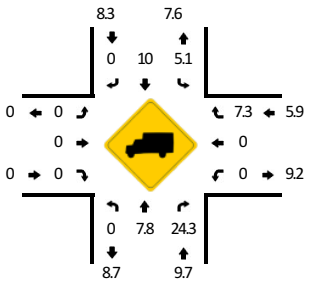
Method for determining peak hour: Total Entering Volume

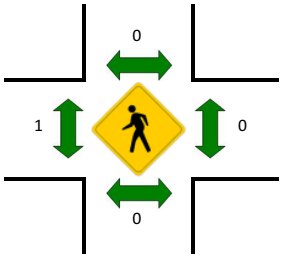
LOCATION: S Main St -- Thompson Ave
CITY/STATE: Winston, OR

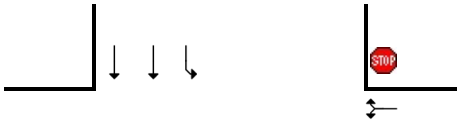
QC JOB #: 15385305
DATE: Thu, Sep 16 2021

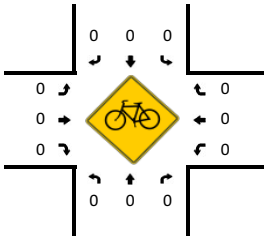
Peak-Hour: 2:10 PM -- 3:10 PM
Peak 15-Min: 2:35 PM -- 2:50 PM

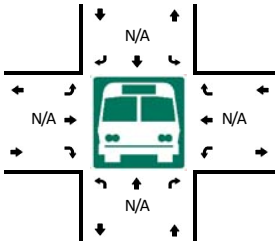


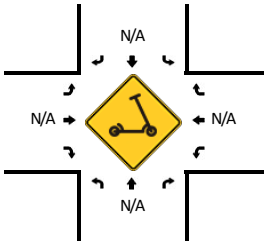












5-Min Count Period Beginning At	S Main St (Northbound)				S Main St (Southbound)				Thompson Ave (Eastbound)				Thompson Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	13	2	0	16	26	0	0	0	0	0	0	3	0	8	0	68	
2:05 PM	0	20	2	0	7	24	0	0	0	0	0	0	1	0	6	0	60	
2:10 PM	0	22	3	0	8	25	0	0	0	0	0	0	9	0	5	0	72	
2:15 PM	0	26	6	0	17	24	0	0	0	0	0	0	7	0	7	0	87	
2:20 PM	0	24	1	0	10	22	0	0	0	0	0	0	5	0	4	0	66	
2:25 PM	0	16	3	0	13	15	0	0	0	0	0	0	0	0	12	0	59	
2:30 PM	0	18	2	0	12	15	0	0	0	0	0	0	2	0	15	0	64	
2:35 PM	0	38	6	0	10	17	0	0	0	0	0	0	2	0	15	0	88	
2:40 PM	0	30	4	0	9	32	0	0	0	0	0	0	4	0	20	0	99	
2:45 PM	0	17	1	0	15	22	0	0	0	0	0	0	0	0	11	0	66	
2:50 PM	0	21	0	0	10	21	0	0	0	0	0	0	2	0	18	0	72	
2:55 PM	0	22	2	0	12	25	0	0	0	0	0	0	1	0	14	0	76	877
3:00 PM	0	17	2	0	10	21	0	0	0	0	0	0	4	0	17	0	71	880
3:05 PM	0	31	7	0	10	12	0	0	0	0	0	0	2	0	12	0	74	894
3:10 PM	0	23	4	0	4	18	0	0	0	0	0	0	2	0	13	0	64	886
3:15 PM	0	26	2	0	7	18	0	0	0	0	0	0	4	0	3	0	60	859
3:20 PM	0	20	0	0	15	20	0	0	0	0	0	0	1	0	9	0	65	858
3:25 PM	0	25	1	0	12	22	0	0	0	0	0	0	3	0	10	0	73	872
3:30 PM	0	27	2	0	15	21	0	0	0	0	0	0	2	0	8	0	75	883
3:35 PM	0	39	2	0	11	12	0	0	0	0	0	0	2	0	8	0	74	869
3:40 PM	0	45	1	0	17	13	0	0	0	0	0	0	1	0	9	0	86	856
3:45 PM	0	28	3	0	16	21	0	0	0	0	0	0	1	0	7	0	76	866
3:50 PM	0	30	6	0	8	21	0	0	0	0	0	0	0	0	5	0	70	864
3:55 PM	0	26	5	0	12	21	0	0	0	0	0	0	3	0	9	0	76	864
4:00 PM	0	14	4	0	19	22	0	0	0	0	0	0	5	0	7	0	71	864
4:05 PM	0	19	3	0	7	25	0	0	0	0	0	0	4	0	12	0	70	860
4:10 PM	0	18	3	0	10	26	0	0	0	0	0	0	4	0	12	0	73	869
4:15 PM	0	18	1	0	17	21	0	0	0	0	0	0	5	0	5	0	67	876
4:20 PM	0	13	5	0	21	21	0	0	0	0	0	0	4	0	9	0	73	884
4:25 PM	0	18	2	0	12	19	0	0	0	0	0	0	2	0	5	0	58	869
4:30 PM	0	26	3	0	10	20	0	0	0	0	0	0	0	0	7	0	66	860
4:35 PM	0	24	3	0	13	15	0	0	0	0	0	0	0	0	6	0	61	847
4:40 PM	0	20	3	0	22	22	0	0	0	0	0	0	7	0	7	0	81	842
4:45 PM	0	12	5	0	20	26	0	0	0	0	0	0	2	0	9	0	74	840
4:50 PM	0	15	3	0	12	22	0	0	0	0	0	0	5	0	7	0	64	834
4:55 PM	0	10	5	0	19	23	0	0	0	0	0	0	2	0	12	0	71	829
5:00 PM	0	24	3	0	11	13	0	0	0	0	0	0	1	0	5	0	57	815
5:05 PM	0	38	5	0	15	14	0	0	0	0	0	0	2	0	4	0	78	823

5-Min Count Period Beginning At	S Main St (Northbound)				S Main St (Southbound)				Thompson Ave (Eastbound)				Thompson Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
5:10 PM	0	28	4	0	22	27	0	0	0	0	0	0	1	0	15	0	97	847
5:15 PM	0	28	5	0	18	17	0	0	0	0	0	0	1	0	18	0	87	867
5:20 PM	0	18	4	0	18	27	0	0	0	0	0	0	3	0	12	0	82	876
5:25 PM	0	15	6	0	13	15	0	0	0	0	0	0	2	0	13	0	64	882
5:30 PM	0	17	3	0	15	18	0	0	0	0	0	0	5	0	12	0	70	886
5:35 PM	0	17	2	0	13	11	0	0	0	0	0	0	3	0	8	0	54	879
5:40 PM	0	12	4	0	19	20	0	0	0	0	0	0	0	0	10	0	65	863
5:45 PM	0	9	3	0	12	16	0	0	0	0	0	0	2	0	10	0	52	841
5:50 PM	0	17	1	0	11	21	0	0	0	0	0	0	1	0	11	0	62	839
5:55 PM	0	12	1	0	13	10	0	0	0	0	0	0	3	0	6	0	45	813

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	340	44	0	136	284	0	0	0	0	0	0	24	0	184	0	1012
Heavy Trucks	0	32	12		12	28	0		0	0	0		0	0	16		100
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

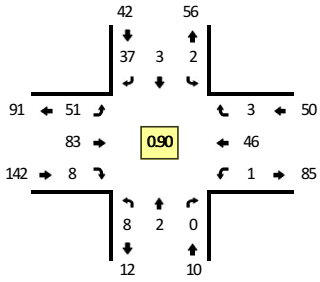
Type of peak hour being reported: Intersection Peak

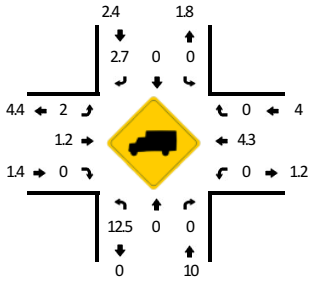
Method for determining peak hour: Total Entering Volume

LOCATION: SE Grape Ave -- Thompson Ave
CITY/STATE: Winston, OR

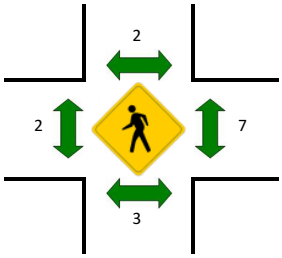
QC JOB #: 15385306
DATE: Thu, Sep 16 2021

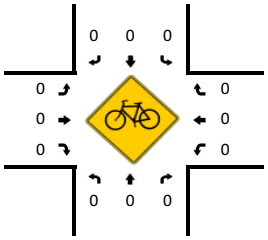
Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

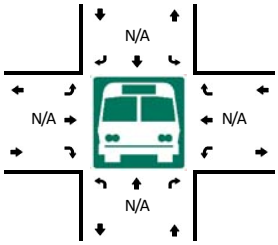


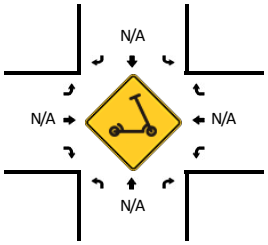


Quality Counts
DATA THAT DRIVES COMMUNITIES









5-Min Count Period Beginning At	SE Grape Ave (Northbound)				SE Grape Ave (Southbound)				Thompson Ave (Eastbound)				Thompson Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	0	0	0	0	3	0	2	7	0	0	0	4	1	0	17	
2:05 PM	0	0	0	0	0	0	0	0	2	3	1	0	0	4	0	0	10	
2:10 PM	1	0	1	0	0	0	11	0	0	6	1	0	0	3	0	0	23	
2:15 PM	1	0	0	0	1	0	2	0	2	2	0	0	0	1	0	0	9	
2:20 PM	1	0	0	0	1	0	3	0	2	4	0	0	0	1	0	0	12	
2:25 PM	1	0	0	0	0	0	2	0	1	3	1	0	0	2	0	0	10	
2:30 PM	0	0	0	0	1	0	3	0	3	3	1	0	0	4	0	0	15	
2:35 PM	0	0	0	0	0	0	5	0	0	9	1	0	0	1	0	0	16	
2:40 PM	3	0	0	0	0	0	3	0	1	2	0	0	0	4	0	0	13	
2:45 PM	0	0	0	0	1	0	3	0	4	3	0	0	0	4	0	0	15	
2:50 PM	0	0	0	0	0	0	4	0	3	3	0	0	1	9	0	0	20	
2:55 PM	1	0	0	0	1	0	2	0	3	5	0	0	0	4	0	0	16	176
3:00 PM	0	0	0	0	1	0	3	0	1	5	1	1	0	5	0	0	17	176
3:05 PM	0	0	0	0	0	0	4	0	0	5	1	0	0	6	0	0	16	182
3:10 PM	0	0	0	0	0	0	0	0	7	4	0	0	0	5	1	0	17	176
3:15 PM	1	0	0	0	0	0	1	0	2	1	0	0	0	1	0	0	6	173
3:20 PM	0	0	1	0	0	0	0	0	2	6	0	0	0	7	0	0	16	177
3:25 PM	0	0	0	0	0	0	2	0	6	4	0	0	0	4	0	0	16	183
3:30 PM	2	0	0	0	1	0	2	0	6	6	1	0	0	4	0	0	22	190
3:35 PM	0	0	0	0	0	0	2	0	1	2	0	0	0	3	0	0	8	182
3:40 PM	2	0	0	0	0	0	5	0	5	4	0	0	0	5	0	0	21	190
3:45 PM	1	0	0	0	0	0	1	0	1	3	0	0	0	2	0	0	8	183
3:50 PM	1	0	0	0	0	0	2	0	3	7	0	0	0	2	0	0	15	178
3:55 PM	0	0	0	0	0	0	5	0	1	9	1	0	0	5	0	0	21	183
4:00 PM	0	0	0	0	0	0	2	0	3	4	0	0	0	6	0	0	15	181
4:05 PM	0	0	0	0	0	0	4	0	4	5	2	0	0	5	0	0	20	185
4:10 PM	1	0	0	0	0	0	4	0	2	6	0	0	0	3	0	0	16	184
4:15 PM	0	0	0	0	0	0	5	0	2	7	0	0	0	5	0	0	19	197
4:20 PM	0	0	0	0	1	0	1	0	3	10	2	0	0	7	0	0	24	205
4:25 PM	0	0	0	0	0	0	1	0	4	5	3	0	0	3	0	0	16	205
4:30 PM	0	0	0	0	2	0	1	0	2	7	0	0	0	4	0	0	16	199
4:35 PM	0	0	0	0	0	0	4	0	1	7	0	0	0	4	0	0	16	207
4:40 PM	0	0	0	0	0	0	3	0	7	9	1	0	0	7	0	0	27	213
4:45 PM	2	1	0	0	0	1	2	0	6	6	1	0	0	3	0	0	22	227
4:50 PM	0	0	0	0	0	0	2	0	1	4	0	0	0	3	1	0	11	223
4:55 PM	1	0	0	0	1	0	3	0	5	6	1	0	0	5	0	0	22	224
5:00 PM	0	0	0	0	0	0	3	0	1	7	0	0	0	4	0	0	15	224
5:05 PM	0	0	0	0	0	0	2	0	2	8	1	0	0	3	0	0	16	220

5-Min Count Period Beginning At	SE Grape Ave (Northbound)				SE Grape Ave (Southbound)				Thompson Ave (Eastbound)				Thompson Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
5:10 PM	1	0	0	0	1	0	3	0	3	9	1	0	0	3	0	0	21	225
5:15 PM	2	0	0	0	0	0	3	0	7	9	0	0	0	5	0	0	26	232
5:20 PM	0	0	0	0	0	1	5	0	5	5	2	0	1	2	0	0	21	229
5:25 PM	2	0	0	0	0	0	3	0	5	6	0	0	0	4	1	0	21	234
5:30 PM	0	0	0	0	0	1	4	0	5	10	1	0	0	3	0	0	24	242
5:35 PM	0	1	0	0	0	0	4	0	4	4	0	0	0	4	1	0	18	244
5:40 PM	0	0	0	0	0	0	3	0	8	3	1	0	0	2	0	0	17	234
5:45 PM	0	0	0	0	0	0	2	0	4	5	0	0	0	5	0	0	16	228
5:50 PM	0	0	0	0	0	0	3	1	2	7	1	0	0	5	0	0	19	236
5:55 PM	0	0	0	0	1	0	2	0	2	6	0	0	0	2	0	0	13	227

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	12	0	0	0	4	4	44	0	60	92	12	0	4	40	0	0	272
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		4				0				8				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

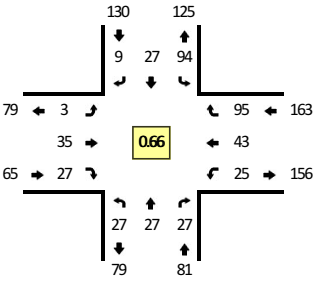
Type of peak hour being reported: Intersection Peak

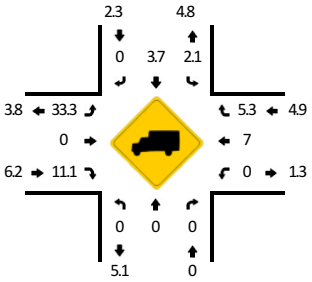
Method for determining peak hour: Total Entering Volume

LOCATION: Brockway Rd -- Lookingglass Rd
CITY/STATE: Winston, OR

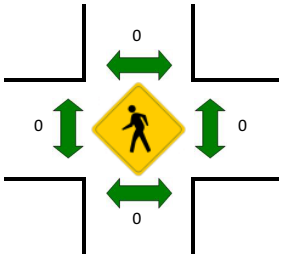
QC JOB #: 15385307
DATE: Thu, Sep 16 2021

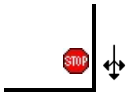
Peak-Hour: 2:30 PM -- 3:30 PM
Peak 15-Min: 3:10 PM -- 3:25 PM

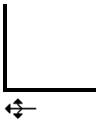


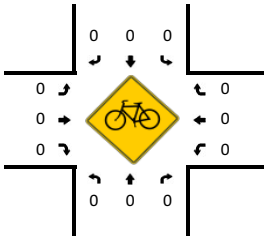


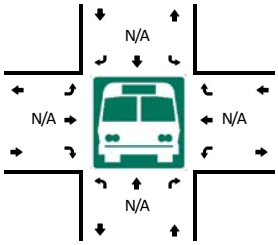
Quality Counts
DATA THAT DRIVES COMMUNITIES

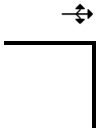


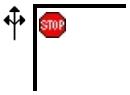


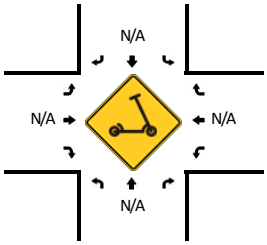












5-Min Count Period Beginning At	Brockway Rd (Northbound)				Brockway Rd (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	1	0	0	1	0	0	0	0	2	0	1	1	0	0	6	
6:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
6:10 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	
6:15 AM	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	3	
6:20 AM	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	5	
6:25 AM	1	0	1	0	0	0	0	0	0	3	3	0	0	0	0	0	8	
6:30 AM	2	0	1	0	1	0	0	0	0	2	1	0	2	0	1	0	10	
6:35 AM	0	1	2	0	0	0	0	0	0	5	1	0	2	0	2	0	13	
6:40 AM	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	4	
6:45 AM	4	0	4	0	0	0	0	0	0	0	1	0	1	1	0	0	11	
6:50 AM	0	0	1	0	1	1	0	0	0	3	6	0	0	3	3	0	18	
6:55 AM	3	0	1	0	0	0	0	0	0	1	2	0	1	3	0	0	11	92
7:00 AM	1	1	2	0	1	0	0	0	0	3	2	0	0	1	1	0	12	98
7:05 AM	0	1	3	0	0	0	1	0	1	3	5	0	1	1	2	0	18	115
7:10 AM	1	1	3	0	1	0	0	0	0	2	4	0	1	2	1	0	16	129
7:15 AM	3	0	2	0	1	0	0	0	0	3	1	0	1	1	1	0	13	139
7:20 AM	0	0	3	0	0	0	0	0	0	0	3	0	0	2	10	0	18	152
7:25 AM	1	0	3	0	0	0	0	0	0	1	0	0	1	2	6	0	14	158
7:30 AM	0	0	3	0	0	1	0	0	0	2	1	0	1	0	2	0	10	158
7:35 AM	2	1	2	0	0	0	0	0	0	4	1	0	1	1	7	0	19	164
7:40 AM	1	0	1	0	1	0	0	0	0	1	1	0	1	3	6	0	15	175
7:45 AM	1	1	2	0	0	0	0	0	0	2	3	0	1	5	6	0	21	185
7:50 AM	2	1	1	0	2	0	0	0	0	7	1	0	1	2	8	0	25	192
7:55 AM	1	3	0	0	0	0	0	0	0	2	2	0	0	2	33	0	43	224
8:00 AM	2	9	2	0	19	3	0	0	2	2	0	0	2	4	27	0	72	284
8:05 AM	1	6	2	0	26	6	4	0	2	3	1	0	0	1	15	0	67	333
8:10 AM	3	7	1	0	31	4	1	0	0	4	2	0	0	2	17	0	72	389
8:15 AM	2	2	1	0	15	6	1	0	2	1	1	0	0	0	2	0	33	409
8:20 AM	0	0	1	0	11	3	0	0	2	2	0	0	1	1	0	0	21	412
8:25 AM	0	1	3	0	4	3	0	0	0	1	1	0	1	2	1	0	17	415
8:30 AM	1	0	2	0	1	0	0	0	0	2	4	0	1	1	0	0	12	417
8:35 AM	2	0	2	0	2	0	0	0	0	0	1	0	0	0	0	0	7	405
8:40 AM	1	0	0	0	0	0	0	0	0	4	3	0	2	2	3	0	15	405
8:45 AM	0	0	3	0	3	2	0	0	0	4	1	0	1	3	1	0	18	402
8:50 AM	4	0	4	0	0	0	0	0	0	3	2	0	0	1	1	0	15	392
8:55 AM	1	2	0	0	0	0	0	0	0	4	4	0	2	1	4	0	18	367
9:00 AM	0	0	2	0	2	1	1	0	0	2	1	0	1	2	0	0	12	307
9:05 AM	0	0	1	0	1	0	0	0	0	5	2	0	1	0	2	0	12	252
9:10 AM	2	1	0	0	2	0	0	0	0	1	3	0	1	2	1	0	13	193

5-Min Count Period Beginning At	Brockway Rd (Northbound)				Brockway Rd (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	0	0	2	0	0	0	0	0	0	0	1	0	2	2	2	0	9	169
9:20 AM	0	0	3	0	1	0	0	0	0	4	0	0	0	0	0	0	8	156
9:25 AM	1	0	2	0	0	1	0	0	0	2	0	0	0	1	0	0	7	146
9:30 AM	0	0	2	0	0	0	0	0	0	3	1	0	2	0	1	0	9	143
9:35 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	139
9:40 AM	2	1	0	0	0	0	0	0	0	0	0	0	1	2	0	0	6	130
9:45 AM	3	0	1	0	0	0	0	0	0	1	0	0	3	1	0	0	9	121
9:50 AM	0	0	1	0	2	0	0	0	0	2	1	0	0	3	0	0	9	115
9:55 AM	0	0	2	0	1	0	0	0	0	4	0	0	0	3	2	0	12	109
10:00 AM	4	0	2	0	2	0	0	0	0	3	1	0	1	2	1	0	16	113
10:05 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	4	105
10:10 AM	2	0	1	0	1	0	0	0	0	5	3	0	0	3	1	0	16	108
10:15 AM	0	0	1	0	0	0	1	0	0	1	2	0	1	1	1	0	8	107
10:20 AM	0	0	0	0	2	0	0	0	0	4	1	0	1	2	0	0	10	109
10:25 AM	3	0	0	0	3	0	0	0	1	1	0	0	0	2	1	0	11	113
10:30 AM	2	0	3	0	1	0	0	0	0	2	1	0	2	1	1	0	13	117
10:35 AM	1	0	0	0	3	1	0	0	0	3	1	0	1	4	1	0	15	129
10:40 AM	3	2	1	0	0	0	0	0	1	2	1	0	0	4	1	0	15	138
10:45 AM	0	0	0	0	1	1	0	0	0	3	1	0	0	3	0	0	9	138
10:50 AM	1	0	1	0	0	0	0	0	1	4	1	0	0	3	3	0	14	143
10:55 AM	2	0	1	0	0	1	0	0	0	2	0	0	2	1	1	0	10	141
11:00 AM	2	0	2	0	0	0	0	0	0	2	2	0	0	4	0	0	12	137
11:05 AM	2	1	0	0	0	0	0	0	0	5	1	0	1	5	0	0	15	148
11:10 AM	0	0	2	0	0	0	0	0	0	1	1	0	1	2	2	0	9	141
11:15 AM	1	0	0	0	0	0	1	0	0	3	1	0	0	5	0	0	11	144
11:20 AM	2	0	3	0	1	0	0	0	0	1	2	0	2	5	0	0	16	150
11:25 AM	0	0	1	0	1	0	0	0	0	3	0	0	1	1	0	0	7	146
11:30 AM	1	0	1	0	1	0	0	0	0	2	0	0	0	3	0	0	8	141
11:35 AM	1	1	2	0	1	0	1	0	1	2	2	0	0	2	1	0	14	140
11:40 AM	4	0	0	0	1	1	0	0	0	1	0	0	1	1	1	0	10	135
11:45 AM	0	0	0	0	1	0	0	0	0	3	0	0	2	2	1	0	9	135
11:50 AM	1	0	0	0	0	0	0	0	0	1	1	0	1	3	0	0	7	128
11:55 AM	1	0	0	0	0	0	0	0	0	4	3	0	0	3	1	0	12	130
12:00 PM	1	0	3	0	0	0	0	0	1	1	5	0	0	2	3	0	16	134
12:05 PM	3	0	2	0	0	1	1	0	0	1	4	0	3	0	1	0	16	135
12:10 PM	0	0	0	0	1	0	0	0	0	3	1	0	0	2	0	0	7	133
12:15 PM	1	0	2	0	2	0	0	0	0	1	2	0	3	1	0	0	12	134
12:20 PM	0	0	2	0	1	0	2	0	1	3	1	0	0	1	1	0	12	130
12:25 PM	0	1	2	0	0	0	0	0	0	5	0	0	1	3	0	0	12	135
12:30 PM	4	0	2	0	2	0	0	0	0	4	0	0	2	3	1	0	18	145
12:35 PM	4	0	1	0	1	0	0	0	0	2	1	0	1	4	0	0	14	145
12:40 PM	1	0	2	0	1	0	0	0	0	3	3	0	0	1	1	0	12	147
12:45 PM	1	0	1	0	2	0	0	0	0	4	0	0	3	3	2	0	16	154
12:50 PM	2	0	1	0	0	0	0	0	0	2	2	0	0	7	0	0	14	161
12:55 PM	1	1	1	1	0	0	0	0	0	3	2	0	0	1	2	0	12	161
1:00 PM	0	0	1	0	2	1	0	0	0	3	2	0	3	0	0	0	12	157
1:05 PM	2	0	1	0	0	0	0	0	0	2	1	0	2	3	0	0	11	152
1:10 PM	1	0	0	0	2	0	1	0	0	4	0	0	2	0	6	0	16	161
1:15 PM	3	1	1	0	0	0	0	0	0	2	1	0	2	1	0	0	11	160
1:20 PM	0	0	1	0	0	1	0	0	0	8	1	0	1	3	1	0	16	164
1:25 PM	1	0	4	0	0	0	0	0	0	3	1	0	0	4	2	0	15	167
1:30 PM	2	0	4	0	1	0	0	0	0	3	2	0	1	3	0	0	16	165
1:35 PM	2	0	2	0	1	0	0	0	0	6	1	0	2	4	1	0	19	170
1:40 PM	3	0	2	0	0	0	0	0	0	6	0	0	1	0	0	0	12	170
1:45 PM	1	1	0	0	0	0	0	0	0	3	4	0	2	5	0	0	16	170
1:50 PM	1	0	1	0	0	1	0	0	1	4	2	0	0	6	1	0	17	173
1:55 PM	7	0	0	0	1	0	0	0	0	5	1	0	2	6	0	0	22	183
2:00 PM	2	1	1	0	2	0	0	0	0	3	1	0	2	4	0	0	16	187
2:05 PM	0	0	2	0	0	1	0	0	0	0	2	0	0	3	0	0	8	184
2:10 PM	1	0	2	0	1	2	0	0	0	4	0	0	2	2	4	0	18	186
2:15 PM	4	0	1	0	1	1	0	0	0	3	2	0	2	3	2	0	19	194
2:20 PM	5	2	1	0	1	0	0	0	0	2	3	0	2	1	6	0	23	201
2:25 PM	0	1	3	0	1	0	0	0	0	2	5	0	1	5	3	0	21	207
2:30 PM	4	0	0	0	6	4	1	0	0	2	6	0	0	1	2	0	26	217
2:35 PM	0	1	1	0	3	0	0	0	0	6	2	0	1	6	4	0	24	222
2:40 PM	1	0	2	0	0	2	0	0	0	3	1	0	3	8	4	0	24	234
2:45 PM	1	1	4	0	0	0	0	0	0	3	3	0	3	3	8	0	26	244
2:50 PM	0	6	2	0	2	0	1	0	0	6	3	0	2	3	7	0	32	259
2:55 PM	5	8	2	0	2	0	0	0	0	1	4	0	1	0	5	0	28	265
3:00 PM	3	2	4	0	2	2	1	0	2	4	2	0	3	4	21	0	50	299
3:05 PM	1	6	3	0	3	0	0	0	0	1	1	0	0	3	16	0	34	325
3:10 PM	3	2	3	0	4	2	0	0	1	2	1	0	1	4	8	0	31	338
3:15 PM	4	1	3	0	32	8	4	0	0	3	3	0	2	4	10	0	74	393
3:20 PM	3	0	0	0	35	7	2	0	0	0	0	0	5	5	4	0	61	431
3:25 PM	2	0	3	0	5	2	0	0	0	4	1	0	4	2	6	0	29	439
3:30 PM	5	0	1	0	3	0	0	0	0	1	1	0	3	3	2	0	19	432
3:35 PM	4	2	4	0	5	0	2	0	0	1	1	0	3	4	1	0	27	435
3:40 PM	6	0	3	0	2	1	0	0	0	2	2	0	2	5	1	0	24	435
3:45 PM	3	0	2	0	1	0	1	0	0	2	0	0	1	5	1	0	16	425
3:50 PM	1	0	1	0	9	1	1	0	0	5	2	0	3	4	0	0	27	420
3:55 PM	4	0	1	0	6	0	0	0	0	7	1	0	3	1	2	0	25	417
4:00 PM	4	0	2	0	3	1	0	0	0	10	3	0	1	1	0	0	25	392
4:05 PM	0	0	1	0	2	0	0	0	0	5	2	0	1	3	1	0	15	373
4:10 PM	1	2	1	0	0	0	1	0	0	2	1	0	1	5	1	0	15	357
4:15 PM	3	0	3	0	3	0	0	0	0	10	1	0	3	3	0	0	26	309
4:20 PM	2	1	1	0	2	0	1	0	0	6	2	0	1	6	1	0	23	271
4:25 PM	2	0	2	0	2	0	0	0	1	3	5	0	0	5	0	0	20	262

5-Min Count Period Beginning At	Brockway Rd (Northbound)				Brockway Rd (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	1	0	1	0	3	1	0	0	0	2	2	0	2	2	4	0	18	261
4:35 PM	4	0	0	0	4	2	1	0	0	8	2	0	1	5	3	0	30	264
4:40 PM	1	1	2	0	3	1	0	0	0	2	3	0	1	6	3	0	23	263
4:45 PM	0	2	1	0	3	2	0	0	0	5	1	0	3	4	4	0	25	272
4:50 PM	1	0	1	0	3	0	1	0	1	5	1	0	0	4	1	0	18	263
4:55 PM	1	0	1	0	2	0	0	0	0	2	4	0	0	2	0	0	12	250
5:00 PM	2	1	3	0	1	1	0	0	0	5	1	0	1	5	0	0	20	245
5:05 PM	1	0	1	0	1	0	0	0	0	6	1	0	4	3	2	0	19	249
5:10 PM	2	0	2	0	1	0	0	0	0	7	3	0	0	4	0	0	19	253
5:15 PM	2	0	0	0	0	0	2	0	1	5	1	0	3	5	0	0	19	246
5:20 PM	1	0	1	0	0	0	0	0	0	2	2	0	5	6	0	0	17	240
5:25 PM	0	0	1	0	0	1	0	0	0	0	5	0	3	0	1	0	11	231
5:30 PM	2	0	5	0	0	0	0	0	1	2	2	0	2	2	0	0	16	229
5:35 PM	1	1	6	0	0	0	0	0	0	2	0	0	0	4	0	0	14	213
5:40 PM	1	0	2	0	1	0	0	0	0	2	2	0	1	1	0	0	10	200
5:45 PM	2	0	1	0	0	0	0	0	0	2	1	0	0	1	0	0	7	182
5:50 PM	1	0	4	0	0	0	0	0	1	0	1	0	2	2	0	0	11	175
5:55 PM	0	1	1	0	0	0	0	0	0	0	1	0	3	1	1	0	8	171
6:00 PM	3	0	0	0	0	0	0	0	0	4	1	0	2	5	0	0	15	166
6:05 PM	0	0	2	0	1	0	0	0	0	2	1	0	1	7	0	0	14	161
6:10 PM	2	0	2	0	0	0	0	0	0	4	2	0	1	0	2	0	13	155
6:15 PM	3	0	2	0	2	0	0	0	1	4	3	0	2	0	4	0	21	157
6:20 PM	1	0	0	0	0	0	0	0	1	0	3	0	2	4	0	0	11	151
6:25 PM	3	0	2	0	2	0	0	0	0	3	0	0	1	1	1	0	13	153
6:30 PM	0	0	0	0	0	0	0	0	0	2	2	0	7	1	1	0	13	150
6:35 PM	1	0	1	0	0	0	1	0	0	2	3	0	1	3	0	0	12	148
6:40 PM	1	0	0	0	0	0	0	0	0	5	1	0	1	2	0	0	10	148
6:45 PM	2	0	0	0	1	0	0	0	0	1	1	0	1	8	0	0	14	155
6:50 PM	0	1	1	0	0	0	0	0	0	3	0	0	1	1	3	0	10	154
6:55 PM	2	1	1	0	0	0	0	0	0	3	1	0	0	4	1	0	13	159
7:00 PM	0	1	1	0	0	0	0	0	0	0	2	0	1	3	1	0	9	153
7:05 PM	3	0	0	0	0	1	1	0	0	2	1	0	2	0	1	0	11	150
7:10 PM	1	0	1	0	2	0	0	0	0	1	1	0	1	4	0	0	11	148
7:15 PM	3	0	1	0	5	4	1	0	0	1	2	0	0	3	0	0	20	147
7:20 PM	2	1	0	0	0	1	0	0	1	1	0	0	0	1	0	0	7	143
7:25 PM	0	0	3	0	0	1	0	0	0	2	0	0	0	0	0	0	6	136
7:30 PM	1	0	4	0	1	0	0	0	0	1	0	0	0	1	0	0	8	131
7:35 PM	3	0	0	0	0	0	0	0	0	3	1	0	1	2	0	0	10	129
7:40 PM	0	0	2	0	0	0	0	0	0	3	0	0	0	2	0	0	7	126
7:45 PM	3	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	6	118
7:50 PM	1	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	6	114
7:55 PM	0	1	3	0	0	0	0	0	0	2	0	0	0	2	0	0	8	109
8:00 PM	2	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	6	106
8:05 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	2	1	0	6	101
8:10 PM	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	5	95
8:15 PM	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3	78
8:20 PM	1	0	1	0	0	0	0	0	0	3	0	0	0	1	0	0	6	77
8:25 PM	2	0	1	0	0	0	0	0	0	2	2	0	1	2	0	0	10	81
8:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3	76
8:35 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3	69
8:40 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	4	66
8:45 PM	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	4	64
8:50 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	6	64
8:55 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3	59
9:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	55
9:05 PM	0	1	0	0	0	0	0	0	0	1	0	0	2	1	0	0	5	54
9:10 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	51
9:15 PM	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	3	51
9:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	46
9:25 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	38
9:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	37
9:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	35
9:40 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	1	0	0	5	36
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	33
9:50 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	30
9:55 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	30

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	40	12	24	0	284	68	24	0	4	20	16	0	32	52	88	0	664
Heavy Trucks	0	0	0		4	0	0		4	0	4		0	0	4		16
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

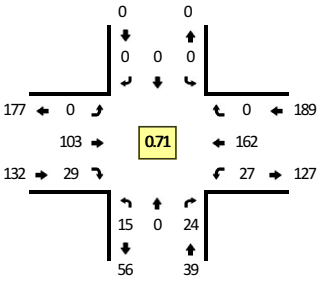
Type of peak hour being reported: Intersection Peak

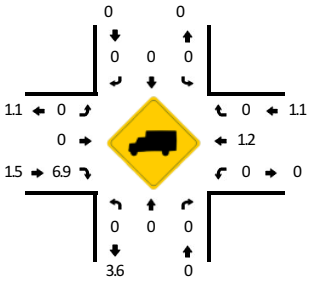
Method for determining peak hour: Total Entering Volume

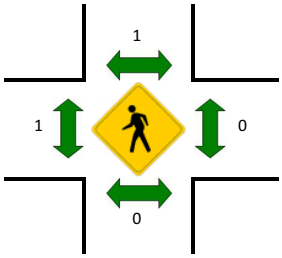
LOCATION: Cary St -- Lookingglass Rd
CITY/STATE: Winston, OR

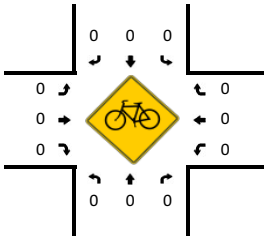
QC JOB #: 15385308
DATE: Thu, Sep 16 2021

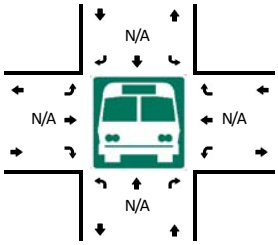
Peak-Hour: 2:40 PM -- 3:40 PM
Peak 15-Min: 3:15 PM -- 3:30 PM

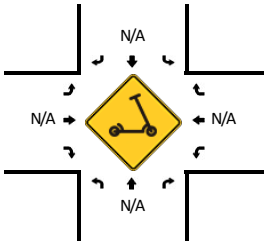












5-Min Count Period Beginning At	Cary St (Northbound)				Cary St (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	
6:05 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	
6:10 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	
6:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6	
6:20 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	3	0	0	9	
6:25 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7	
6:30 AM	0	0	0	0	0	0	0	0	0	8	0	0	1	0	0	0	9	
6:35 AM	0	0	4	0	0	0	0	0	0	6	0	0	1	2	0	0	13	
6:40 AM	0	0	1	0	0	0	0	0	0	4	1	0	0	0	0	0	6	
6:45 AM	0	0	2	0	0	0	0	0	0	8	0	0	0	1	0	0	11	
6:50 AM	0	0	0	0	0	0	0	0	0	2	1	0	3	3	0	0	9	
6:55 AM	0	0	1	0	0	0	0	0	0	7	0	0	1	5	0	0	14	91
7:00 AM	0	0	0	0	0	0	0	0	0	7	0	0	1	1	0	0	9	98
7:05 AM	0	0	2	0	0	0	0	0	0	12	0	0	0	1	0	0	15	110
7:10 AM	0	0	1	0	0	0	0	0	0	8	1	0	1	5	0	0	16	124
7:15 AM	0	0	0	0	0	0	0	0	0	6	0	0	2	1	0	0	9	127
7:20 AM	1	0	2	0	0	0	0	0	0	5	0	0	0	9	0	0	17	135
7:25 AM	0	0	0	0	0	0	0	0	0	7	0	0	1	4	0	0	12	140
7:30 AM	0	0	0	0	0	0	0	0	0	8	1	0	2	2	0	0	13	144
7:35 AM	2	0	0	0	0	0	0	0	0	13	2	0	0	7	0	0	24	155
7:40 AM	2	0	1	0	0	0	0	0	0	3	2	0	1	8	0	0	17	166
7:45 AM	0	0	4	0	0	0	0	0	0	7	4	0	5	10	0	0	30	185
7:50 AM	2	0	5	0	0	0	0	0	0	6	6	0	2	8	0	0	29	205
7:55 AM	4	0	0	0	0	0	0	0	0	8	0	0	4	14	0	0	30	221
8:00 AM	2	0	1	0	0	0	0	0	0	8	3	0	3	8	0	0	25	237
8:05 AM	0	0	0	0	0	0	0	0	0	22	0	0	2	6	0	0	30	252
8:10 AM	0	0	0	0	0	0	0	0	0	14	1	0	0	13	0	0	28	264
8:15 AM	2	0	4	0	0	0	0	0	0	10	2	0	2	1	0	0	21	276
8:20 AM	0	0	1	0	0	0	0	0	0	14	0	0	0	6	0	0	21	280
8:25 AM	0	0	1	0	0	0	0	0	0	7	0	0	2	3	0	0	13	281
8:30 AM	0	0	1	0	0	0	0	0	0	9	0	0	0	4	0	0	14	282
8:35 AM	0	0	1	0	0	0	0	0	0	6	1	0	2	7	0	0	17	275
8:40 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	7	0	0	10	268
8:45 AM	0	0	0	0	0	0	0	0	0	7	0	0	1	4	0	0	12	250
8:50 AM	0	0	0	0	0	0	0	0	0	14	0	0	0	2	0	0	16	237
8:55 AM	0	0	1	0	0	0	0	0	0	7	0	0	0	5	0	0	13	220
9:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	0	10	205
9:05 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8	183
9:10 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6	161

5-Min Count Period Beginning At	Cary St (Northbound)				Cary St (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	2	0	0	8	148
9:20 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	4	0	0	7	134
9:25 AM	0	0	1	0	0	0	0	0	0	6	0	0	0	3	0	0	10	131
9:30 AM	1	0	0	0	0	0	0	0	0	4	1	0	0	1	0	0	7	124
9:35 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8	115
9:40 AM	0	0	0	0	0	0	0	0	0	4	1	0	1	2	0	0	8	113
9:45 AM	0	0	2	0	0	0	0	0	0	0	1	0	0	5	0	0	8	109
9:50 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	7	100
9:55 AM	0	0	1	0	0	0	0	0	0	7	1	0	0	2	0	0	11	98
10:00 AM	0	0	0	0	0	0	0	0	0	4	0	0	3	5	0	0	12	100
10:05 AM	1	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	8	100
10:10 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	8	0	0	11	105
10:15 AM	1	0	2	0	0	0	0	0	0	5	0	0	0	4	0	0	12	109
10:20 AM	0	0	0	0	0	0	0	0	0	3	0	0	1	5	0	0	9	111
10:25 AM	0	0	2	0	0	0	0	0	0	6	2	0	1	2	0	0	13	114
10:30 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	9	0	0	16	123
10:35 AM	0	0	1	0	0	0	0	0	0	6	0	0	1	5	0	0	13	128
10:40 AM	0	0	0	0	0	0	0	0	0	7	0	0	1	4	0	0	12	132
10:45 AM	0	0	0	0	0	0	0	0	0	10	0	0	0	1	0	0	11	135
10:50 AM	1	0	1	1	0	0	0	0	0	8	0	0	1	5	0	0	17	145
10:55 AM	0	0	1	0	0	0	0	0	0	2	0	0	1	4	0	0	8	142
11:00 AM	0	0	1	0	0	0	0	0	0	5	0	0	2	2	0	0	10	140
11:05 AM	1	0	1	0	0	0	0	0	0	10	0	0	1	9	0	1	23	155
11:10 AM	0	0	0	0	0	0	0	0	0	5	0	0	1	4	0	0	10	154
11:15 AM	0	0	0	0	0	0	0	0	0	2	1	0	2	3	0	0	8	150
11:20 AM	0	0	1	0	0	0	0	0	0	5	0	0	0	6	0	0	12	153
11:25 AM	1	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	7	147
11:30 AM	0	0	1	0	0	0	0	0	0	7	1	0	0	2	0	0	11	142
11:35 AM	0	0	2	0	0	0	0	0	0	3	1	0	0	3	0	0	9	138
11:40 AM	0	0	2	0	0	0	0	0	0	4	1	0	2	2	0	0	11	137
11:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	1	13	0	0	16	142
11:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	128
11:55 AM	0	0	2	0	0	0	0	0	0	2	0	0	2	4	0	0	10	130
12:00 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	13	0	0	15	135
12:05 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	114
12:10 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	6	110
12:15 PM	0	0	0	0	0	0	0	0	0	6	0	0	2	5	0	0	13	115
12:20 PM	1	0	1	0	0	0	0	0	0	5	0	0	2	4	0	0	13	116
12:25 PM	1	0	3	0	0	0	0	0	0	6	0	0	0	7	0	0	17	126
12:30 PM	0	0	2	0	0	0	0	0	0	5	0	0	0	6	0	0	13	128
12:35 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	4	0	0	13	132
12:40 PM	1	0	1	0	0	0	0	0	0	6	1	0	1	4	0	0	14	135
12:45 PM	1	0	0	0	0	0	0	0	0	6	0	0	1	9	0	0	17	136
12:50 PM	0	0	1	0	0	0	0	0	0	3	0	0	1	4	0	0	9	142
12:55 PM	1	0	0	0	0	0	0	0	0	6	0	0	1	7	0	0	15	147
1:00 PM	0	0	1	0	0	0	0	0	0	8	1	0	1	4	0	0	15	147
1:05 PM	0	0	0	0	0	0	0	0	0	4	1	0	1	4	0	0	10	155
1:10 PM	1	0	2	0	0	0	0	0	0	7	0	0	2	8	0	0	20	169
1:15 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	0	10	166
1:20 PM	1	0	0	0	0	0	0	0	0	4	0	0	1	9	0	0	15	168
1:25 PM	0	0	1	0	0	0	0	0	0	9	0	0	0	9	0	0	19	170
1:30 PM	0	0	0	0	0	0	0	0	0	8	0	0	0	4	0	0	12	169
1:35 PM	0	0	1	0	0	0	0	0	0	10	0	0	1	5	0	0	17	173
1:40 PM	0	0	0	0	0	0	0	0	0	8	0	0	0	6	0	0	14	173
1:45 PM	0	0	2	0	0	0	0	0	0	7	0	0	1	10	0	0	20	176
1:50 PM	0	0	1	0	0	0	0	0	0	5	0	0	2	11	0	0	19	186
1:55 PM	0	0	2	0	0	0	0	0	0	7	0	0	1	3	0	0	13	184
2:00 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	10	179
2:05 PM	1	0	0	0	0	0	0	0	0	4	0	0	2	9	0	0	16	185
2:10 PM	1	0	0	0	0	0	0	0	0	7	0	0	2	10	0	0	20	185
2:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	1	14	0	0	18	193
2:20 PM	2	0	0	0	0	0	0	0	0	6	0	0	1	6	0	0	15	193
2:25 PM	2	0	1	0	0	0	0	0	0	6	0	0	2	6	0	0	17	191
2:30 PM	0	0	0	0	0	0	0	0	0	9	1	0	1	9	0	0	20	199
2:35 PM	1	0	1	0	0	0	0	0	0	7	1	0	3	14	0	0	27	209
2:40 PM	0	0	0	0	0	0	0	0	0	2	3	0	3	14	0	0	22	217
2:45 PM	0	0	0	0	0	0	0	0	0	7	2	0	2	14	0	0	25	222
2:50 PM	2	0	1	0	0	0	0	0	0	6	1	0	3	8	0	0	21	224
2:55 PM	0	0	3	0	0	0	0	0	0	5	0	0	3	13	0	0	24	235
3:00 PM	1	0	0	0	0	0	0	0	0	8	3	0	2	19	0	0	33	258
3:05 PM	0	0	1	0	0	0	0	0	0	9	0	0	1	13	0	0	24	266
3:10 PM	0	0	1	0	0	0	0	0	0	6	0	0	3	15	0	0	25	271
3:15 PM	2	0	0	0	0	0	0	0	0	18	6	0	1	15	0	0	42	295
3:20 PM	4	0	3	0	0	0	0	0	0	17	12	0	2	9	0	0	47	327
3:25 PM	3	0	5	0	0	0	0	0	0	12	2	0	2	14	0	0	38	348
3:30 PM	2	0	8	0	0	0	0	0	0	5	0	0	3	12	0	0	30	358
3:35 PM	1	0	2	0	0	0	0	0	0	8	0	0	2	16	0	0	29	360
3:40 PM	1	0	0	0	0	0	0	0	0	4	2	0	0	8	0	0	15	353
3:45 PM	0	0	0	0	0	0	0	0	0	6	0	0	4	12	0	0	22	350
3:50 PM	1	0	1	0	0	0	0	0	0	5	2	0	2	9	0	0	20	349
3:55 PM	0	0	1	0	0	0	0	0	0	11	1	0	2	11	0	0	26	351
4:00 PM	0	0	1	0	0	0	0	0	0	15	0	0	3	4	0	0	23	341
4:05 PM	2	0	0	0	0	0	0	0	0	10	1	0	0	13	0	0	26	343
4:10 PM	0	0	1	0	0	0	0	0	0	6	0	0	1	5	0	0	13	331
4:15 PM	0	0	1	0	0	0	0	0	0	14	2	0	1	10	0	0	28	317
4:20 PM	1	0	0	0	0	0	0	0	0	9	0	0	2	2	0	0	14	284
4:25 PM	1	0	2	0	0	0	0	0	0	7	0	0	1	10	0	0	21	267

5-Min Count Period Beginning At	Cary St (Northbound)				Cary St (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	0	0	2	0	0	0	0	0	0	6	0	0	1	13	0	0	22	259
4:35 PM	0	0	1	0	0	0	0	0	0	6	0	0	3	5	0	0	15	245
4:40 PM	0	0	1	0	0	0	0	0	0	5	0	0	0	21	0	0	27	257
4:45 PM	1	0	1	0	0	0	0	0	0	11	0	0	1	7	0	0	21	256
4:50 PM	1	0	1	0	0	0	0	0	0	9	1	0	0	3	0	0	15	251
4:55 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	7	0	0	9	234
5:00 PM	0	0	1	0	0	0	0	0	0	6	0	0	1	9	0	0	17	228
5:05 PM	0	0	2	0	0	0	0	0	0	9	2	0	0	13	0	0	26	228
5:10 PM	0	0	0	0	0	0	0	0	0	9	0	0	2	7	0	0	18	233
5:15 PM	0	0	0	0	0	0	0	0	0	7	1	0	1	9	0	0	18	223
5:20 PM	1	0	0	0	0	0	0	0	0	5	0	0	3	13	0	0	22	231
5:25 PM	0	0	0	0	0	0	0	0	0	7	0	0	2	9	0	0	18	228
5:30 PM	0	0	2	0	0	0	0	0	0	7	0	0	2	11	0	0	22	228
5:35 PM	0	0	2	0	0	0	0	0	0	8	0	0	2	8	0	0	20	233
5:40 PM	0	0	1	0	0	0	0	0	0	3	0	0	1	7	0	0	12	218
5:45 PM	0	0	0	0	0	0	0	0	0	6	2	0	2	7	0	0	17	214
5:50 PM	0	0	1	0	0	0	0	0	0	6	1	0	0	7	0	0	15	214
5:55 PM	0	0	0	0	0	0	0	0	0	9	1	0	2	8	0	0	20	225
6:00 PM	0	0	1	0	0	0	0	0	0	1	0	0	2	10	0	0	14	222
6:05 PM	0	0	0	0	0	0	0	0	0	4	0	0	1	6	0	0	11	207
6:10 PM	0	0	0	0	0	0	0	0	0	4	1	0	0	10	0	0	15	204
6:15 PM	0	0	0	0	0	0	0	0	0	5	1	0	0	11	0	0	17	203
6:20 PM	0	0	1	0	0	0	0	0	0	5	0	0	1	4	0	0	11	192
6:25 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7	181
6:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	3	12	0	0	16	175
6:35 PM	0	0	1	0	0	0	0	0	0	5	0	0	3	10	0	0	19	174
6:40 PM	0	0	1	0	0	0	0	0	0	5	0	0	1	8	0	0	15	177
6:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	4	0	0	6	166
6:50 PM	0	0	0	0	0	0	0	0	0	3	0	0	1	5	0	0	9	160
6:55 PM	0	0	1	0	0	0	0	0	0	4	0	0	0	6	0	0	11	151
7:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7	144
7:05 PM	0	0	0	0	0	0	0	0	0	4	0	0	2	8	0	0	14	147
7:10 PM	1	0	0	0	0	0	0	0	0	4	0	0	2	5	0	0	12	144
7:15 PM	0	0	1	0	0	0	0	0	0	8	0	0	2	3	0	0	14	141
7:20 PM	0	0	1	0	0	0	0	0	0	4	1	0	0	3	0	0	9	139
7:25 PM	1	0	0	0	0	0	0	0	0	5	0	0	1	3	0	0	10	142
7:30 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	3	0	0	9	135
7:35 PM	0	0	1	0	0	0	0	0	0	4	0	0	1	3	0	0	9	125
7:40 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	0	9	119
7:45 PM	0	0	1	0	0	0	0	0	0	3	0	0	0	3	0	0	7	120
7:50 PM	0	0	1	0	0	0	0	0	0	3	0	0	2	1	0	0	7	118
7:55 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	3	0	0	5	112
8:00 PM	0	0	1	0	0	0	0	0	0	6	0	0	0	4	0	0	11	116
8:05 PM	1	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	7	109
8:10 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	8	105
8:15 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	3	94
8:20 PM	0	0	0	0	0	0	0	0	0	5	0	0	1	1	0	0	7	92
8:25 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	0	10	92
8:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	86
8:35 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	4	0	0	7	84
8:40 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	8	83
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	79
8:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	73
8:55 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	3	0	0	5	73
9:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3	65
9:05 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	4	62
9:10 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5	59
9:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	59
9:20 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	7	59
9:25 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5	54
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	55
9:35 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	4	52
9:40 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	47
9:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	3	0	0	5	49
9:50 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4	52
9:55 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6	53

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	36	0	32	0	0	0	0	0	0	188	80	0	20	152	0	0	508
Heavy Trucks	0	0	0		0	0	0		0	0	4		0	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

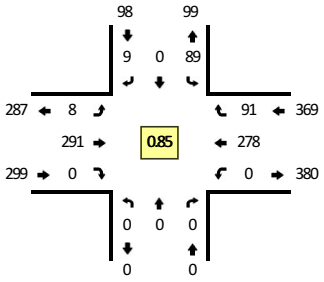
Type of peak hour being reported: Intersection Peak

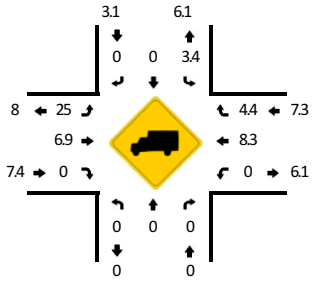
Method for determining peak hour: Total Entering Volume

LOCATION: Abraham Ave -- OR 42
CITY/STATE: Winston, OR

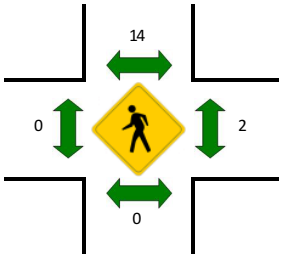
QC JOB #: 15385309
DATE: Thu, Sep 16 2021

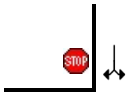
Peak-Hour: 2:40 PM -- 3:40 PM
Peak 15-Min: 2:55 PM -- 3:10 PM

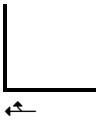


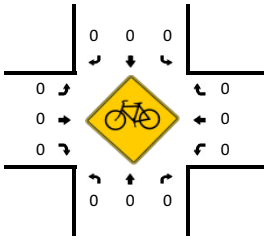


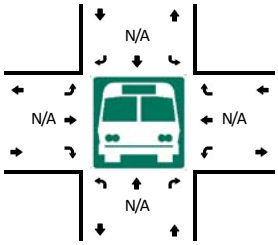
Quality Counts
DATA THAT DRIVES COMMUNITIES

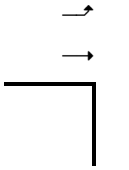


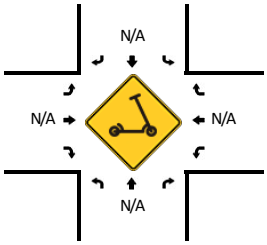












5-Min Count Period Beginning At	Abraham Ave (Northbound)				Abraham Ave (Southbound)				OR 42 (Eastbound)				OR 42 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	6	2	0	15	
6:05 AM	0	0	0	0	1	0	0	0	0	6	0	0	0	6	0	0	13	
6:10 AM	0	0	0	0	1	0	0	0	0	11	0	0	0	6	0	0	18	
6:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6	
6:20 AM	0	0	0	0	2	0	0	0	0	9	0	0	0	5	1	0	17	
6:25 AM	0	0	0	0	1	0	1	0	2	18	0	0	0	8	0	0	30	
6:30 AM	0	0	0	0	1	0	0	0	0	13	0	0	0	8	0	0	22	
6:35 AM	0	0	0	0	6	0	1	0	1	10	0	0	0	11	3	0	32	
6:40 AM	0	0	0	0	3	0	0	0	0	10	0	0	0	17	0	0	30	
6:45 AM	0	0	0	0	3	0	0	0	0	13	0	0	0	10	1	0	27	
6:50 AM	0	0	0	0	2	0	1	0	1	14	0	0	0	23	4	0	45	
6:55 AM	0	0	0	0	5	0	1	0	0	23	0	0	0	29	0	0	58	313
7:00 AM	0	0	0	0	5	0	4	0	4	29	0	0	0	29	1	0	72	370
7:05 AM	0	0	0	0	3	0	3	0	1	35	0	0	0	29	0	0	71	428
7:10 AM	0	0	0	0	3	0	0	0	3	31	0	0	0	22	2	0	61	471
7:15 AM	0	0	0	0	6	0	0	0	0	29	0	0	0	13	2	0	50	515
7:20 AM	0	0	0	0	3	0	0	0	0	25	0	0	0	17	8	0	53	551
7:25 AM	0	0	0	0	3	0	0	0	0	20	0	0	0	14	3	0	40	561
7:30 AM	0	0	0	0	2	0	1	0	0	14	0	0	0	9	1	0	27	566
7:35 AM	0	0	0	0	7	0	0	0	0	12	0	0	0	11	3	0	33	567
7:40 AM	0	0	0	0	4	0	2	0	0	15	0	0	0	11	6	0	38	575
7:45 AM	0	0	0	0	2	0	1	0	0	24	0	0	0	12	5	0	44	592
7:50 AM	0	0	0	0	5	0	0	0	0	20	0	0	0	12	9	0	46	593
7:55 AM	0	0	0	0	2	0	0	0	0	19	0	0	0	13	19	0	53	588
8:00 AM	0	0	0	0	8	0	1	0	0	10	0	0	0	9	11	0	39	555
8:05 AM	0	0	0	0	8	0	0	0	1	14	0	0	0	12	11	0	46	530
8:10 AM	0	0	0	0	18	0	1	0	0	21	0	0	0	10	2	0	52	521
8:15 AM	0	0	0	0	10	0	0	0	1	14	0	0	0	14	2	0	41	512
8:20 AM	0	0	0	0	14	0	1	0	0	17	0	0	0	12	1	0	45	504
8:25 AM	0	0	0	0	9	0	2	0	0	15	0	0	0	13	3	0	42	506
8:30 AM	0	0	0	0	5	0	0	0	0	19	0	0	0	14	1	0	39	518
8:35 AM	0	0	0	0	6	0	0	0	0	19	0	0	0	8	1	0	34	519
8:40 AM	0	0	0	0	5	0	0	0	0	17	0	0	0	9	0	0	31	512
8:45 AM	0	0	0	0	8	0	1	0	0	19	0	0	0	13	4	0	45	513
8:50 AM	0	0	0	0	5	0	0	0	1	9	0	0	0	8	4	0	27	494
8:55 AM	0	0	0	0	5	0	0	0	0	13	0	0	0	8	4	0	30	471
9:00 AM	0	0	0	0	6	0	1	0	0	9	0	0	0	15	4	0	35	467
9:05 AM	0	0	0	0	6	0	0	0	0	19	0	0	0	12	2	0	39	460
9:10 AM	0	0	0	0	4	0	0	0	0	17	0	0	0	21	3	0	45	453

5-Min Count Period Beginning At	Abraham Ave (Northbound)				Abraham Ave (Southbound)				OR 42 (Eastbound)				OR 42 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	0	0	0	0	2	0	0	0	0	10	0	0	0	11	5	0	28	440
9:20 AM	0	0	0	0	2	0	1	0	0	12	0	0	0	13	1	0	29	424
9:25 AM	0	0	0	0	4	0	0	0	0	13	0	0	0	12	0	0	29	411
9:30 AM	0	0	0	0	6	0	0	0	0	17	0	0	0	14	2	0	39	411
9:35 AM	0	0	0	0	3	0	2	0	0	16	0	0	0	8	4	0	33	410
9:40 AM	0	0	0	0	3	0	0	0	1	24	0	0	0	12	1	0	41	420
9:45 AM	0	0	0	0	1	0	0	0	1	11	0	0	0	20	0	0	33	408
9:50 AM	0	0	0	0	2	0	0	0	2	20	0	0	0	9	5	0	38	419
9:55 AM	0	0	0	0	7	0	0	0	1	13	0	0	0	11	5	0	37	426
10:00 AM	0	0	0	0	2	0	0	0	1	17	0	0	0	21	2	0	43	434
10:05 AM	0	0	0	0	9	0	0	0	0	22	0	0	0	12	4	0	47	442
10:10 AM	0	0	0	0	3	0	0	0	0	14	0	0	0	14	4	0	35	432
10:15 AM	0	0	0	0	5	0	1	0	0	25	0	0	0	14	5	0	50	454
10:20 AM	0	0	0	0	4	0	0	0	0	21	0	0	0	14	3	0	42	467
10:25 AM	0	0	0	0	8	0	0	0	0	21	0	0	0	19	1	0	49	487
10:30 AM	0	0	0	0	5	0	0	0	0	20	0	0	0	8	6	0	39	487
10:35 AM	0	0	0	0	6	0	0	0	0	28	0	0	0	15	3	0	52	506
10:40 AM	0	0	0	0	3	0	0	0	0	14	0	0	0	15	7	0	39	504
10:45 AM	0	0	0	0	6	0	0	0	0	14	0	0	0	14	4	0	38	509
10:50 AM	0	0	0	0	5	0	0	0	0	11	0	0	0	12	3	0	31	502
10:55 AM	0	0	0	0	8	0	0	0	0	28	0	0	0	20	3	0	59	524
11:00 AM	0	0	0	0	4	0	0	0	0	14	0	0	0	15	5	0	38	519
11:05 AM	0	0	0	0	4	0	0	0	0	8	0	0	0	10	3	0	25	497
11:10 AM	0	0	0	0	3	0	0	0	0	20	0	0	0	15	7	0	45	507
11:15 AM	0	0	0	0	3	0	0	0	1	18	0	0	0	18	3	0	43	500
11:20 AM	0	0	0	0	8	0	0	0	0	21	0	0	0	13	7	0	49	507
11:25 AM	0	0	0	0	3	0	0	0	0	14	0	0	0	23	1	0	41	499
11:30 AM	0	0	0	0	5	0	0	0	2	33	0	0	0	14	2	0	56	516
11:35 AM	0	0	0	0	5	0	0	0	1	17	0	0	0	17	2	0	42	506
11:40 AM	0	0	0	0	4	0	0	0	0	18	0	0	0	12	3	0	37	504
11:45 AM	0	0	0	0	6	0	0	0	0	12	0	0	0	27	3	0	48	514
11:50 AM	0	0	0	0	7	0	0	0	0	17	0	0	0	20	5	0	49	532
11:55 AM	0	0	0	0	6	0	0	0	0	27	0	0	0	15	3	0	51	524
12:00 PM	0	0	0	0	5	0	0	0	0	18	0	0	0	14	2	0	39	525
12:05 PM	0	0	0	0	5	0	0	0	0	26	0	0	0	16	2	0	49	549
12:10 PM	0	0	0	0	4	0	0	0	0	17	0	0	0	22	4	0	47	551
12:15 PM	0	0	0	0	0	0	0	0	1	23	0	0	0	10	3	0	37	545
12:20 PM	0	0	0	0	5	0	0	0	0	18	0	0	0	22	5	0	50	546
12:25 PM	0	0	0	0	2	0	0	0	0	12	0	0	0	16	3	0	33	538
12:30 PM	0	0	0	0	7	0	0	0	1	31	0	0	0	12	5	0	56	538
12:35 PM	0	0	0	0	4	0	0	0	0	9	0	0	0	20	4	0	37	533
12:40 PM	0	0	0	0	7	0	0	0	0	15	0	0	0	28	7	0	57	553
12:45 PM	0	0	0	0	9	0	0	0	0	25	0	0	0	21	5	0	60	565
12:50 PM	0	0	0	0	2	0	0	0	0	25	0	0	0	15	5	0	47	563
12:55 PM	0	0	0	0	8	0	0	0	0	17	0	0	0	15	5	0	45	557
1:00 PM	0	0	0	0	5	0	0	0	0	23	0	0	0	22	3	0	53	571
1:05 PM	0	0	0	0	4	0	0	0	1	9	0	0	0	22	5	0	41	563
1:10 PM	0	0	0	0	4	0	0	0	0	8	0	0	0	18	5	0	35	551
1:15 PM	0	0	0	0	0	0	0	0	2	20	0	0	0	16	2	0	40	554
1:20 PM	0	0	0	0	6	0	0	0	0	24	0	0	0	19	7	0	56	560
1:25 PM	0	0	0	0	3	0	0	0	0	17	0	0	0	24	2	0	46	573
1:30 PM	0	0	0	0	3	0	0	0	0	12	0	0	0	17	1	1	34	551
1:35 PM	0	0	0	0	7	0	0	0	0	20	0	0	0	14	5	0	46	560
1:40 PM	0	0	0	0	7	0	0	0	0	21	0	0	0	14	4	0	46	549
1:45 PM	0	0	0	0	5	0	0	0	0	15	0	0	0	21	4	0	45	534
1:50 PM	0	0	0	0	5	0	0	0	1	28	0	0	0	30	2	0	66	553
1:55 PM	0	0	0	0	8	0	0	0	0	14	0	0	0	15	6	0	43	551
2:00 PM	0	0	0	0	6	0	0	0	1	25	0	0	0	14	5	0	51	549
2:05 PM	0	0	0	0	5	0	2	0	0	18	0	0	0	19	4	0	48	556
2:10 PM	0	0	0	0	7	0	0	0	0	16	0	0	0	20	3	0	46	567
2:15 PM	0	0	0	0	6	0	0	0	0	27	0	0	0	17	4	0	54	581
2:20 PM	0	0	0	0	3	0	1	0	0	12	0	0	0	16	6	0	38	563
2:25 PM	0	0	0	0	7	0	0	0	1	17	0	0	0	21	4	0	50	567
2:30 PM	0	0	0	0	2	0	2	0	0	25	0	0	0	24	3	0	56	589
2:35 PM	0	0	0	0	4	0	0	0	0	15	0	0	0	27	7	0	53	596
2:40 PM	0	0	0	0	6	0	2	0	0	21	0	0	0	30	7	0	66	616
2:45 PM	0	0	0	0	6	0	0	0	0	22	0	0	0	23	5	0	56	627
2:50 PM	0	0	0	0	8	0	0	0	0	19	0	0	0	23	5	0	55	616
2:55 PM	0	0	0	0	4	0	2	0	3	42	0	0	0	26	13	0	90	663
3:00 PM	0	0	0	0	5	0	1	0	3	38	0	0	0	17	10	0	74	686
3:05 PM	0	0	0	0	6	0	0	0	1	17	0	0	0	24	12	0	60	698
3:10 PM	0	0	0	0	4	0	2	0	0	29	0	0	0	23	7	0	65	717
3:15 PM	0	0	0	0	10	0	0	0	1	26	0	0	0	16	5	0	58	721
3:20 PM	0	0	0	0	18	0	1	0	0	26	0	0	0	13	7	0	65	748
3:25 PM	0	0	0	0	10	0	0	0	0	13	0	0	0	34	6	0	63	761
3:30 PM	0	0	0	0	8	0	0	0	0	11	0	0	0	23	9	0	51	756
3:35 PM	0	0	0	0	4	0	1	0	0	27	0	0	0	26	5	0	63	766
3:40 PM	0	0	0	0	5	0	1	0	0	16	0	0	0	19	12	0	53	753
3:45 PM	0	0	0	0	9	0	0	0	0	20	0	0	0	20	4	0	53	750
3:50 PM	0	0	0	0	5	0	0	0	0	29	0	0	0	27	9	0	70	765
3:55 PM	0	0	0	0	8	0	1	0	0	17	0	0	0	33	8	0	67	742
4:00 PM	0	0	0	0	5	0	1	0	1	33	0	0	0	25	7	0	72	740
4:05 PM	0	0	0	0	8	0	0	0	0	15	0	0	0	26	3	0	52	732
4:10 PM	0	0	0	0	2	0	0	0	2	24	0	0	0	23	6	0	57	724
4:15 PM	0	0	0	0	5	0	0	0	0	30	0	0	0	36	1	0	72	738
4:20 PM	0	0	0	0	10	0	0	0	0	14	0	0	0	19	6	0	49	722
4:25 PM	0	0	0	0	8	0	0	0	0	20	0	0	0	28	4	0	60	719

5-Min Count Period Beginning At	Abraham Ave (Northbound)				Abraham Ave (Southbound)				OR 42 (Eastbound)				OR 42 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	0	0	0	0	9	0	0	0	1	19	0	0	0	21	5	0	55	723
4:35 PM	0	0	0	0	6	0	1	0	0	14	0	0	0	18	9	0	48	708
4:40 PM	0	0	0	0	6	0	0	0	0	21	0	0	0	27	13	0	67	722
4:45 PM	0	0	0	0	8	0	1	0	1	9	0	0	0	14	6	0	39	708
4:50 PM	0	0	0	0	8	0	0	0	0	20	0	0	0	25	4	0	57	695
4:55 PM	0	0	0	0	4	0	0	0	1	25	0	0	0	18	5	0	53	681
5:00 PM	0	0	0	0	4	0	0	0	0	23	0	0	0	25	4	0	56	665
5:05 PM	0	0	0	0	2	0	1	0	2	20	0	0	0	22	7	0	54	667
5:10 PM	0	0	0	0	6	0	0	0	0	19	0	0	0	21	6	0	52	662
5:15 PM	0	0	0	0	7	0	0	0	1	16	0	0	0	22	8	0	54	644
5:20 PM	0	0	0	0	5	0	0	0	0	11	0	0	0	31	7	0	54	649
5:25 PM	0	0	0	0	1	0	0	0	1	27	0	0	0	32	4	0	65	654
5:30 PM	0	0	0	0	3	0	3	0	0	20	0	0	0	31	4	0	61	660
5:35 PM	0	0	0	0	4	0	0	0	1	13	0	0	0	26	7	0	51	663
5:40 PM	0	0	0	0	6	0	0	0	0	16	0	0	0	27	8	0	57	653
5:45 PM	0	0	0	0	3	0	0	0	1	20	0	0	0	19	3	0	46	660
5:50 PM	0	0	0	0	6	0	0	0	0	12	0	0	0	18	3	0	39	642
5:55 PM	0	0	0	0	1	0	0	0	0	15	0	0	0	22	8	0	46	635
6:00 PM	0	0	0	0	3	0	1	0	0	10	0	0	0	18	7	0	39	618
6:05 PM	0	0	0	0	3	0	0	0	0	14	0	0	0	20	9	0	46	610
6:10 PM	0	0	0	0	3	0	1	0	1	13	0	0	0	12	5	0	35	593
6:15 PM	0	0	0	0	9	0	1	0	1	12	0	0	0	16	5	0	44	583
6:20 PM	0	0	0	0	1	0	2	0	0	8	0	0	0	17	6	0	34	563
6:25 PM	0	0	0	0	5	0	0	0	2	8	0	0	0	23	4	0	42	540
6:30 PM	0	0	0	0	5	0	0	0	1	7	0	0	0	21	9	0	43	522
6:35 PM	0	0	0	0	3	0	0	0	0	8	0	0	0	20	2	0	33	504
6:40 PM	0	0	0	0	7	0	1	0	0	8	0	0	0	21	3	0	40	487
6:45 PM	0	0	0	0	6	0	0	0	0	7	0	0	0	9	5	0	27	468
6:50 PM	0	0	0	0	5	0	0	0	0	10	0	0	0	9	1	0	25	454
6:55 PM	0	0	0	0	4	0	2	0	0	14	0	0	0	19	6	0	45	453
7:00 PM	0	0	0	0	6	0	0	0	0	6	0	0	0	15	5	0	32	446
7:05 PM	0	0	0	0	4	0	0	0	0	12	0	0	0	17	3	0	36	436
7:10 PM	0	0	0	0	2	0	0	0	1	9	0	0	0	17	3	0	32	433
7:15 PM	0	0	0	0	4	0	1	0	0	12	0	0	0	9	5	0	31	420
7:20 PM	0	0	0	0	2	0	0	0	0	12	0	0	0	9	5	0	28	414
7:25 PM	0	0	0	0	2	0	0	0	0	7	0	0	0	20	5	0	34	406
7:30 PM	0	0	0	0	1	0	0	0	0	8	0	0	0	15	3	0	27	390
7:35 PM	0	0	0	0	3	0	0	0	0	1	0	0	0	11	1	0	16	373
7:40 PM	0	0	0	0	2	0	0	0	0	11	0	0	0	10	3	0	26	359
7:45 PM	0	0	0	0	1	0	0	0	0	11	0	0	0	9	2	0	23	355
7:50 PM	0	0	0	0	2	0	1	0	0	8	0	0	0	13	3	0	27	357
7:55 PM	0	0	0	0	1	0	0	0	2	7	0	0	0	12	2	0	24	336
8:00 PM	0	0	0	0	1	0	1	0	0	6	0	0	0	6	5	0	19	323
8:05 PM	0	0	0	0	3	0	0	0	0	10	0	0	0	8	2	0	23	310
8:10 PM	0	0	0	0	0	0	0	0	0	7	0	0	0	13	2	0	22	300
8:15 PM	0	0	0	0	2	0	0	0	0	6	0	0	0	6	0	0	14	283
8:20 PM	0	0	0	0	1	0	0	0	1	7	0	0	0	10	3	0	22	277
8:25 PM	0	0	0	0	0	0	1	0	0	8	0	0	0	6	3	0	18	261
8:30 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	9	2	0	20	254
8:35 PM	0	0	0	0	0	0	1	0	0	7	0	0	0	9	3	0	20	258
8:40 PM	0	0	0	0	1	0	0	0	0	8	0	0	0	6	2	0	17	249
8:45 PM	0	0	0	0	4	0	0	0	0	12	0	0	0	8	2	0	26	252
8:50 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	0	10	235
8:55 PM	0	0	0	0	1	0	0	0	0	6	0	0	0	8	2	0	17	228
9:00 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	6	2	0	12	221
9:05 PM	0	0	0	0	2	0	0	0	0	2	0	0	0	5	3	0	12	210
9:10 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	3	0	0	7	195
9:15 PM	0	0	0	0	1	0	1	0	0	4	0	0	0	5	0	0	11	192
9:20 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	10	180
9:25 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7	169
9:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5	154
9:35 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	0	2	0	8	142
9:40 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6	131
9:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	13	1	0	16	121
9:50 PM	0	0	0	0	0	0	0	0	1	2	0	0	0	4	0	0	7	118
9:55 PM	0	0	0	0	0	0	1	0	0	3	0	0	0	3	2	0	9	110

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	60	0	12	0	28	388	0	0	0	268	140	0	896
Heavy Trucks	0	0	0		0	0	0		8	48	0		0	20	0		76
Buses																	
Pedestrians		0				44				0				8			52
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

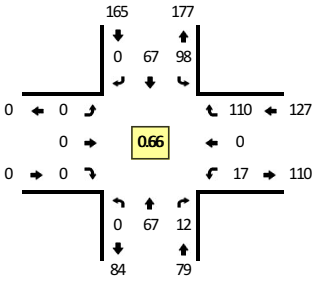
Type of peak hour being reported: Intersection Peak

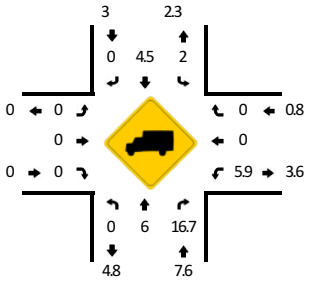
Method for determining peak hour: Total Entering Volume

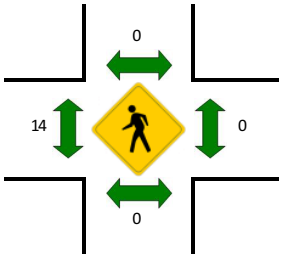
LOCATION: Abraham Ave -- Lookingglass Rd
CITY/STATE: Winston, OR

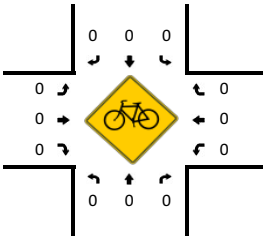
QC JOB #: 15385310
DATE: Thu, Sep 16 2021

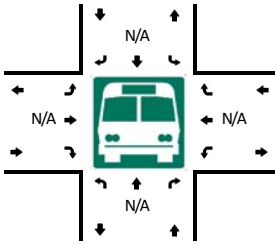
Peak-Hour: 2:40 PM -- 3:40 PM
Peak 15-Min: 3:15 PM -- 3:30 PM

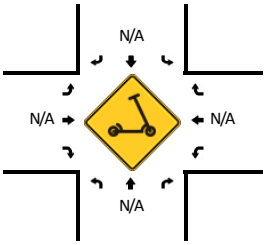












5-Min Count Period Beginning At	Abraham Ave (Northbound)				Abraham Ave (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
6:05 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3	
6:10 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
6:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	
6:20 AM	0	0	1	0	3	0	0	0	0	0	0	0	0	0	2	0	6	
6:25 AM	0	0	2	0	3	2	0	0	0	0	0	0	0	0	0	0	7	
6:30 AM	0	0	0	0	4	1	0	0	0	0	0	0	0	0	2	0	7	
6:35 AM	0	2	0	0	5	5	0	0	0	0	0	0	0	0	1	0	13	
6:40 AM	0	0	1	0	1	4	0	0	0	0	0	0	0	0	0	0	6	
6:45 AM	0	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	5	
6:50 AM	0	3	0	0	2	4	0	0	0	0	0	0	0	0	2	0	11	
6:55 AM	0	1	1	0	3	2	0	0	0	0	0	0	1	0	2	0	10	73
7:00 AM	0	1	0	0	2	4	0	0	0	0	0	0	1	0	1	0	9	80
7:05 AM	0	0	2	0	7	1	0	0	0	0	0	0	0	0	4	0	14	91
7:10 AM	0	3	0	0	4	2	0	0	0	0	0	0	0	0	1	0	10	100
7:15 AM	0	1	1	0	6	5	0	0	0	0	0	0	0	0	2	0	15	113
7:20 AM	0	7	2	0	1	2	0	0	0	0	0	0	0	0	6	0	18	125
7:25 AM	0	2	1	0	3	1	0	0	0	0	0	0	0	0	5	0	12	130
7:30 AM	0	1	1	0	1	1	0	0	0	0	0	0	0	0	2	0	6	129
7:35 AM	0	2	1	0	5	5	0	0	0	0	0	0	0	0	7	0	20	136
7:40 AM	0	6	1	0	2	0	0	0	0	0	0	0	0	0	5	0	14	144
7:45 AM	0	3	0	0	5	2	0	0	0	0	0	0	1	0	10	0	21	160
7:50 AM	0	9	0	0	4	1	0	0	0	0	0	0	0	0	6	0	20	169
7:55 AM	0	18	0	0	4	3	0	0	0	0	0	0	1	0	18	0	44	203
8:00 AM	0	11	2	0	12	7	0	0	0	0	0	0	0	0	18	0	50	244
8:05 AM	0	10	0	0	19	13	0	0	0	0	0	0	0	0	6	0	48	278
8:10 AM	0	5	1	0	17	15	0	0	0	0	0	0	0	0	14	0	52	320
8:15 AM	0	1	0	0	10	8	0	0	0	0	0	0	0	0	1	0	20	325
8:20 AM	0	0	0	0	12	9	0	0	0	0	0	0	0	0	1	0	22	329
8:25 AM	0	0	0	0	5	6	0	0	0	0	0	0	0	0	5	0	16	333
8:30 AM	0	1	0	0	4	2	0	0	0	0	0	0	1	0	1	0	9	336
8:35 AM	0	0	1	0	2	2	0	0	0	0	0	0	2	0	1	0	8	324
8:40 AM	0	1	0	0	3	2	0	0	0	0	0	0	0	0	6	0	12	322
8:45 AM	0	1	0	0	6	5	0	0	0	0	0	0	1	0	3	0	16	317
8:50 AM	0	2	0	0	4	2	0	0	0	0	0	0	0	0	1	0	9	306
8:55 AM	0	2	0	0	7	4	0	0	0	0	0	0	0	0	5	0	18	280
9:00 AM	0	1	0	0	5	3	0	0	0	0	0	0	0	0	3	0	12	242
9:05 AM	0	2	0	0	3	5	0	0	0	0	0	0	1	0	0	0	11	205
9:10 AM	0	2	0	0	2	2	0	0	0	0	0	0	1	0	2	0	9	162

5-Min Count Period Beginning At	Abraham Ave (Northbound)				Abraham Ave (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	0	4	0	0	1	0	0	0	0	0	0	0	0	0	2	0	7	149
9:20 AM	0	1	0	0	3	3	0	0	0	0	0	0	0	0	0	0	7	134
9:25 AM	0	0	1	0	4	1	0	0	0	0	0	0	1	0	1	0	8	126
9:30 AM	0	1	0	0	2	5	0	0	0	0	0	0	1	0	2	0	11	128
9:35 AM	0	1	0	0	2	1	0	0	0	0	0	0	0	0	1	0	5	125
9:40 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	5	118
9:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	5	0	7	109
9:50 AM	0	4	1	0	3	3	0	0	0	0	0	0	0	0	0	0	11	111
9:55 AM	0	4	2	0	3	5	0	0	0	0	0	0	0	0	1	0	15	108
10:00 AM	0	3	0	0	1	1	0	0	0	0	0	0	1	0	1	0	7	103
10:05 AM	0	2	0	0	3	5	0	0	0	0	0	0	2	0	1	0	13	105
10:10 AM	0	4	0	0	2	2	0	0	0	0	0	0	3	0	2	0	13	109
10:15 AM	0	2	0	0	3	2	0	0	0	0	0	0	0	0	1	0	8	110
10:20 AM	0	3	1	0	1	5	0	0	0	0	0	0	1	0	2	0	13	116
10:25 AM	0	2	1	0	3	2	0	0	0	0	0	0	0	0	2	0	10	118
10:30 AM	0	3	1	0	3	3	0	0	0	0	0	0	0	0	4	0	14	121
10:35 AM	0	4	1	0	5	4	0	0	0	0	0	0	1	0	3	0	18	134
10:40 AM	0	4	0	0	1	2	0	0	0	0	0	0	1	0	1	0	9	138
10:45 AM	0	2	1	0	4	3	0	0	0	0	0	0	0	0	2	0	12	143
10:50 AM	0	2	0	0	5	3	0	0	0	0	0	0	1	0	5	0	16	148
10:55 AM	0	1	2	0	0	6	0	0	0	0	0	0	0	0	3	0	12	145
11:00 AM	0	3	2	0	1	2	0	0	0	0	0	0	3	0	1	0	12	150
11:05 AM	0	3	0	0	6	0	0	0	0	0	0	0	1	0	3	0	13	150
11:10 AM	0	2	2	0	2	2	0	0	0	0	0	0	1	0	4	0	13	150
11:15 AM	0	4	2	0	0	3	0	0	0	0	0	0	0	0	2	0	11	153
11:20 AM	0	5	1	0	1	3	0	0	0	0	0	0	0	0	2	0	12	152
11:25 AM	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	8	150
11:30 AM	0	2	0	0	4	2	0	0	0	0	0	0	0	0	1	0	9	145
11:35 AM	0	1	1	0	1	6	0	0	0	0	0	0	0	0	2	0	11	138
11:40 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	4	133
11:45 AM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	3	0	9	130
11:50 AM	0	2	0	0	0	4	0	0	0	0	0	0	1	0	2	0	9	123
11:55 AM	0	4	0	0	1	4	0	0	0	0	0	0	2	0	1	0	12	123
12:00 PM	0	0	1	0	0	4	0	0	0	0	0	0	0	0	5	0	10	121
12:05 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	4	0	7	115
12:10 PM	0	2	1	0	1	1	0	0	0	0	0	0	1	0	0	0	6	108
12:15 PM	0	1	1	0	3	3	0	0	0	0	0	0	0	0	3	0	11	108
12:20 PM	0	2	0	0	4	4	0	0	0	0	0	0	0	0	1	0	11	107
12:25 PM	0	2	0	0	5	0	0	0	0	0	0	0	0	0	3	0	10	109
12:30 PM	0	3	0	0	3	6	0	0	0	0	0	0	0	0	3	0	15	115
12:35 PM	0	3	1	0	4	3	0	0	0	0	0	0	1	0	4	0	16	120
12:40 PM	0	2	0	0	3	3	0	0	0	0	0	0	0	0	0	0	8	124
12:45 PM	0	4	0	0	5	4	0	0	0	0	0	0	2	0	6	0	21	136
12:50 PM	0	7	1	0	0	2	0	0	0	0	0	0	0	0	1	0	11	138
12:55 PM	0	1	0	0	3	2	0	0	0	0	0	0	1	0	3	0	10	136
1:00 PM	0	1	0	0	2	3	0	0	0	0	0	0	1	0	2	0	9	135
1:05 PM	0	3	2	0	2	2	0	0	0	0	0	0	1	0	3	0	13	141
1:10 PM	0	3	1	0	5	2	0	0	0	0	0	0	1	0	4	0	16	151
1:15 PM	0	2	1	0	0	1	0	0	0	0	0	0	0	0	1	0	5	145
1:20 PM	0	2	2	0	5	5	0	0	0	0	0	0	0	0	3	0	17	151
1:25 PM	0	2	1	0	4	5	0	0	0	0	0	0	2	0	5	0	19	160
1:30 PM	0	1	1	0	4	1	0	0	0	0	0	0	0	0	4	0	11	156
1:35 PM	0	3	1	0	4	7	0	0	0	0	0	0	1	0	4	0	20	160
1:40 PM	0	0	1	0	4	5	0	0	0	0	0	0	0	0	2	0	12	164
1:45 PM	0	3	1	0	2	5	0	0	0	0	0	0	0	0	4	0	15	158
1:50 PM	0	2	1	0	2	3	0	0	0	0	0	0	0	0	6	0	14	161
1:55 PM	0	4	0	0	3	3	0	0	0	0	0	0	1	0	6	0	17	168
2:00 PM	0	4	0	0	2	7	0	0	0	0	0	0	0	0	3	0	16	175
2:05 PM	0	2	1	0	1	3	0	0	0	0	0	0	1	0	6	0	14	176
2:10 PM	0	1	1	0	2	4	0	0	0	0	0	0	0	0	7	0	15	175
2:15 PM	0	0	0	0	1	5	0	0	0	0	0	0	1	0	8	0	15	185
2:20 PM	0	4	1	0	2	4	0	0	0	0	0	0	0	0	4	0	15	183
2:25 PM	0	3	0	0	2	4	0	0	0	0	0	0	2	0	7	0	18	182
2:30 PM	0	3	2	0	4	3	0	0	0	0	0	0	0	0	2	0	14	185
2:35 PM	0	1	1	0	5	4	0	0	0	0	0	0	1	0	9	0	21	186
2:40 PM	0	6	0	0	4	7	0	0	0	0	0	0	0	0	10	0	27	201
2:45 PM	0	5	0	0	5	0	0	0	0	0	0	0	2	0	9	0	21	207
2:50 PM	0	3	1	0	3	7	0	0	0	0	0	0	1	0	9	0	24	217
2:55 PM	0	3	1	0	3	3	0	0	0	0	0	0	1	0	4	0	15	215
3:00 PM	0	12	0	0	10	2	0	0	0	0	0	0	2	0	15	0	41	240
3:05 PM	0	9	0	0	6	4	0	0	0	0	0	0	3	0	12	0	34	260
3:10 PM	0	8	3	0	4	2	0	0	0	0	0	0	0	0	9	0	26	271
3:15 PM	0	3	3	0	21	11	0	0	0	0	0	0	2	0	11	0	51	307
3:20 PM	0	5	0	0	24	16	0	0	0	0	0	0	0	0	12	0	57	349
3:25 PM	0	6	0	0	12	7	0	0	0	0	0	0	1	0	7	0	33	364
3:30 PM	0	4	3	0	2	4	0	0	0	0	0	0	2	0	5	0	20	370
3:35 PM	0	3	1	0	4	4	0	0	0	0	0	0	3	0	7	0	22	371
3:40 PM	0	1	0	0	5	3	0	0	0	0	0	0	4	0	7	0	20	364
3:45 PM	0	3	1	0	5	2	0	0	0	0	0	0	1	0	6	0	18	361
3:50 PM	0	4	0	0	8	3	0	0	0	0	0	0	1	0	4	0	20	357
3:55 PM	0	4	0	0	7	6	0	0	0	0	0	0	1	0	4	0	22	364
4:00 PM	0	2	2	0	13	3	0	0	0	0	0	0	1	0	1	0	22	345
4:05 PM	0	2	1	0	6	7	0	0	0	0	0	0	1	0	3	0	20	331
4:10 PM	0	4	0	0	3	1	0	0	0	0	0	0	0	0	4	0	12	317
4:15 PM	0	2	0	0	5	6	0	0	0	0	0	0	0	0	4	0	17	283
4:20 PM	0	5	1	0	4	9	0	0	0	0	0	0	0	0	5	0	24	250
4:25 PM	0	4	2	0	5	4	0	0	0	0	0	0	1	0	5	0	21	238

5-Min Count Period Beginning At	Abraham Ave (Northbound)				Abraham Ave (Southbound)				Lookingglass Rd (Eastbound)				Lookingglass Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	0	2	1	0	3	7	0	0	0	0	0	0	0	0	7	0	20	238
4:35 PM	0	7	0	0	4	5	0	0	0	0	0	0	2	0	3	0	21	237
4:40 PM	0	7	2	0	3	5	0	0	0	0	0	0	0	0	8	0	25	242
4:45 PM	0	4	2	0	6	5	0	0	0	0	0	0	1	0	7	0	25	249
4:50 PM	0	3	2	0	4	6	0	0	0	0	0	0	0	0	2	0	17	246
4:55 PM	0	2	0	0	1	2	0	0	0	0	0	0	2	0	1	0	8	232
5:00 PM	0	3	0	0	4	2	0	0	0	0	0	0	1	0	4	0	14	224
5:05 PM	0	4	0	0	6	4	0	0	0	0	0	0	0	0	8	0	22	226
5:10 PM	0	3	0	0	7	6	0	0	0	0	0	0	2	0	2	0	20	234
5:15 PM	0	6	0	0	5	4	0	0	0	0	0	0	1	0	6	0	22	239
5:20 PM	0	4	1	0	3	2	0	0	0	0	0	0	0	0	8	0	18	233
5:25 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	6	0	10	222
5:30 PM	0	1	0	0	2	2	0	0	0	0	0	0	3	0	2	0	10	212
5:35 PM	0	4	0	0	8	4	0	0	0	0	0	0	1	0	4	0	21	212
5:40 PM	0	2	0	0	2	2	0	0	0	0	0	0	0	0	1	0	7	194
5:45 PM	0	1	1	0	3	2	0	0	0	0	0	0	1	0	2	0	10	179
5:50 PM	0	2	0	0	3	3	0	0	0	0	0	0	0	0	3	0	11	173
5:55 PM	0	2	0	0	3	1	0	0	0	0	0	0	0	0	3	0	9	174
6:00 PM	0	6	1	0	1	5	0	0	0	0	0	0	2	0	3	0	18	178
6:05 PM	0	7	1	0	2	1	0	0	0	0	0	0	0	0	3	0	14	170
6:10 PM	0	2	3	0	3	5	0	0	0	0	0	0	1	0	3	0	17	167
6:15 PM	0	2	1	0	3	6	0	0	0	0	0	0	3	0	5	0	20	165
6:20 PM	0	5	1	0	0	0	0	0	0	0	0	0	1	0	3	0	10	157
6:25 PM	0	2	1	0	4	3	0	0	0	0	0	0	0	0	0	0	10	157
6:30 PM	0	6	1	0	0	3	0	0	0	0	0	0	0	0	6	0	16	163
6:35 PM	0	2	0	0	2	3	0	0	0	0	0	0	1	0	2	0	10	152
6:40 PM	0	2	1	0	4	1	0	0	0	0	0	0	2	0	3	0	13	158
6:45 PM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	4	0	11	159
6:50 PM	0	1	0	0	2	1	0	0	0	0	0	0	1	0	5	0	10	158
6:55 PM	0	4	1	0	1	1	0	0	0	0	0	0	2	0	2	0	11	160
7:00 PM	0	3	0	0	2	1	0	0	0	0	0	0	1	0	3	0	10	152
7:05 PM	0	0	1	0	4	1	0	0	0	0	0	0	1	0	3	0	10	148
7:10 PM	0	3	0	0	1	1	0	0	0	0	0	0	0	0	2	0	7	138
7:15 PM	0	1	2	0	6	3	0	0	0	0	0	0	0	0	3	0	15	133
7:20 PM	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	4	127
7:25 PM	0	0	1	0	3	2	0	0	0	0	0	0	1	0	0	0	7	124
7:30 PM	0	2	0	0	6	0	0	0	0	0	0	0	0	0	1	0	9	117
7:35 PM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	3	0	8	115
7:40 PM	0	1	1	0	3	3	0	0	0	0	0	0	0	0	1	0	9	111
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	101
7:50 PM	0	3	1	0	2	2	0	0	0	0	0	0	0	0	0	0	8	99
7:55 PM	0	2	0	0	3	2	0	0	0	0	0	0	0	0	0	0	7	95
8:00 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	4	89
8:05 PM	0	3	0	0	2	2	0	0	0	0	0	0	0	0	1	0	8	87
8:10 PM	0	1	0	0	2	0	0	0	0	0	0	0	0	0	2	0	5	85
8:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	72
8:20 PM	0	1	2	0	5	0	0	0	0	0	0	0	0	0	0	0	8	76
8:25 PM	0	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	5	74
8:30 PM	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	69
8:35 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	4	65
8:40 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	3	0	6	62
8:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3	64
8:50 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	59
8:55 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	4	56
9:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	1	0	1	0	5	57
9:05 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	1	0	5	54
9:10 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	4	53
9:15 PM	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	55
9:20 PM	0	0	0	0	1	0	0	0	0	0	0	0	2	0	1	0	4	51
9:25 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	48
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	4	48
9:35 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	45
9:40 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	4	43
9:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	3	43
9:50 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	3	43
9:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	41

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	56	12	0	228	136	0	0	0	0	0	0	12	0	120	0	564
Heavy Trucks	0	8	4		4	0	0		0	0	0		0	0	0		16
Buses																	
Pedestrians		0				0				56				0			56
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/27/2021 10:28 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

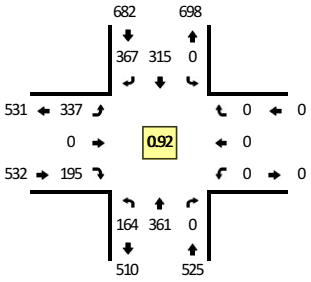
Type of peak hour being reported: Intersection Peak

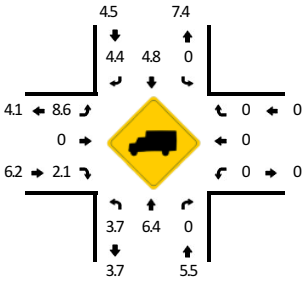
Method for determining peak hour: Total Entering Volume

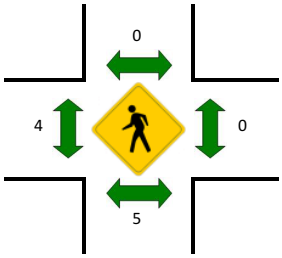
LOCATION: Main St/OR 99 -- OR 42
CITY/STATE: Winston, OR

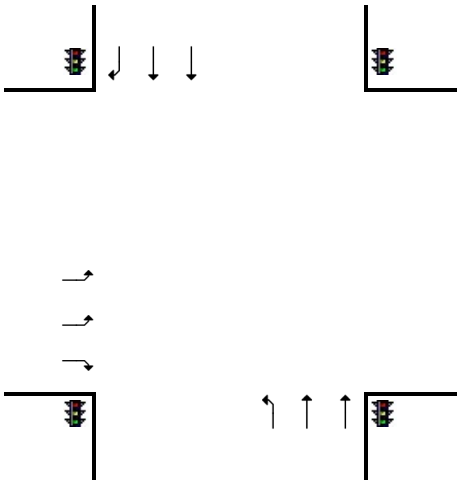
QC JOB #: 15608801
DATE: Tue, Oct 26 2021

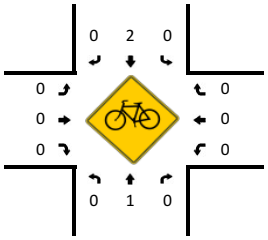
Peak-Hour: 3:10 PM -- 4:10 PM
Peak 15-Min: 3:30 PM -- 3:45 PM

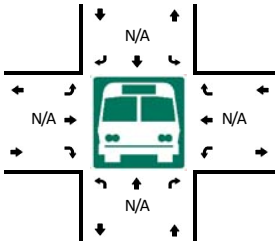


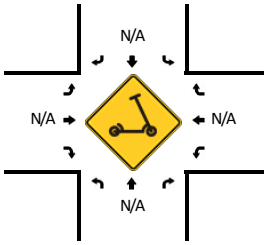












5-Min Count Period Beginning At	Main St/OR 99 (Northbound)				Main St/OR 99 (Southbound)				OR 42 (Eastbound)				OR 42 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	10	23	0	0	0	25	24	0	24	0	16	0	0	0	0	0	122	
2:05 PM	10	29	0	0	0	27	25	0	27	0	12	0	0	0	0	0	130	
2:10 PM	10	20	0	0	0	22	30	0	24	0	10	0	0	0	0	0	116	
2:15 PM	11	21	0	0	0	35	28	0	27	0	18	0	0	0	0	0	140	
2:20 PM	19	23	0	0	0	28	30	0	21	0	17	0	0	0	0	0	138	
2:25 PM	15	16	0	0	0	36	21	0	15	0	9	0	0	0	0	0	112	
2:30 PM	20	33	0	0	0	24	32	0	26	0	9	0	0	0	0	0	144	
2:35 PM	15	41	0	0	0	15	28	0	21	0	13	0	0	0	0	0	133	
2:40 PM	15	28	0	0	0	29	32	0	20	0	14	0	0	0	0	0	138	
2:45 PM	10	20	0	0	0	23	26	0	27	0	9	0	0	0	0	0	115	
2:50 PM	15	30	0	0	0	19	29	0	17	0	8	0	0	0	0	0	118	
2:55 PM	18	23	0	0	0	25	39	0	32	0	15	0	0	0	0	0	152	1558
3:00 PM	13	17	0	0	0	23	28	0	39	0	13	0	0	0	0	0	133	1569
3:05 PM	13	31	0	0	0	23	27	0	31	0	15	0	0	0	0	0	140	1579
3:10 PM	16	31	0	0	0	32	22	0	22	0	12	0	0	0	0	0	135	1598
3:15 PM	16	27	0	0	0	18	38	0	28	0	15	0	0	0	0	0	142	1600
3:20 PM	15	23	0	0	0	22	31	0	25	0	17	0	0	0	0	0	133	1595
3:25 PM	13	16	0	0	0	25	34	0	19	0	14	0	0	0	0	0	121	1604
3:30 PM	14	40	0	0	0	30	29	0	26	0	16	0	0	0	0	0	155	1615
3:35 PM	14	44	0	0	0	19	23	0	29	0	13	0	0	0	0	0	142	1624
3:40 PM	10	50	0	0	0	31	39	0	35	0	12	0	0	0	0	0	177	1663
3:45 PM	10	20	0	0	0	34	36	0	21	0	19	0	0	0	0	0	140	1688
3:50 PM	21	22	0	0	0	20	27	0	36	0	17	0	0	0	0	0	143	1713
3:55 PM	12	30	0	0	0	33	34	0	24	0	12	0	0	0	0	0	145	1706
4:00 PM	17	27	0	0	0	28	20	0	39	0	24	0	0	0	0	0	155	1728
4:05 PM	6	31	0	0	0	23	34	0	33	0	24	0	0	0	0	0	151	1739
4:10 PM	10	22	0	0	0	26	27	0	30	0	16	0	0	0	0	0	131	1735
4:15 PM	10	19	0	0	0	35	31	0	29	0	10	0	0	0	0	0	134	1727
4:20 PM	16	17	0	0	0	37	29	0	17	0	8	0	0	0	0	0	124	1718
4:25 PM	12	24	0	0	0	35	24	0	21	0	21	0	0	0	0	0	137	1734
4:30 PM	11	22	0	0	0	27	33	0	29	0	13	0	0	0	0	0	135	1714
4:35 PM	16	39	0	0	0	34	25	0	29	0	12	0	0	0	0	0	155	1727
4:40 PM	6	38	0	0	0	35	29	0	21	0	15	0	0	0	0	0	144	1694
4:45 PM	7	27	0	0	0	35	28	0	24	0	16	0	0	0	0	0	137	1691
4:50 PM	10	28	0	0	0	29	40	0	26	0	13	0	0	0	0	0	146	1694
4:55 PM	12	47	0	0	0	23	23	0	19	0	9	0	0	0	0	0	133	1682
5:00 PM	3	22	0	0	0	26	32	0	17	0	12	0	0	0	0	0	112	1639
5:05 PM	6	38	0	0	0	25	36	0	33	0	16	0	0	0	0	0	154	1642

5-Min Count Period Beginning At	Main St/OR 99 (Northbound)				Main St/OR 99 (Southbound)				OR 42 (Eastbound)				OR 42 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
5:10 PM	10	36	0	0	0	28	27	0	25	0	10	0	0	0	0	0	136	1647
5:15 PM	6	18	0	0	0	37	21	0	25	0	15	0	0	0	0	0	122	1635
5:20 PM	10	18	0	0	0	32	35	0	25	0	8	0	0	0	0	0	128	1639
5:25 PM	11	24	0	0	0	36	31	0	21	0	16	0	0	0	0	0	139	1641
5:30 PM	9	20	0	0	0	19	41	0	30	0	12	0	0	0	0	0	131	1637
5:35 PM	8	26	0	0	0	24	24	0	24	0	15	0	0	0	0	0	121	1603
5:40 PM	7	29	0	0	0	22	31	0	13	0	6	0	0	0	0	0	108	1567
5:45 PM	6	13	0	0	0	30	24	0	12	0	4	0	0	0	0	0	89	1519
5:50 PM	11	19	0	0	0	26	28	0	16	0	7	0	0	0	0	0	107	1480
5:55 PM	9	20	0	0	0	25	30	0	18	0	9	0	0	0	0	0	111	1458

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	152	536	0	0	0	320	364	0	360	0	164	0	0	0	0	0	1896
Heavy Trucks	4	24	0		0	8	20		28	0	0		0	0	0		84
Buses																	
Pedestrians		16				0				8				0			24
Bicycles	0	4	0		0	4	0		0	0	0		0	0	0		8
Scooters																	

Comments:

Report generated on 11/11/2021 2:46 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Attachment B: Technical Memorandum #3 (Analysis Methodology)

Technical Memorandum

Date:	November 1, 2021	Kittelson Project No: 23021.041
To:	Project Management Team	DOT&PF Agreement No: 20455
From:	Matt Kittelson, PE and Miranda Barrus, PE	
Subject:	Final TM #3: Analysis Methodology Memorandum	

Introduction

The analysis methodology proposes the methodology and assumptions to perform technical analyses for the City of Winston Transportation System Plan (TSP) Update. The methodologies included in this memorandum are based on guidance provided in the Oregon Department of Transportation (ODOT) Analysis Procedures Manual, Version 2 (APM – Reference 1) and direction provided by the City of Winston and ODOT staff. The methodology and assumptions include:

- Data collection and volume development that consider the ongoing COVID-19 pandemic;
- Traffic analysis procedure for the study intersections under existing and planning horizon (no-build and build) traffic conditions;
- Crash analysis procedure for the study intersections; and,
- Multimodal analysis procedure for collector and arterial roadways.

This information will serve as a baseline for determining a comprehensive list of transportation needs as well as helping to identify, evaluate, and prioritize potential solutions as part of the TSP Update.

Project Study Area

The project study area for the Winston TSP Update consists of the multimodal transportation network within the city's urban growth boundary (UGB) and includes 12 unsignalized study intersections and one signalized study intersection, as illustrated in Figure 1.

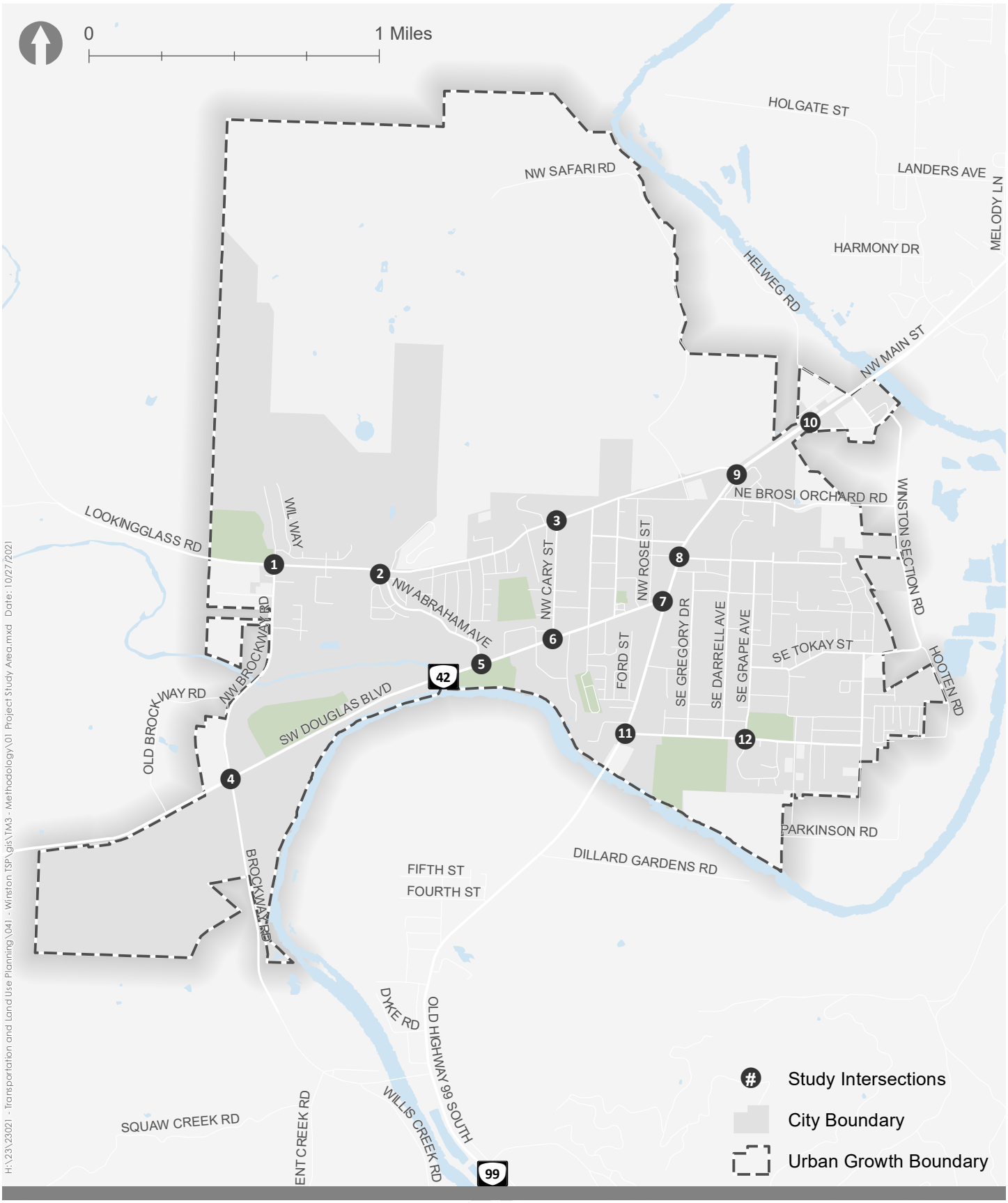


Figure 1

Project Study Area
Winston, Oregon

These study intersections will be evaluated under existing and future traffic conditions to inform potential capacity needs:

1. Brockway Road / Lookingglass Road
2. Lookingglass Road / Abraham Avenue
3. Lookingglass Road / Cary Street
4. OR 42 / Brockway Road
5. OR 42 / Abraham Avenue
6. OR 42 / Cary Street
7. OR 42 / Main Street (OR 99)
8. OR 42 / NW Jorgen Street
9. OR 42 / NW Lookingglass Road
10. OR 42 / Pepsi Road
11. Thompson Avenue / S Main Street
12. Thompson Avenue / SE Grape Avenue

Volume Development

The following sections describe how existing proxy volumes will be estimated at the study intersections and how they will be used to evaluate existing and future traffic conditions in the project study area.

Traffic Counts

Traffic counts at the study intersections comprise both historical counts provided by ODOT and new counts that were collected on September 16, 2021, while school was in session. All counts include the total number of pedestrians, bicyclists, motor vehicles, and percentage of heavy vehicles that entered the intersections in 15-minutes intervals. Traffic count details are summarized in Table 1.

Considering the ongoing effects of the COVID-19 pandemic on typical travel patterns, historical counts at the OR 42 / Pepsi Road study intersection were compared to the new counts collected at this intersection in September. The intersection is an anchor for developing existing proxy volumes at remaining study intersections, as needed. Per guidance from the APM Appendix 3E, if the percent difference between the historical and new counts is greater than 10 percent, additional adjustments will be developed with City and ODOT approval. In comparing the historical and new counts at the OR 42 / Pepsi Road study intersection, current traffic volumes are within 10 percent of the traffic volumes collected prior to the COVID-19 pandemic, therefore, no additional adjustments are necessary. Note that counts were historically and seasonally adjusted for the comparison as described in succeeding sections. *Traffic count worksheets are provided in Attachment A*.

Table 1: Traffic Count Summary

ID	Intersection	Count Date	Count Type	Duration
1	Brockway Rd / Lookingglass Rd	September 2021	16-Hour	6 AM to 10 PM
2	Abraham Ave / Lookingglass Rd	September 2021	16-Hour	6 AM to 10 PM
3	Cary St / Lookingglass Rd	September 2021	16-Hour	6 AM to 10 PM
4	OR 42 / Brockway Rd	October 2017	16-Hour	6 AM to 10 PM
5	OR 42 / Abraham Ave	September 2021	16-Hour	6 AM to 10 PM
6	OR 42 / Cary St	September 2021	4-Hour	2 PM to 6 PM
7	OR 42 / Main St	October 2021	4-Hour	2 PM to 6 PM
8	OR 42 / NW Jorgen St	September 2021	4-Hour	2 PM to 6 PM
9	OR 42 NW Lookingglass Rd	July 2019	16-Hour	6 AM to 10 PM
10	OR 42 / Pepsi Rd	July 2019	12-Hour	7 AM to 7 PM
		September 2021	4-Hour	2 PM to 6 PM
11	S Main St / Thompson Ave	September 2021	4-Hour	2 PM to 6 PM
12	SE Grape Ave / Thompson Ave	September 2021	4-Hour	2 PM to 6 PM

Historical Adjustment

The traffic counts conducted at the OR 42 / Brockway Road and OR 42 NW Lookingglass Road study intersections in 2017 and 2019, respectively, will require an adjustment to reflect existing traffic conditions. From the APM, historical adjustments are determined from information provided in ODOT's Future Volume Tables (FVT). According to the FVT's, the annual growth rate for these two study intersections was calculated based on the existing (2018) and forecast (2039) traffic volumes along OR 42 near these intersections, consistent with the information in the Roseburg travel demand model. The resultant annual growth rate is approximately 2.25 percent. This will be applied to the historical traffic counts for the existing traffic analysis. *Historical adjustment calculations are provided in Attachment B.*

Seasonal Adjustment

Thirtieth Hour Volumes (30HV) will be developed at the study intersections using the collected and estimated traffic counts and applying seasonal adjustment factors, consistent with the methodology established in the APM. The APM provides three methods for identifying seasonal adjustment factors for highway traffic volumes. All three methods utilize information provided by ODOT Automatic Traffic Records (ATRs) ATRs are positioned in select locations throughout the State Highway System to collect traffic data 24 hours a day, 365 days a year. Each method was assessed to determine which is most appropriate for the study intersections.

Below is a description of each seasonal adjustment method.

- **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.).

The ATR closest to the study area is 10-006 on OR 42, just west of the UGB. Several major intersections are located east of this ATR and the AADT at the ATR are not within 10 percent of the traffic volumes throughout the project study area. Further, most of the available sites around the state with similar roadway characteristics and traffic volumes have weekend traffic trends or area types that do not align with Winston. Based on the assessment, the Seasonal Trends Table method will be used for study intersections on state facilities.

Given that OR 42 serves local traffic within Winston and between Winston and Roseburg, as well as regional traffic between Winston and Coos Bay, we propose applying an average seasonal adjustment to state highway traffic volumes based on the average of the Commuter and Summer classifications within the Seasonal Trends Table. Table 2 through Table 5 summarize the peak period and count period factors associated with these seasonal trends and the resultant seasonal adjustment factors for counts collected in late July, mid-September, and early and late October.

Table 2: Seasonal Adjustment for Counts Collected in Late July

Seasonal Trend	Peak Period Factor	Count Period Factor	Seasonal Adjustment	Average Seasonal Adjustment Factor
Commuter	0.9355	0.9509	1.02	**1.01**
Summer	0.8299	0.8354	1.01	

Table 3: Seasonal Adjustment for Counts Collected in Mid-September

Seasonal Trend	Peak Period Factor	Count Period Factor	Seasonal Adjustment	Average Seasonal Adjustment Factor
Commuter	0.9355	0.9623	1.03	**1.06**
Summer	0.8299	0.9077	1.09	

Table 4: Seasonal Adjustment for Counts Collected in Early October

Seasonal Trend	Peak Period Factor	Count Period Factor	Seasonal Adjustment	Average Seasonal Adjustment Factor
Commuter	0.9355	0.9614	1.03	**1.08**
Summer	0.8299	0.9357	1.13	

Table 5: Seasonal Adjustment for Counts Collected in Late October

Seasonal Trend	Peak Period Factor	Count Period Factor	Seasonal Adjustment	Average Seasonal Adjustment Factor
Commuter	0.9355	0.9604	1.03	**1.09**
Summer	0.8299	0.9638	1.16	

Peak Hour Identification

Existing and future traffic operations analyses will reflect weekday PM peak hour conditions. A review of the traffic count data showed that the study intersection peak hours generally range from 2:30 to 4:30 PM and a system peak occurs from 3:00 to 4:00 PM. After evaluating individual intersection and system peak hours, and based on guidance from ODOT, we recommend using the system peak hour for the traffic operations analysis.

Forecast Traffic Volumes

The planning horizon for the Winston TSP Update is the year 2043. Forecast traffic volumes for the study intersections will be developed based on the proxy existing traffic volumes and information provided in the Roseburg travel demand model. The Roseburg travel demand model provides base year 2010 and forecast year 2035 traffic volume projections for study area roadways that reflect anticipated land use changes and planned transportation improvements within the Roseburg-Winston area.

Forecast traffic volumes will be developed by applying post-processing methodology identified in the National Cooperative Highway Research Program (NCHRP) Report 765, *Analytical Travel Forecasting Approaches for Project-Level Planning and Design* (Reference 2), which is the update to NCHRP Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design*. The methodology derives forecast traffic volumes at the study intersections based on the proxy existing traffic volumes and base and future year traffic volume model projections. Forecasting traffic volumes will also include engineering judgment and knowledge of the project study area, including anticipated growth in specific areas.

Traffic Analysis

The traffic analysis will evaluate peak hour traffic operations of the study intersections under existing conditions and through the TSP planning horizon to identify potential capacity constraints and alternatives. This section summarizes the traffic analysis methodology including applicable intersection operational standards and analysis parameters and assumptions.

Intersection Operational Standards

The study intersections identified for the TSP are subject to the operating standards described in the following sections according to their jurisdiction.

ODOT Facilities

ODOT uses volume-to-capacity (v/c) ratios to assess intersection operations. Table 6 of the *Oregon Highway Plan* (OHP – Reference 3) and Table 10-2 of ODOT's *Highway Design Manual* (HDM – Reference 4) provide maximum v/c ratios for all signalized and unsignalized intersections located outside of the Portland metropolitan area. The OHP v/c ratios are targets used to evaluate existing and future no-build conditions, while the HDM v/c ratios are standards used in evaluating future alternatives along state highways.

ODOT intersections within the project study area are located on OR 42. The following parameters help determine applicable v/c ratio thresholds for these study intersections.

- The study intersections are located within the Winston UGB;
- The City of Winston is not associated with a Metropolitan Planning Organization (MPO); and,
- OR 42 is classified as a Statewide Highway and designated as an OHP Freight Route through the project study area.

Additional details needed to identify v/c ratio thresholds for these study intersections are summarized as follows.

- **OR 42 / Brockway Road** – The east and west legs of OR 42 are posted at 45 MPH. The north and south legs of Brockway Road are local streets and are assumed to have posted speeds of 45 MPH or higher. ODOT's Freight Route on a Statewide Highway mobility target will be applied to OR 42 and ODOT's District/Local Interest Roads v/c ratio threshold will be applied to Brockway Road.
- **OR 42 / Abraham Avenue** – The east and west legs of OR 42 are posted at 30 MPH. The north leg, Abraham Avenue, is a local street and is posted at 25 MPH. ODOT's Freight Route on a Statewide Highway mobility target will be applied to OR 42 and ODOT's District/Local Interest Roads v/c ratio threshold will be applied to Abraham Avenue.
- **OR 42 / Cary Street** – The east and west legs of OR 42 are posted at 30 MPH. The north leg, Cary Street, is a local street and assumed to have a posted speed of 35 MPH or lower. ODOT's Freight Route on a Statewide Highway mobility target will be applied to OR 42 and ODOT's District/Local Interest Roads v/c ratio threshold will be applied to Cary Street.
- **OR 42 / NW Civil Bend Avenue** – The east and west legs of OR 42 are posted at 30 MPH. The north and south legs of NW Civil Bend Avenue are local streets and are assumed to have posted speeds of 35 MPH or lower. ODOT's Freight Route on a Statewide Highway mobility target will be applied to OR 42 and ODOT's District/Local Interest Roads v/c ratio threshold will be applied to NW Civil Bend Avenue.

- **OR 42 / Main Street (OR 99)** – The west and north legs of OR 42 are posted at 30 MPH. The south leg, Main Street (OR 99) is a local street and is also posted at 30 MPH. ODOT's Freight Route on a Statewide Highway mobility target will be applied to OR 42 and ODOT's District/Local Interest Roads v/c ratio threshold will be applied to Main Street (OR 99).
- **OR 42 / NW Jorgen Street** – The north and south legs of OR 42 are posted at 30 MPH. The east and west legs of Jorgen Street are local streets and are assumed to have posted speeds of 35 MPH or lower. ODOT's Freight Route on a Statewide Highway mobility target will be applied to OR 42 and ODOT's District/Local Interest Roads v/c ratio threshold will be applied to Jorgen Street.
- **OR 42 / NW Lookingglass Road** – The east leg of OR 42 is classified as an OHP Expressway and both east and west legs are posted at 45 MPH. The north leg, NW Lookingglass Road, is a local street posted at 40 MPH. ODOT's Statewide Expressway mobility target will be applied to the OR 42 east leg, the Freight Route on a Statewide Highway mobility target will be applied to the OR 42 west leg, and the District/Local Interest Roads v/c ratio threshold will be applied to NW Lookingglass Road.
- **OR 42 / Pepsi Road** – The east and west legs of OR 42 are classified as OHP Expressways with 55 mile-per-hour (MPH) posted speeds. The south leg, Pepsi Road, is a local street with a 25 MPH posted speed limit. ODOT's Statewide Expressway mobility target will be applied to the OR 42 approaches and ODOT's District/Local Interest Roads v/c ratio threshold will be applied to Pepsi Road.

As a result, Table 6 summarizes applicable v/c ratio thresholds that will be used to identify potential existing and future operational issues at the ODOT study intersections.

Table 6: OHP Targets and HDM Standards for ODOT Study Intersections

ID	Intersection	Traffic Control	OHP Target[1]	HDM Standard[1]
4	OR 42 / Brockway Rd	Unsignalized	0.80 / 0.90	0.70 / 0.75
5	OR 42 / Abraham Ave	Unsignalized	0.85 / 0.95	0.70 / 0.80
6	OR 42 / Cary St	Unsignalized	0.85 / 0.95	0.70 / 0.80
7	OR 42 / Main St (OR 99)	Signalized	0.85 / 0.95	0.70 / 0.80
8	OR 42 / NW Jorgen St	Unsignalized	0.85 / 0.95	0.70 / 0.80
9	OR 42 NW Lookingglass Rd	Unsignalized	0.80 / 0.90	0.65-0.70 / 0.80
10	OR 42 / Pepsi Rd	Unsignalized	0.80 / 0.95	0.65 / 0.80

[1]State Highway V/C Ratio / Side-Street V/C Ratio

Local Facilities

The remaining study intersections are on the local street system and subject to appropriate local operating standards, as summarized in Table 7. Currently, the City of Winston has not established operating standards for their facilities. As such, we will evaluate and report operational characteristics of study intersections under City jurisdiction based on a 1.0 v/c ratio. Like ODOT, Douglas County also uses v/c ratios to assess intersection operations.

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 applicable v/c ratio thresholds under existing and future traffic conditions.

Table 7: Operating Standards for Local Study Intersections

ID	Intersection	Jurisdiction	Traffic Control	Mobility Target	
1	Brockway Rd / Lookingglass Rd	City	Unsignalized	1.0 for Planning Purposes	
2	Abraham Ave / Lookingglass Rd	City	Unsignalized		
3	Cary St / Lookingglass Rd	City	Unsignalized		
11	S Main St / Thompson Ave	County	Unsignalized	Arterial Major Collector	0.85 0.90
12	SE Grape Ave / Thompson Ave	City	Unsignalized	1.0 for Planning Purposes	

Analysis Parameters

The following data sources and methodologies are proposed for conducting traffic analysis. Analysis of all state facilities will be performed according to the APM, unless otherwise agreed upon by the City and ODOT.

1. **Intersection/Road Geometry** (e.g., number of lanes, lane configurations, cross-section elements, etc.) will be collected through aerial photography. Available as-built data may also be used to verify existing roadway geometry. The analysis models will be constructed on scaled roadway line work from GIS or aerial photography.
2. **Operational Data** (e.g., posted speeds, intersection control, rail crossings, etc.) will be collected through aerial photography and confirmed through Oregon digital video log, straight line carts, GIS data, and/or local knowledge.
3. **Peak Hour Factors** (PHF) will be calculated for each intersection with traffic count data, as available, and applied to the existing conditions analysis. Per the APM, the following PHF's will be applied for the year 2043 analysis:
    a. Major Arterial to Major Arterial Facilities: 0.95
    b. Major Arterial to Minor Arterial Facilities: 0.92
    c. Minor Arterial to Minor Arterial Facilities: 0.90
    d. Minor Arterial to Collector Facilities: 0.88
    e. Collector to Collector (or Lower) Facilities: 0.85

    If an existing PHF is greater than the default future values above, the existing PHF will be used.
4. **Traffic Volume Development** is described in previous sections.
5. **Traffic Operations**
    a. The methodologies identified in the Highway Capacity Manual 6th Edition (HCM – Reference 5) will be used to analyze traffic operations at the study intersections.
    b. Vistro is a software tool designed to assist with operations analyses in according with HCM 6th Edition methodologies; therefore, Vistro 7 will be used to conduct the traffic operations analyses. Level-of-service (LOS), delay, v/c ratios (critical movement for unsignalized intersections) and 95th percentile queue lengths will be reported at all intersections regardless of jurisdiction. Failing unsignalized intersections will be evaluated using Manual on Uniform Traffic Control Devices (MUTCD – Reference 6) traffic signal warrants.

Traffic Analysis Software & Input Assumptions

Table 8 summarizes the Vistro software and input assumptions for the traffic analysis.

Table 8: Traffic Analysis Assumptions

Intersection Parameters	Existing Conditions Assumptions
Peak Hour Factor	From traffic counts
Conflicting Bikes and Pedestrians per Hour	From traffic counts (as available)
Area Type	Not a Central Business District
Ideal Saturation Flow Rate (All Movements)	1,750 passenger cars per hour per lane
Lane Width	12 feet (unless field observations suggest otherwise)
Percent Heavy Vehicles (All Movements)	From traffic counts (as available)
Percent Grade	Estimated based on field observations
95th-Percentile & Average Vehicle Queues	Vistro summary output

Crash Analysis

The crash analysis will review the most recent five years of reported crash data at the study intersections, obtained from ODOT's Crash Analysis & Reporting Unit, to identify any potential safety focus locations. Possible crash patterns that may include location, type, characteristics, and/or severity will be identified. Consistent with the methodologies outline in the APM, intersection crash rates will be developed and compared with statewide crash rates (APM Exhibit 4-1) and critical crash rates. Reported intersection crashes will also be analyzed with Excess Proportion of Specific Crash Types methodologies to identify crash types in excess. ODOT's top 10 percent Safety Priority Index System (SPIS) sites will be reviewed, as appropriate. If safety focus locations are identified through analyses, potential countermeasures will be selected from the All Roads Transportation Safety (ARTS) Crash Reduction Factors (CRF) listing.

Multimodal Analysis

The multimodal analysis will review the following elements of the active transportation network to identify potential facility and service alternatives for people walking, rolling, biking, and taking transit within the project study area:

- Availability of facilities and services (including transit) along collector and arterial roadways;
- Level of Traffic Stress (LTS) ratings for pedestrian and bicycle facilities along collector and arterial roadways, including around transit facilities; and,
- Safety risk to pedestrians and bicyclists along state highways, including around transit facilities.

The LTS analyses will be performed in accordance with the methodologies identified in Chapter 14 of the APM. For state facilities, the assessment will rely on LTS data that ODOT has developed. Pedestrian and Bicycle LTS have unique criteria that are used to determine a facilities LTS score (e.g., number of travel lanes, bike lane widths, adjacent parking, roadway functional classification, daily volume, 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.

The statewide bicycle and pedestrian safety risk assessment focuses on the safety of active transportation modes and their risk of being involved crashes. The State of Oregon has established several factors for determining a facility's safety performance for pedestrians and bicyclists such as roadway classification, number of travel lanes, access density, land use, etc. The state highway risk assessment within the project study area will rely on ODOT analyses and resulting data.

References

1. Oregon Department of Transportation. Analysis Procedures Manual, 2018.
2. Transportation Research Board. NCHRP Report 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design. 2014.
3. Oregon Department of Transportation. Oregon Highway Plan, 2015.
4. Oregon Department of Transportation. Highway Design Manual, 2012.
5. Transportation Research Board. Highway Capacity Manual, 6th Edition, 2016.
6. Federal Highway Administration. Manual on Uniform Traffic Control Devices. 2009.

Attachment C: Existing Traffic Operations Worksheets

Intersection Level Of Service Report
Intersection 1: Brockway Rd / Lookingglass Road

Control Type:	Two-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.305

Intersection Setup

Name	Brockway Road			Brockway Road			Lookingglass Road			Lookingglass Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
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			30.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Brockway Road			Brockway Road			Lookingglass Road			Lookingglass Road		
Base Volume Input [veh/h]	39	13	28	107	23	11	3	32	15	30	44	72
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 [%]	5.00	15.00	0.00	5.00	4.00	0.00	33.00	0.00	13.00	0.00	7.00	6.00
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]	39	13	28	107	23	11	3	32	15	30	44	72
Peak Hour Factor	0.6300	0.6300	0.6300	0.6300	0.6300	0.6300	0.6300	0.6300	0.6300	0.6300	0.6300	0.6300
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]	15	5	11	42	9	4	1	13	6	12	17	29
Total Analysis Volume [veh/h]	62	21	44	170	37	17	5	51	24	48	70	114
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.04	0.04	0.31	0.06	0.02	0.00	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	12.67	13.10	9.88	15.35	15.10	12.76	7.95	0.00	0.00	7.42	0.00	0.00
Movement LOS	B	B	A	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.71	0.71	0.71	1.82	1.82	1.82	0.01	0.01	0.01	0.10	0.10	0.10
95th-Percentile Queue Length [ft/ln]	17.74	17.74	17.74	45.57	45.57	45.57	0.31	0.31	0.31	2.42	2.42	2.42
d_A, Approach Delay [s/veh]	11.77			15.11			0.50			1.53		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	7.96											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 2: Abraham Avenue / Lookingglass Road

Control Type:	Two-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.046

Intersection Setup

Name	Abraham Avenue		Lookingglass Road		Lookingglass Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Right	Left	Thru
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		35.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Abraham Avenue		Lookingglass Road		Lookingglass Road	
Base Volume Input [veh/h]	62	11	108	64	20	99
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	5.00	9.00	4.00	2.00	0.00	2.00
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]	62	11	108	64	20	99
Peak Hour Factor	0.6500	0.6500	0.6500	0.6500	0.6500	0.6500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	4	42	25	8	38
Total Analysis Volume [veh/h]	95	17	166	98	31	152
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.05	0.22
d_M, Delay for Movement [s/veh]	7.90	0.00	0.00	0.00	12.31	12.21
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.00	0.00	1.08	1.08
95th-Percentile Queue Length [ft/ln]	6.84	6.84	0.00	0.00	27.11	27.11
d_A, Approach Delay [s/veh]	6.70		0.00		12.22	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	5.34					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 3: Cary Street / Lookingglass Road

Control Type:	Two-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	Cary Street		Lookingglass Road		Lookingglass Road	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
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		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Cary Street		Lookingglass Road		Lookingglass Road	
Base Volume Input [veh/h]	15	22	109	28	24	153
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	0.00	0.00	14.00	4.00	1.00
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]	15	22	109	28	24	153
Peak Hour Factor	0.6900	0.6900	0.6900	0.6900	0.6900	0.6900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	8	39	10	9	55
Total Analysis Volume [veh/h]	22	32	158	41	35	222
Pedestrian Volume [ped/h]	0		1		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.04	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	12.30	9.59	0.00	0.00	7.71	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.26	0.26	0.00	0.00	0.08	0.08
95th-Percentile Queue Length [ft/ln]	6.38	6.38	0.00	0.00	1.98	1.98
d_A, Approach Delay [s/veh]	10.69		0.00		1.05	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.66					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 4: OR 42 / Brockway Road

Control Type:	Two-way stop	Delay (sec / veh):	21.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.211

Intersection Setup

Name	Brockway Road			Brockway Road			OR 42			OR 42		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
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	1	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Brockway Road			Brockway Road			OR 42			OR 42		
Base Volume Input [veh/h]	62	43	20	11	29	16	11	172	63	33	266	26
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 [%]	25.00	8.00	0.00	10.00	7.00	0.00	0.00	7.00	22.00	3.00	5.00	8.00
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]	62	43	20	11	29	16	11	172	63	33	266	26
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
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]	17	12	5	3	8	4	3	47	17	9	72	7
Total Analysis Volume [veh/h]	67	47	22	12	32	17	12	187	68	36	289	28
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.13	0.03	0.04	0.09	0.02	0.01	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	21.79	20.12	14.80	18.03	16.46	11.40	7.90	0.00	0.00	7.84	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.63	1.63	1.63	0.52	0.52	0.52	0.03	0.03	0.03	0.09	0.09	0.09
95th-Percentile Queue Length [ft/ln]	40.78	40.78	40.78	13.02	13.02	13.02	0.72	0.72	0.72	2.13	2.13	2.13
d_A, Approach Delay [s/veh]	20.08			15.36			0.35			0.80		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	4.95											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 5: OR 42 / Abraham Avenue

Control Type:	Two-way stop	Delay (sec / veh):	17.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.246

Intersection Setup

Name	Abraham Avenue		OR 42		OR 42	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
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	1	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		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Abraham Avenue		OR 42		OR 42	
Base Volume Input [veh/h]	92	7	5	285	292	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	1.00	0.00	0.00	7.00	5.00	3.00
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]	92	7	5	285	292	94
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	2	1	77	78	25
Total Analysis Volume [veh/h]	99	8	5	306	314	101
Pedestrian Volume [ped/h]	13		0		2	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	16.96	13.41	8.21	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.02	1.02	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	25.46	25.46	0.33	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.70		0.13		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.19					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: OR 42 / Cary Street

Control Type:	Two-way stop	Delay (sec / veh):	20.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.213

Intersection Setup

Name	Cary Street		OR 42		OR 42	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
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	1	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		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Cary Street		OR 42		OR 42	
Base Volume Input [veh/h]	59	15	8	407	405	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	0.00	12.00	6.00	5.00	4.00
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]	59	15	8	407	405	25
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	4	2	108	108	7
Total Analysis Volume [veh/h]	63	16	9	433	431	27
Pedestrian Volume [ped/h]	8		1		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.03	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	20.53	14.33	8.50	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.92	0.92	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	22.88	22.88	0.66	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	19.27		0.17		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.63					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: OR 42 / Main Street (OR 99)

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name	N Main St / OR 42		S Main St		OR 42	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
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	1	0	0	1	1	0
Entry Pocket Length [ft]	125.00	100.00	100.00	225.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	500.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		Yes	

Volumes

Name	N Main St / OR 42		S Main St		OR 42	
Base Volume Input [veh/h]	167	351	310	401	365	175
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	7.00	6.00	5.00	10.00	2.00
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	351	310	401	365	175
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]	46	98	86	111	101	49
Total Analysis Volume [veh/h]	186	390	344	446	406	194
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major stree	5		0		4	
v_di, Inbound Pedestrian Volume crossing major street [	4		0		5	
v_co, Outbound Pedestrian Volume crossing minor stree	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	1		2		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Unsignalized
Signal Group	1	6	2	8	8	0
Auxiliary Signal Groups				2,8		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	4	10	10	8	8	0
Maximum Green [s]	25	40	40	30	30	0
Amber [s]	3.5	3.8	3.8	3.8	3.8	0.0
All red [s]	2.0	2.0	2.0	1.3	1.3	0.0
Split [s]	0	0	0	0	0	0
Vehicle Extension [s]	2.5	6.1	6.1	2.5	2.5	0.0
Walk [s]	0	0	7	7	7	0
Pedestrian Clearance [s]	0	0	18	18	18	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.5	3.8	3.8	3.1	3.1	0.0
Minimum Recall	No	No	Yes	Yes	Yes	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L
C, Cycle Length [s]	57	57	57	57	57
L, Total Lost Time per Cycle [s]	5.50	5.80	5.80	5.10	5.10
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.80	3.80	0.00	3.10
g_i, Effective Green Time [s]	8	30	16	38	16
g / C, Green / Cycle	0.14	0.53	0.29	0.67	0.28
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.11	0.31	0.14
s, saturation flow rate [veh/h]	1614	3148	3174	1419	2981
c, Capacity [veh/h]	234	1669	917	949	830
d1, Uniform Delay [s]	23.54	7.17	16.16	4.54	17.17
k, delay calibration	0.08	0.42	0.42	0.42	0.08
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.56	0.27	0.98	1.39	0.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.23	0.38	0.47	0.49
d, Delay for Lane Group [s/veh]	28.09	7.45	17.14	5.93	17.51
Lane Group LOS	C	A	B	A	B
Critical Lane Group	Yes	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	2.53	1.07	1.73	1.88	2.04
50th-Percentile Queue Length [ft/ln]	63.18	26.78	43.31	47.08	50.94
95th-Percentile Queue Length [veh/ln]	4.55	1.93	3.12	3.39	3.67
95th-Percentile Queue Length [ft/ln]	113.73	48.21	77.95	84.74	91.69

Movement, Approach, & Intersection Results

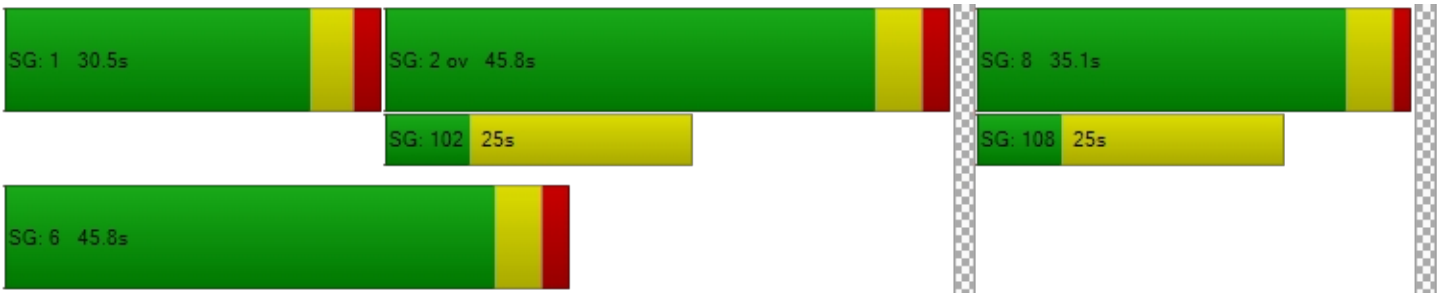
d_M, Delay for Movement [s/veh]	28.09	7.45	17.14	5.93	17.51	0.00
Movement LOS	C	A	B	A	B	
d_A, Approach Delay [s/veh]	14.11		10.81		17.51	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	13.42					
Intersection LOS	B					
Intersection V/C	0.545					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	2.479	0.000	2.556
Crosswalk LOS	B	F	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	889	889	667
d_b, Bicycle Delay [s]	13.90	13.90	20.00
l_b,int, Bicycle LOS Score for Intersection	2.035	2.211	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 8: OR 42 / NW Jorgen Street

Control Type:	Two-way stop	Delay (sec / veh):	49.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	N Main St / OR 42			N Main St / OR 42			NW Jorgen St			NW Jorgen St		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
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	1	0	0	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	250.00	100.00	100.00	200.00	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]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	N Main St / OR 42			N Main St / OR 42			NW Jorgen St			NW Jorgen St		
Base Volume Input [veh/h]	3	755	16	39	716	9	4	0	2	12	1	36
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	5.00	0.00	0.00	4.00	11.00	0.00	0.00	0.00	0.00	0.00	3.00
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]	3	755	16	39	716	9	4	0	2	12	1	36
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
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]	1	203	4	10	192	2	1	0	1	3	0	10
Total Analysis Volume [veh/h]	3	812	17	42	770	10	4	0	2	13	1	39
Pedestrian Volume [ped/h]	0			0			8			1		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.05	0.01	0.00	0.04	0.00	0.00	0.11	0.01	0.07
d_M, Delay for Movement [s/veh]	9.33	0.00	0.00	9.69	0.00	0.00	38.73	47.47	11.96	39.10	49.31	14.20
Movement LOS	A	A	A	A	A	A	E	E	B	E	E	B
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.16	0.00	0.00	0.12	0.12	0.12	0.69	0.69	0.69
95th-Percentile Queue Length [ft/ln]	0.27	0.00	0.00	4.10	0.00	0.00	3.08	3.08	3.08	17.24	17.24	17.24
d_A, Approach Delay [s/veh]	0.03			0.50			29.81			20.97		
Approach LOS	A			A			D			C		
d_I, Intersection Delay [s/veh]	1.01											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 9: OR 42 / NW Lookingglass Road

Control Type:	Two-way stop	Delay (sec / veh):	56.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.663

Intersection Setup

Name	Lookingglass Road		OR 42		OR 42	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
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	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	175.00	100.00	100.00	200.00
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]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Lookingglass Road		OR 42		OR 42	
Base Volume Input [veh/h]	119	16	7	725	710	158
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	0.00	0.00	8.00	6.00	1.00
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]	119	16	7	725	710	158
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	4	2	189	185	41
Total Analysis Volume [veh/h]	124	17	7	755	740	165
Pedestrian Volume [ped/h]	11		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.66	0.03	0.01	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	56.30	42.89	9.88	0.00	0.00	0.00
Movement LOS	F	E	A	A	A	A
95th-Percentile Queue Length [veh/ln]	4.33	4.33	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	108.22	108.22	0.71	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	54.68		0.09		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	4.30					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 10: OR 42 / Pepsi Road

Control Type:	Two-way stop	Delay (sec / veh):	49.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.135

Intersection Setup

Name	Pepsi Road		OR 42		OR 42	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	150.00	275.00	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		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Pepsi Road		OR 42		OR 42	
Base Volume Input [veh/h]	11	63	916	16	72	909
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	5.00	5.00	0.00	1.00	4.00
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]	11	63	916	16	72	909
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	17	241	4	19	239
Total Analysis Volume [veh/h]	12	66	964	17	76	957
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.13	0.01	0.00	0.11	0.01
d_M, Delay for Movement [s/veh]	49.73	16.11	0.00	0.00	10.72	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	1.02	1.02	0.00	0.00	0.36	0.00
95th-Percentile Queue Length [ft/ln]	25.59	25.59	0.00	0.00	9.01	0.00
d_A, Approach Delay [s/veh]	21.28		0.00		0.79	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.18					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 11: S Main Street / Thompson Avenue

Control Type:	Two-way stop	Delay (sec / veh):	19.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.095

Intersection Setup

Name	S Main Street		S Main Street		Thompson Avenue	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
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	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	125.00	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		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	S Main Street		S Main Street		Thompson Avenue	
Base Volume Input [veh/h]	337	35	137	220	25	110
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	4.00	3.00	4.00	5.00	0.00	5.00
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]	337	35	137	220	25	110
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	92	10	37	60	7	30
Total Analysis Volume [veh/h]	366	38	149	239	27	120
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			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.13	0.00	0.10	0.15
d_M, Delay for Movement [s/veh]	0.00	0.00	8.64	0.00	19.69	11.48
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.45	0.00	0.96	0.96
95th-Percentile Queue Length [ft/ln]	0.00	0.00	11.27	0.00	24.09	24.09
d_A, Approach Delay [s/veh]	0.00		3.32		12.99	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	3.41					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 12: SE Grape Avenue / Thompson Avenue

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	SE Grape Avenue			Parkway Dr			Thompson Avenue			Thompson Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
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]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	SE Grape Avenue			Parkway Dr			Thompson Avenue			Thompson Avenue		
Base Volume Input [veh/h]	7	0	1	2	0	27	36	56	4	0	49	1
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	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	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]	7	0	1	2	0	27	36	56	4	0	49	1
Peak Hour Factor	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
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]	2	0	0	1	0	8	11	16	1	0	14	0
Total Analysis Volume [veh/h]	8	0	1	2	0	32	42	66	5	0	58	1
Pedestrian Volume [ped/h]	4			4			0			3		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.30	10.54	8.72	10.87	10.62	8.72	7.39	0.00	0.00	7.35	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.11	0.11	0.11	0.08	0.08	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.96	0.96	0.96	2.72	2.72	2.72	2.09	2.09	2.09	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.13			8.85			2.75			0.00		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	3.27											
Intersection LOS	B											

Attachment D: Crash Data and Analysis Worksheets

CITY OF WINSTON, DOUGLAS COUNTY

Intersectional Crashes at Abraham Ave & Lookingglass Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00087	Y	N	N	N	N	01/27/2018	16	ABRAHAM AVE	INTER	3-LEG	N	Y	CLD	FIX OBJ	01	NONE	STRGHT										040,053	32,30,27
CITY			N			Sat 6A	0	LOOKINGGLASS RD	NE		STOP SIGN	N	DRY	FIX		RENTL	NW SE									000	040,053	00
No	*43*	*7*	*22.59*	*-123*	*25*	*56.92*	1		06	0		N	DARK	INJ		PSNGR CAR		01	DRVR	INJB	25	F	OTH-Y N-RES		050,052,081	038		32,30,27

CITY OF WINSTON, DOUGLAS COUNTY

Intersectional Crashes at Brockway Rd & Lookingglass Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00197	N	N	N			03/12/2015	17	BROCKWAY RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE	STRGHT											29
NO RPT			N			Thu 3P	0	LOOKINGGLASS RD	S		STOP SIGN	N	DRY	REAR		PRVTE	S N									000		00
No	*43*	*7 23.48*				*-123 26 22.81*	1		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	16	F	OR-Y OR<25		026	000		29
															02	NONE	STOP											
																PRVTE	S N									011		00
																PSNGR CAR		01	DRVR	NONE	17	F	OR-Y OR<25		000	000		00

CITY OF WINSTON, DOUGLAS COUNTY

Intersectional Crashes at Main St & Thompson Ave in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00627	Y	N	N			06/07/2017	16	MAIN ST	INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02,01
CITY			N			Wed 2P	0	THOMPSON AVE	CN		STOP SIGN	N	DRY	ANGL		PRVTE	E W									018		00
No	*43*	*6 55.38*				*-123 24 55.39*	1		01	0		Y	DAY	INJ		PSNGR CAR		01	DRVR	INJC	37	M	OR-Y OR<25		028	000		02
																		02	PSNG	INJC	40	F			000	000		00
															02	NONE 0	STRGHT											
																PRVTE	N S									000		00
																PSNGR CAR		01	DRVR	NONE	52	M	OR-Y OR<25		047	000		01
00126	N	N	N			02/10/2019	16	MAIN ST	INTER	3-LEG	N	Y	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
CITY			N			Sun 9A	0	THOMPSON AVE	CN		STOP SIGN	N	DRY	ANGL		PRVTE	NE SW									000	058	00
No	*43*	*6 55.39*				*-123 24 55.39*	1		01	0		Y	DAY	INJ		PSNGR CAR		01	DRVR	INJC	40	M	OR-Y OR<25		000	000		00
															02	NONE 0	STRGHT											
																PRVTE	E W									019		00
																PSNGR CAR		01	DRVR	NONE	67	F	OR-Y OR<25		028	000		02
																		02	PSNG	INJC	87	M			000	000		00

035 COOS BAY-ROSEBURG

Intersectional Crashes at OR-42, Coos Bay-Roseburg Hwy (#035) & Brockway Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	DRUG	SCHL	WORK	DAY/TIME	COUNTY / CITY / URBAN AREA	RD# / CMPT/MLG / MILEPNT / LRS	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
00286	Y	N	N	N	N	03/23/2019	DOUGLAS	1 14	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE	TURN-R										01,08
COUNTY		N				Sat 4P	WINSTON	MN 0	SE		STOP SIGN	N	DRY	TURN		PRVTE	W S								000	00
							ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	06	0		N	DAY	INJ		MTRCYCLE		01	DRVR	INJC	71	M	OR-Y		047,001	017	01,08
No						*43 6 44.81 -123 26 31.76*		003500100S00	1															OR>25				
															02	NONE	STRGHT										
																PRVTE	SE NW									006	00
																PSNGR CAR		01	DRVR	NONE	26	F	OR-Y		000	000	00
																							OR>25				
01428	N	N	N			09/09/2016	DOUGLAS	1 14	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT										03
NONE		N				Fri 3P	WINSTON	MN 0	CN		STOP SIGN	N	DRY	ANGL		N/A	SE NW								000	00
							ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
No						*43 6 44.82 -123 26 31.78*		003500100S00	1															UNK				
															02	NONE 9	STRGHT										
																N/A	NE SW									000	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
																							UNK				
00272	N	N	N	N	N	03/29/2018	DOUGLAS	1 14	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 9	STRGHT										02,08
STATE		N				Thu 10A	WINSTON	MN 0	CN		STOP SIGN	N	DRY	TURN		N/A	NE SW								000	00
							ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
No						*43 6 44.81 -123 26 31.76*		003500100S00	1															UNK				
															02	NONE 9	TURN-L										
																N/A	SW NW									000	00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
																							UNK				
00487	N	N	N	N	N	05/29/2018	DOUGLAS	1 14	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE	STRGHT										02
STATE		N				Tue 4P	WINSTON	MN 0	CN		STOP SIGN	N	DRY	ANGL		PRVTE	SE NW								015	00
							ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	18	M	OR-Y		028	000	02
No						*43 6 44.82 -123 26 31.78*		003500100S00	1															OR<25				
															02	NONE	STRGHT										
																PRVTE	NE SW									000	00
																PSNGR CAR		01	DRVR	INJC	67	F	OR-Y		000	000	00
																							OR<25				
																		02	PSNG	INJC	57	F			000	000	00
00718	N	N	N	N	N	08/07/2018	DOUGLAS	1 14	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE	STRGHT										32,02
STATE		N				Tue 6P	WINSTON	MN 0	CN		STOP SIGN	N	DRY	ANGL		PRVTE	NE SW								000	00
							ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	60	M	OR-Y		000	000	00
No						*43 6 44.82 -123 26 31.78*		003500100S00	1															OR<25				

035 COOS BAY-ROSEBURG — Intersectional Crashes at OR-42, Coos Bay-Roseburg Hwy (#035) & Brockway Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	MJ	SCH	WORK	DRUG	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# / CMPT/MLG / MILEPNT / LRS	FC / CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																	02	NONE / PRVTE	STRGHT / SE NW									015		00
																		PSNGR CAR		01	DRVR	NONE	46	F	OR-Y / OR>25		052,028	000		32,02
00372	N	N	N	N	N	N	04/19/2019	DOUGLAS	1	14		INTER	CROSS	N		N	CLR	ANGL-OTH	01	NONE	9	STRGHT										02
STATE		N					Fri 3P	WINSTON	MN 0	BROCKWAY RD		CN		STOP SIGN		N	DRY	ANGL		N/A		SW NE							000		00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H		02	0			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	00	U	UNK		000	000		00
No	*43*	*6*	*44.82*	*-123*	*26*	*31.79*			003500100S00	1																	UNK					
																	02	NONE / N/A	9 STRGHT / SE NW									015		00
																		PSNGR CAR		01	DRVR	NONE	00	U	UNK / UNK		000	000		00
00393	N	N	N				05/08/2015	DOUGLAS	1	14		INTER	CROSS	N		N	CLR	ANGL-OTH	01	NONE		TURN-R										02,08
NONE		N					Fri 4P	WINSTON	MN 0	BROCKWAY RD		CN		STOP SIGN		N	DRY	TURN		PRVTE		NW SW							000		00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H		03	0			N	DAY	PDO		PSNGR CAR			01	DRVR	NONE	17	M	OR-Y / OR<25		028,007	000		02,08
No	*43*	*6*	*44.82*	*-123*	*26*	*31.78*			003500100S00	1																						
																	02	NONE / PRVTE	STRGHT / NE SW									000		00
																		PSNGR CAR		01	DRVR	NONE	56	M	OR-Y / OR>25		000	000		00
01306	N	N	N	N	N	N	12/02/2016	DOUGLAS	1	14		INTER	CROSS	N		N	CLD	ANGL-OTH	01	NONE	0	STRGHT									013	02,32
STATE		N					Fri 4P	WINSTON	MN 0	BROCKWAY RD		CN		STOP SIGN		N	WET	ANGL		PRVTE		NE SW							000		00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H		03	0			N	DAY	INJ		PSNGR CAR			01	DRVR	INJC	50	M	OR-Y / OR<25		000	000		00
No	*43*	*6*	*44.82*	*-123*	*26*	*31.78*			003500100S00	1																						
																	02	NONE / PRVTE	0 STRGHT / NW SE									015	013	00
																		PSNGR CAR		01	DRVR	NONE	70	M	SUSP / OR<25		028,052	000		02,32
																	03	NONE / PRVTE	0 PRKD-P / NW SE									032		00
																		PSNGR CAR												
00492	N	N	N	N	N	N	06/08/2015	DOUGLAS	1	14		INTER	CROSS	N		N	CLR	ANGL-OTH	01	NONE		STRGHT									079,053	02
CITY		N					Mon 4P	WINSTON	MN 0	BROCKWAY RD		CN		STOP SIGN		N	DRY	ANGL		PRVTE		NW SE							015		00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H		04	0			N	DAY	INJ		PSNGR CAR			01	DRVR	INJB	65	F	OR-Y / OR<25		028	000		02
No	*43*	*6*	*44.82*	*-123*	*26*	*31.78*			003500100S00	1																						

035 COOS BAY-ROSEBURG — Intersectional Crashes at OR-42, Coos Bay-Roseburg Hwy (#035) & Brockway Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	DRUG	MC	SCH BUS	WORK	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# / CMPT/MLG / MILEPNT / LRS	FC / CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																	02	NONE PRVTE	STRGHT SW NE									000	079,053	00
																		PSNGR CAR		01	DRVR	INJA	66	M	OR-Y OR<25		000	000		00
																				02	PSNG	INJB	62	F			000	000		00
01079 STATE	N	N	N	N	N	N	11/09/2015 Sun 6P	DOUGLAS WINSTON	1 14 MN 0	BROCKWAY RD	INTER CN	CROSS STOP SIGN	N	N	CLD DRY	ANGL-OTH TURN	01	NONE 1 PRVTE	STRGHT W E									000		02 00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	04	0		N	DARK	INJ		SEMI TOW		01	DRVR	INJC	45	M	OR-Y OR>25		000	000		00
No							*43 6 44.82 -123 26 31.78*		003500100	S00 1																					
																	02	NONE 0 PRVTE	TURN-L S W									015		00
																		PSNGR CAR		01	DRVR	INJA	69	F	OR-Y OR>25		000	000		00
																				02	PSNG	INJB	70	F			000	000		00
																				03	PSNG	NO<5	01	M			000	000		00
01114 STATE	N	N	N				10/17/2016 Mon 12P	DOUGLAS WINSTON	1 14 MN 0	BROCKWAY RD	INTER CN	CROSS STOP SIGN	N	N	CLR DRY	ANGL-OTH ANGL	01	NONE 0 PRVTE	STRGHT SW NE									000		03 00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	68	F	OR-Y OR<25		000	000		00
No							*43 6 44.82 -123 26 31.78*		003500100	S00 1																					
																				02	PSNG	INJC	18	F			000	000		00
																	02	NONE 0 PRVTE	STRGHT NW SE									000		00
																		PSNGR CAR		01	DRVR	INJB	24	F	OR-Y OR<25		021	000		03
01092 STATE	N	N	N	N			09/30/2017 Sat 3P	DOUGLAS WINSTON	1 14 MN 0	BROCKWAY RD	INTER CN	CROSS STOP SIGN	N	N	CLR DRY	S-1TURN TURN	01	NONE 9 N/A	TURN-L SW NW									000		08 00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
No							*43 6 44.82 -123 26 31.78*		003500100	S00 1																					
																	02	NONE 9 N/A	STRGHT SW NE									000		00
																		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
00014 STATE	N	N	N	N	N	N	01/05/2019 Sat 3P	DOUGLAS WINSTON	1 14 MN 0	BROCKWAY RD	INTER CN	CROSS STOP SIGN	N	N	CLD DRY	ANGL-OTH ANGL	01	NONE PRVTE	STRGHT SW NE									000	121	03 00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	04	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	INJB	81	F	OR-Y OR<25		000	000		00
No							*43 6 44.83 -123 26 31.76*		003500100	S00 1																					
																				02	PSNG	INJB	86	M			000	000		00

035 COOS BAY-ROSEBURG

Intersectional Crashes at OR-42, Coos Bay-Roseburg Hwy (#035) & Brockway Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	DRUG	MAJ	SCH	HWY	WORK	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# CMPT/MLG MILEPNT LRS	FC / CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																		02	NONE PRVTE	STRGHT NW SE									000	121	00
																			PSNGR CAR		01	DRVR	INJB	80	M	OR-Y OR<25		021	000		03
00527	N	N	N	N	N		06/03/2019	DOUGLAS	1 14		INTER	CROSS	N	N	CLR	ANGL-OTH		01	NONE	STRGHT											02
STATE		N		Mon		7A		WINSTON	MN 0	BROCKWAY RD	CN		STOP SIGN	N	DRY	ANGL			PRVTE	SW NE									000		00
								ROSEBURG UA	71.73	COOS BAY-ROSEBURG H	04	0		N	DAY	INJ			PSNGR CAR		01	DRVR	INJC	41	M	OR-Y OR<25		000	000		00
No	*43*	*6*	*44.82*	*-123*	*26*	*31.78*			003500100S00		1																				
																		02	NONE PRVTE	STRGHT NW SE									015		00
																			PSNGR CAR		01	DRVR	INJB	36	M	OTH-Y N-RES		028	000		02

CITY OF WINSTON, DOUGLAS COUNTY

Intersectional Crashes at OR-42, Coos Bay-Roseburg Hwy (#035) & Brockway Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00303	N	N	N			03/13/2017	16	BROCKWAY RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											07,29,27
NONE			N			Mon 2P	0	COOS BAY-ROSEBURG H	SE		STOP SIGN	N	DRY	REAR		N/A	SE NW									000		00
No	*43*	*6 44.82*				*-123 26 31.78*	1		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
															02	NONE 9	STOP											
																N/A	SE NW									011		00
																SEMI TOW		01	DRVR	NONE	00	U	UNK UNK		000	000		00
00285	N	N	N			04/01/2018	16	BROCKWAY RD	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE			N			Sun 6P	0	COOS BAY-ROSEBURG H	SE		STOP SIGN	N	DRY	REAR		N/A	SE NW									000		00
No	*43*	*6 44.82*				*-123 26 31.75*	1		06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
															02	NONE 9	STOP											
																N/A	SE NW									011		00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00

035 COOS BAY-ROSEBURG

Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Jorgen St in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	DRUGS	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# FC / CMPT/MLG / MILEPNT / LRS	CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00149	N	N	N			02/27/2015	DOUGLAS	1 14		INTER	CROSS	N		N RAIN	ANGL-OTH	01	NONE	STRGHT											02
NO RPT			N			Fri 1P	WINSTON	MN 0	COOS BAY-ROSEBURG H	CN		STOP SIGN		N WET	ANGL		PRVTE	SW NE									000		00
							ROSEBURG UA	73.52	JORGEN ST	02	0			N DAY	INJ		PSNGR CAR		01	DRVR	INJC	70	M	OR-Y		000	000		00
No	*43*	*7*	*27.58*	*-123*	*24*	*43.59*		003500100	S00 1															OR<25					
																02	NONE	STRGHT											
																	PRVTE	E W									015		00
																	PSNGR CAR		01	DRVR	NONE	27	M	OR-Y		028	000		02
																								OR<25					

035 COOS BAY-ROSEBURG

Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Lookingglass Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALCHL	DRUGS	MCJ	SCHL	WORK	DAY/TIME / LAT/LONG	COUNTY / CITY / URBAN AREA	RD# / CMPT/MILEPNT / LRS	FC / MLG / CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS / RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00926	N	N	N	N	N		08/31/2016	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE	TURN-L										010	02,08
CITY		N					Wed 5P	WINSTON	MN 0	COOS BAY-ROSEBURG H	NE		STOP SIGN	N	DRY	TURN		PRVTE	NW NE									015		00
								ROSEBURG UA	73.88	LOOKINGGLASS RD	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	66	M	OR-Y		028,007	000		02,08
No	*43*	*7*	*42.71*	*-123*	*24*	*30.04*			003500100S00	1																OR<25				
																	02	NONE	STRGHT											
																		PRVTE	SW NE									000	010	00
																		MTRCYCLE		01	DRVR	INJB	55	M	OR-Y		000	000		00
																									OR<25					
00706	N	N	N				06/26/2017	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	TURN-L											02
NO RPT		N					Mon 11A	WINSTON	MN 0	COOS BAY-ROSEBURG H	CN		STOP SIGN	N	DRY	TURN		PRVTE	NW NE									000		00
								ROSEBURG UA	73.88	LOOKINGGLASS RD	03	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	62	M	OR-Y		028	000		02
No	*43*	*7*	*42.71*	*-123*	*24*	*30.04*			003500100S00	1																OR<25				
																	02	NONE 0	STRGHT											
																		PRVTE	NE SW									000		00
																		PSNGR CAR		01	DRVR	INJC	54	F	OR-Y		000	000		00
																									OR<25					
01333	N	N	N	N	N		11/30/2017	DOUGLAS	1 14		INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE 1	STRGHT											02
CITY		N					Thu 7A	WINSTON	MN 0	COOS BAY-ROSEBURG H	CN		STOP SIGN	N	DRY	TURN		PRVTE	NE SW									000		00
								ROSEBURG UA	73.88	LOOKINGGLASS RD	03	0		N	DAY	INJ		SEMI TOW		01	DRVR	NONE	53	M	OTH-Y		000	000		00
No	*43*	*7*	*42.71*	*-123*	*24*	*30.04*			003500100S00	1																N-RES				
																	02	NONE	TURN-L											
																		PRVTE	NW NE									015		00
																		PSNGR CAR		01	DRVR	INJB	26	M	SUSP		028	000		02
																									OR<25					
00420	N	N	N	N	N		05/09/2018	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 1	STRGHT											02
CITY		N					Wed 5P	WINSTON	MN 0	COOS BAY-ROSEBURG H	CN		STOP SIGN	N	DRY	TURN		PRVTE	NE SW									000		00
								ROSEBURG UA	73.88	LOOKINGGLASS RD	03	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	60	M	OR-Y		000	000		00
No	*43*	*7*	*42.71*	*-123*	*24*	*30.02*			003500100S00	1																OR<25				
																	02	NONE	TURN-L											
																		PRVTE	NW NE									015		00
																		PSNGR CAR		01	DRVR	INJB	64	F	OR-Y		028	000		02
																									OR<25					
																				02	PSNG	INJB	58	F			000	000		00
																				03	PSNG	INJB	41	F			000	000		00
																				04	PSNG	INJB	31	M			000	000		00
01267	N	N	N				12/28/2018	DOUGLAS	1 14		INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE 9	TURN-L											02
NO RPT		N					Fri 4P	WINSTON	MN 0	COOS BAY-ROSEBURG H	CN		STOP SIGN	N	WET	TURN		N/A	NW NE									015		00
								ROSEBURG UA	73.88	LOOKINGGLASS RD	03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
No	*43*	*7*	*42.70*	*-123*	*24*	*30.03*			003500100S00	1																UNK				

035 COOS BAY-ROSEBURG — Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Lookingglass Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	DRUGS	MAJ	CMV	HORK	SCHL BUS	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# CMPT/MLG MILEPNT LRS	FC CONN # FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																		02	NONE 9 N/A	STRGHT SW NE										000		00
																			PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
00709	N	N	N	N	N			07/18/2019	DOUGLAS	1 14		INTER	3-LEG	N		N	RAIN	ANGL-OTH	01	NONE	STRGHT											02
CITY		N						Thu 10A	WINSTON	MN 0	COOS BAY-ROSEBURG H	CN		STOP SIGN		N	WET	TURN		PRVTE	NE SW									000		00
									ROSEBURG UA	73.88	LOOKINGGLASS RD	03	0			N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	68	M	OR-Y		000	000		00
No	*43*	*7*	*42.71*	*-123*	*24*	*30.04*				00350010	0S00 1																OR>25					
																						02	PSNG	INJC	64	F			000	000		00
																		02	NONE PRVTE	TURN-L NW NE										015		00
																			PSNGR CAR		01	DRVR	INJC	16	F	OR-Y OR<25		028	000		02
01340	N	N	N	N	N			12/29/2019	DOUGLAS	1 14		INTER	3-LEG	N		N	RAIN	ANGL-OTH	01	NONE	TURN-L											02
CITY		N						Sun 3P	WINSTON	MN 0	COOS BAY-ROSEBURG H	CN		STOP SIGN		N	WET	TURN		PRVTE	NW NE									015		00
									ROSEBURG UA	73.88	LOOKINGGLASS RD	03	0			N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	46	F	OR-Y		028	000		02
No	*43*	*7*	*42.71*	*-123*	*24*	*30.04*				00350010	0S00 1																OR<25					
																		02	NONE PRVTE	STRGHT NE SW										000		00
																			PSNGR CAR		01	DRVR	INJC	34	F	OR-Y OR<25		000	000		00

035 COOS BAY-ROSEBURG

Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Main St in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	DRUG	MCJ	SHL	WRK	SCHL	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# / CMPT/MLG / MILEPNT / LRS	FC / CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
00076	N	N	N					01/21/2016	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT										29
NO RPT			N					Thu 4P	WINSTON	MN 0	COOS BAY-ROSEBURG H	NE		TRF SIGNAL	N	DRY	REAR		N/A	NE SW									000	00
									ROSEBURG UA	73.37	SOUTH MAIN ST	06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*				003500100S00	1															UNK				
																		02	NONE 9	STOP										
																			N/A	NE SW									011	00
																			PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
																										UNK				
01349	N	N	N					12/04/2017	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE	STRGHT										27,29,22
NONE			N					Mon 1P	WINSTON	MN 0	COOS BAY-ROSEBURG H	NE		TRF SIGNAL	N	DRY	REAR		PRVTE	NE SW									000	22
									ROSEBURG UA	73.37	SOUTH MAIN ST	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	70	F	OR-Y		026	000	07,29
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*				003500100S00	1															OR<25				
																		02	NONE	STOP										
																			PRVTE	NE SW									011	00
																			PSNGR CAR		01	DRVR	INJC	19	M	OR-Y		000	000	00
																										OR<25				
00042	Y	Y	N	N	N			01/17/2018	DOUGLAS	1 14		INTER	3-LEG	N	N	RAIN	S-1STOP	01	NONE	STRGHT										32,29,30
CITY			N					Wed 7P	WINSTON	MN 0	COOS BAY-ROSEBURG H	NE		TRF SIGNAL	N	WET	REAR		PRVTE	NE SW									000	00
									ROSEBURG UA	73.37	SOUTH MAIN ST	06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	22	M	OR-Y		052,050,026	000	32,30,29
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*				003500100S00	1															OR<25				
																		02	NONE	STOP										
																			PRVTE	NE SW									011	00
																			PSNGR CAR		01	DRVR	INJC	37	F	OR-Y		000	000	00
																										OR<25				
																					02	PSNG	INJC	11	M			000	000	00
00324	N	N	N					03/31/2016	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	O-OTHER	01	NONE 9	TURN-R										08
NO RPT			N					Thu 9A	WINSTON	MN 0	COOS BAY-ROSEBURG H	SW		TRF SIGNAL	N	DRY	TURN		N/A	N SW									000	00
									ROSEBURG UA	73.37	SOUTH MAIN ST	05	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*				003500100S00	1															UNK				
																		02	NONE 9	TURN-L										
																			N/A	S SW									000	00
																			PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
																										UNK				
00017	N	N	N	N	N			01/07/2015	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE	STRGHT										07,29,22
CITY			N					Wed 4P	WINSTON	MN 0	COOS BAY-ROSEBURG H	SW		TRF SIGNAL	N	DRY	REAR		PUBLC	SW NE									000	22
									ROSEBURG UA	73.37	SOUTH MAIN ST	06	0		N	DAY	INJ		SCHL BUS		01	DRVR	NONE	37	F	OR-Y		043	000	07,29
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*				003500100S00	1															OR<25				

035 COOS BAY-ROSEBURG — Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Main St in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	MOTR	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# / CMPT/MLG / LRS	FC / CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
																02	NONE / PRVTE	STOP / SW NE									011	00
																	PSNGR CAR		01	DRVR	INJC	25	F	OR-Y / OR<25		000	000	00
																			02	PSNG	INJB	62	F			000	000	00
																			03	PSNG	NO<5	03	F			000	000	00
																			04	PSNG	NO<5	01	F			000	000	00
																			05	PSNG	INJC	06	M			000	000	00
00290	N	N	N	N	N	03/25/2019	DOUGLAS	1	14		INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE	STRGHT										16,29
CITY		N				Mon 3A	WINSTON	MN	0 COOS BAY-ROSEBURG H	SW		TRF SIGNAL		N	DRY	REAR		PRVTE	SW NE									000	00
							ROSEBURG UA	73.37	SOUTH MAIN ST	06	0			N	DLIT	INJ		PSNGR CAR		01	DRVR	INJB	31	M	OR-Y / OR<25		026	025	16,29
No	*43*	*7*	*19.83*	*-123*	*24*	*46.43*		003500100S00	1																			
																02	NONE / PRVTE	STOP / SW NE									012	00
																	PSNGR CAR		01	DRVR	NONE	58	M	OR-Y / OR>25		000	000	00
00132	N	N	N			02/19/2015	DOUGLAS	1	14		INTER	3-LEG	N	N	CLR	O-1 L-TURN	01	NONE	STRGHT										02,08
NONE		N				Thu 5P	WINSTON	MN	0 COOS BAY-ROSEBURG H	CN		TRF SIGNAL		N	DRY	TURN		PRVTE	N S									000	00
							ROSEBURG UA	73.37	SOUTH MAIN ST	01	0			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	27	M	OR-Y / OR<25		000	000	00
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*		003500100S00	1																			
																02	NONE / PRVTE	TURN-L / S SW									000	00
																	PSNGR CAR		01	DRVR	NONE	43	M	OR-Y / OR<25		004,028	000	02,08
00715	N	N	N			06/28/2017	DOUGLAS	1	14		INTER	3-LEG	N	N	UNK	S-1TURN	01	NONE 9	TURN-R										08
NONE		N				Wed 5P	WINSTON	MN	0 COOS BAY-ROSEBURG H	CN		R-GRN-SIG		N	UNK	TURN		N/A	N SW									000	00
							ROSEBURG UA	73.37	SOUTH MAIN ST	01	0			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK / UNK		000	000	00
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*		003500100S00	1																			
																02	NONE 9 / N/A	TURN-R / N SW									000	00
																	PSNGR CAR		01	DRVR	NONE	00	U	UNK / UNK		000	000	00
00314	N	N	N			03/27/2016	DOUGLAS	1	14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 9	TURN-L										04
NO RPT		N				Sun 10A	WINSTON	MN	0 COOS BAY-ROSEBURG H	CN		TRF SIGNAL		N	DRY	TURN		N/A	S SW									000	00
							ROSEBURG UA	73.37	SOUTH MAIN ST	03	0			N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK / UNK		000	000	00
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*		003500100S00	1																			

035 COOS BAY-ROSEBURG — Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Main St in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCH	WORK	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# / CMPT/MILEPNT / LRS	FC / MLG / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	CONN #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																	02	NONE 9 N/A	TURN-L SW N									000		00
																		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
00432	N	N	N	N	N	05/14/2018	DOUGLAS	1 14			INTER	3-LEG	N		N	CLR ANGL-OTH	01	NONE 9	TURN-L											04
CITY		N				Mon 2P	WINSTON	MN 0	COOS BAY-ROSEBURG H		CN		TRF SIGNAL		N	DRY TURN		N/A	SW N									000		00
							ROSEBURG UA	73.37	SOUTH MAIN ST		03	0			N	DAY PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*		003500100S00		1																				
																	02	NONE 9 N/A	STRGHT N S									000		00
																		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
00384	N	N	N			04/03/2017	DOUGLAS	1 14			INTER	3-LEG	N		N	CLR ANGL-OTH	01	NONE 0	STRGHT										128	04
NO RPT		N				Mon 4P	WINSTON	MN 0	COOS BAY-ROSEBURG H		CN		TRF SIGNAL		N	DRY ANGL		N/A	S N									000		00
							ROSEBURG UA	73.37	SOUTH MAIN ST		04	0			N	DAY PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
No	*43*	*7*	*19.83*	*-123*	*24*	*46.44*		003500100S00		1																				
																	02	NONE 9 N/A	STRGHT SW NE									000		00
																		BOBTAIL		01	DRVR	NONE	00	U	UNK UNK		000	000		00

CITY OF WINSTON, DOUGLAS COUNTY

Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Main St in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPED	ALC	DRUG/MJ	SCHL	WORK	DATE / DAY/TIME / *LAT/LONG*	FC / DISTNC	CITY STREET / FIRST STREET / SECOND STREET / INTERSECTION SEQ #	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CONTL	OFF-RD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
01265	N	N	N			12/21/2015	14	COOS BAY-ROSEBURG H	INTER	3-LEG	N	N	RAIN	S-1STOP	01	NONE	STRGHT											13
NO RPT			N			Mon 11A	0	MAIN ST	N		R-GRN-SIG	N	WET	SS-O		PRVTE	NE SW										000		00
No	*43*	*7*	*19.83*			*-123 24 46.44*	1	1	06	1		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	41	M	OR-Y OR<25		045	000		13
															02	NONE	STOP											00
																PRVTE	NE SW									011		
																PSNGR CAR		01	DRVR	NONE	76	F	OR-Y OR<25		000	000		00

035 COOS BAY-ROSEBURG

Intersectional Crashes OR-42, Coos Bay-Roseburg Hwy (#035) & Pepsi Rd in Winston, OR
January 1, 2015 through December 31, 2019

SER# / INVEST / UNLOC?	SPEED	ALC	MDRUG	SCHL	WORK	DATE / DAY / TIME / LAT/LONG	COUNTY / CITY / URBAN AREA	RD# / CMPT/MILEPNT / LRS	FC / MLG / CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
01045	N	N	N			09/20/2017	DOUGLAS	1 14		INTER	3-LEG	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										29
NO RPT			N			Wed 10A	WINSTON	MN 0	PEPSI RD	NE		STOP SIGN	N	WET	REAR		PRVTE	NE SW									000	00
							ROSEBURG UA	74.19	COOS BAY-ROSEBURG H	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	57	M	OR-Y		026	000	29
No	*43*	*7*				*52.75 -123 24 12.33*		003500100	S00 1															OR<25				
																02	NONE 0	STOP										
																	UNKN	NE SW									011	00
																	PSNGR CAR		01	DRVR	NONE	48	M	OR-Y		000	000	00
																								OR<25				
																			02	PSNG	INJC	14	F			000	000	00
																			03	PSNG	INJC	11	M			000	000	00
00001	N	N	N	N	N	01/02/2015	DOUGLAS	1 14		INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE	TURN-L										02
CITY			N			Fri 11A	WINSTON	MN 0	PEPSI RD	CN		STOP SIGN	N	DRY	TURN		PRVTE	SE SW									015	00
							ROSEBURG UA	74.19	COOS BAY-ROSEBURG H	02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	81	M	OR-Y		028	000	02
No	*43*	*7*				*52.75 -123 24 12.33*		003500100	S00 1															OR<25				
																			02	PSNG	INJB	66	F			000	000	00
																02	NONE	STRGHT										
																	PRVTE	SW NE									000	00
																	PSNGR CAR		01	DRVR	INJB	60	M	OR-Y		000	000	00
																								OR<25				
01114	N	N	N	N	N	11/20/2015	DOUGLAS	1 14		INTER	3-LEG	N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT										02
CITY			N			Fri 10P	WINSTON	MN 0	PEPSI RD	CN		STOP SIGN	N	DRY	TURN		PRVTE	SW NE									000	00
							ROSEBURG UA	74.19	COOS BAY-ROSEBURG H	02	0		N	DARK	INJ		PSNGR CAR		01	DRVR	INJA	66	M	OR-Y		000	000	00
No	*43*	*7*				*52.75 -123 24 12.33*		003500100	S00 1															OR<25				
																02	NONE 0	TURN-L										
																	PRVTE	SE SW									000	00
																	PSNGR CAR		01	DRVR	INJB	42	F	OR-Y		028	000	02
																								OR<25				
																			02	PSNG	INJB	10	F			000	000	00

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT 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 DRIVEWAY
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	X N/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

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
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 LN C	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 RO
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	F AVOID	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	RD RAGE	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

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN,ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT 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

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT 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 CODE TRANSLATION LIST

ERROR CODE	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
043	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
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	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

EVENT CODE	SHORT 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/TROLLEY (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

EVENT CODE	SHORT 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 ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)
135	RAIL OCC	INJURED OCCUPANT OF RAILWAY TRAIN, LIGHT RAIL, STREET CAR OR CABLE CAR

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC 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	URBAN MAJOR COLLECTOR
18	URBAN MINOR COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT 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 - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT 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)

MEDIAN TYPE CODE TRANSLATION LIST

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

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST

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

NON-MOTORIST LOCATION CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYA
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

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	CHANNELIZATION
017	MEDIAN 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	WIGWAG	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
040	AUTO. FLAG	AUTOMATED FLAGGER ASSISTANCE DEVICE
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 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

WEATHER CONDITION CODE TRANSLATION LIST

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

Attachment E: Level of Traffic Stress Analysis Worksheets

				Sidewalk Condition Exhibit 14-21		Width Exhibit 14-21		LTS		Buffer Type Exhibit 14-22			LTS		Buffer Width Exhibit 14-23			LTS		Land Use Exhibit 14-24	LTS		Overall LTS	
Segment #	**Street**	**From**	**To**	**SW_Cond_Left**	**SW_Cond_Right**	**SW_Width_Left**	**SW_Width_Right**	**Left**	**Right**	**Buffer_Type_Left**	**Buffer_Type_Right**	**Speed**	**Left**	**Right**	**Lane_Count**	**Buffer_Width_Left**	**Buffer_Width_Right**	**Left**	**Right**	**Land_Use**	**Left**	**Right**	**Left**	**Right**
1	S Main St	UGB	Thompson Ave	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	45	**4**	**4**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
2	S Main St	Thompson Ave	OR 42	Fair	Fair	5	5	**2**	**2**	Solid Surface	Solid Surface	30	**2**	**2**	4	5	5	**3**	**3**	Urban Mix	**1**	**1**	**3**	**3**
3	Brockway Rd	UGB	Lookingglass Road	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	45	**4**	**4**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
4	Lookingglass Road	OR 42	Glenhart Ave	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	40	**4**	**4**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
5	Lookingglass Road	Glenhart Ave	Bremner Ln	No Sidewalk (South)	Good (North)	N/A	5	**4**	**2**	N/A	No Buffer	30	**3**	**3**	2	N/A	0	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**3**
6	Lookingglass Road	Bremner Ln	Serengeti Dr	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	30	**3**	**3**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
7	Lookingglass Road	Serengeti Dr	Brockway Rd	No Sidewalk (South)	Good (North)	N/A	5	**4**	**2**	N/A	No Buffer	30	**3**	**3**	2	N/A	0	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**3**
8	Lookingglass Road	Brockway Rd	UGB	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	45	**4**	**4**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
9	Abraham Ave	Lookingglass Road	Timothy Ave	Fair	Fair	5	5	**2**	**2**	No Buffer	No Buffer	25	**2**	**2**	2	0	0	**2**	**2**	Residential Corridor	**1**	**1**	**2**	**2**
10	Abraham Ave	Timothy Ave	OR 42	Fair (East)	No Sidewalk (West)	5	N/A	**2**	**4**	No Buffer	N/A	25	**2**	**2**	2	0	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**2**	**4**
11	Thompson Ave	Main St	Edgewood Dr	Fair	Fair	5	5	**2**	**2**	Solid Surface	Solid Surface	25	**2**	**2**	2	8	8	**2**	**2**	Urban Mix	**1**	**1**	**2**	**2**
12	Thompson Ave	Edgewood Dr	Winston Section Rd	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
13	Winston Section Rd	Thompson Ave	Tokay St	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25	**2**	**2**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
14	Tokay St	Winston Rd	UGB	Good (North)	Fair (South)	6	6	**2**	**2**	No Buffer	No Buffer	25	**2**	**2**	2	0	0	**2**	**2**	Suburban Fringe	**2**	**2**	**2**	**2**
15	Pepsi Rd	OR 42	UGB	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25	**2**	**2**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
16	Jorgen St	Rose Ave	Grape Ave	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25?	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
17	Glenhart Ave	Lookingglass Road	OR 42	Fair	Fair	6	6	**2**	**2**	Solid Surface	Solid Surface	25	**2**	**2**	2	6	6	**2**	**2**	Residential Corridor	**1**	**1**	**2**	**2**
18	Grape Ave	Jorgen St	Hall St	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
19	Grape Ave	Hall St	Thompson Ave	Fair (East)	No Sidewalk (West)	6	N/A	**2**	**4**	No Buffer	N/A	25	**2**	**2**	2	0	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**2**	**4**
20	Gregory Dr	Thompson Ave	Baker St	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
21	Darrell Ave	Jorgen St	Thompson Ave	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
22	Brosi Orchard Rd	OR 42	UGB	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25	**2**	**2**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
23	Sherry St	OR 42	Rose Ave	Fair	Fair	5	5	**2**	**2**	No Buffer	No Buffer	25?	**2**	**2**	2	0	0	**2**	**2**	Urban Mix	**1**	**1**	**2**	**2**
24	Sherry St	Rose Ave	Civil Bend Ave	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25?	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
25	Cary St	OR 42	Lookingglass Road	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25?	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
26	Civil Bend Ave	OR 42	Lookingglass Road	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	25?	**2**	**2**	2	N/A	N/A	**2**	**2**	Residential Corridor	**1**	**1**	**4**	**4**
27	OR 42	UGB	Douglas High School	No Sidewalk	No Sidewalk	N/A	N/A	**4**	**4**	N/A	N/A	45	**4**	**4**	2	N/A	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**4**	**4**
28	OR 42	Douglas High School	860' east	Fair (North)		7		**2**		Solid Surface		45	**2**		2	4		**2**		Suburban Fringe	**2**		**2**	
29	OR 42	860' east	Lower Lookingglass Creek Bridge	Fair (North)		9		**2**		Solid Surface		45	**2**		2	4		**2**		Suburban Fringe	**2**		**2**	
30	OR 42	Bridge (West End)	Bridge (East End)	Fair (North)		6		**2**		Vertical		45	**2**		2	2		**2**		Suburban Fringe	**2**		**2**	
31	OR 42	Bridge (East End)	Abraham Ave	Fair (North)		6		**2**		Solid Surface		45	**2**		2	7		**2**		Suburban Fringe	**2**		**2**	
32	OR 42	Abraham Ave	Nichols Ct	Fair (North)	No Sidewalk (South)	5	N/A	**2**	**4**	Solid Surface	N/A	30	**2**	**4**	2	6	N/A	**2**	**2**	Suburban Fringe	**2**	**2**	**2**	**4**
33	OR 42	Nichols Ct	Glenhart Ave	Fair (North)	Fair (South)	5	5	**2**	**2**	Solid Surface	Solid Surface	30	**2**	**2**	2	6	6	**2**	**2**	Urban Mix	**1**	**1**	**2**	**2**
34	OR 42	Glenhart Ave	S Main St	Fair (North)	Fair (South)	5	5	**2**	**2**	Solid Surface	Solid Surface	30	**2**	**2**	4	5	5	**3**	**3**	Urban Mix	**1**	**1**	**3**	**3**
35	OR 42	S Main St	Sherry St	Fair (West)	Fair (East)	5	5	**2**	**2**	Solid Surface	Solid Surface	30	**2**	**2**	4	5	5	**3**	**3**	Urban Mix	**1**	**1**	**3**	**3**
36	OR 42	Sherry St	Lookingglass Road	Fair (West)	Fair (East)	5	5	**2**	**2**	Solid Surface	Solid Surface	45	**2**	**2**	4	5	5	**3**	**3**	Suburban Fringe	**2**	**2**	**3**	**3**
37	OR 42	Lookingglass Road	East Sidewalk End	Fair (West Multi-Use)	Fair (East)	8	5	**1**	**2**	Solid Surface	Solid Surface	45	**2**	**2**	4	15	5	**2**	**3**	Suburban Fringe	**2**	**2**	**2**	**3**
38	OR 42	Sidewalk End	Bridge Begin	Fair (West Multi-Use)		8		**1**		Solid Surface		45	**2**		4	27		**1**		Suburban Fringe	**2**		**2**	
39	OR 42	Bridge Begin	Pepsi Road	Fair (West Multi-Use)		8		**1**		Vertical		45	**2**		4	12		**2**		Suburban Fringe	**2**		**2**	
40	OR 42	Pepsi Road	UGB	Fair (West Multi-Use)		8		**1**		Solid Surface		45	**2**		4	25		**1**		Suburban Fringe	**2**		**2**	

Exhibit 14-21 PLTS based on Sidewalk Conditions [1,3]

Actual/Effective Sidewalk Width (ft)[2]		Sidewalk Condition				
		Good	Fair	Poor	Very Poor	No Sidewalk
Actual	<4	PLTS 4	PLTS 4	PLTS 4	PLTS 4	PLTS 4
	≥4 to <5	PLTS 3	PLTS 3	PLTS 3	PLTS 4	PLTS 4
	≥5	PLTS 2	PLTS 2	PLTS 3	PLTS 4	PLTS 4
Effective	≥6[4]	PLTS 1	PLTS 1	PLTS 2	PLTS 3	PLTS 4

[1]Can include other facilities such as walkways and shared-use paths
[2]Effective width is the available/useable area for the pedestrian clear of obstructions. Does not include areas occupied by store fronts or curb side features.
[3]Consider increasing the PLTS one level higher (Max PLTS 4) for segments that do not have illumination. Darkness requires more awareness especially if sidewalk is in fair or worse condition.
[4]Effective width should be proportional to volume as higher volume sidewalks should be wider than the base six feet. Use a minimum PLTS 2 for higher volume sidewalks that are not proportional (include documentation).

Exhibit 14-22 PLTS based on Physical Buffer Type

Physical Buffer Type				
Buffer Type[1]	Prevailing or Posted Speed			
	≤25 MPH	30 MPH	35 MPH	≥40 MPH
No Buffer (curb tight)	PLTS 2	PLTS 3	PLTS 3	PLTS 4
Solid surface	PLTS 2[2]	PLTS 2	PLTS 2	PLTS 2
Landscaped	PLTS 1	PLTS 2	PLTS 2	PLTS 2
Landscaped with trees	PLTS 1	PLTS 1	PLTS 1	PLTS 2
Vertical				

[1]Combined buffers: If two or more of the buffer conditions apply, use the most appropriate, typically the lower stress level.
[2]If street furniture, street trees, lighting, planters, surface change, etc. are present then the PLTS can be lowered to PLTS 1.

Exhibit 14-23 PLTS based on Total Buffering Width

Total Number of Travel Lanes (both directions)	Total Buffering Width (ft)[1]				
	<5	≥5 to <10	≥10 to <15	≥15 to <25	≥25
2	PLTS 2	PLTS 2	PLTS 1	PLTS 1	PLTS 1
3	PLTS 3	PLTS 2	PLTS 2	PLTS 1	PLTS 1
4 - 5	PLTS 4[2]	PLTS 3	PLTS 2	PLTS 1	PLTS 1
6	PLTS 4[2]	PLTS 4[2]	PLTS 3	PLTS 2	PLTS 2

[1]Total Buffering Width is the summation of the width of buffer, width of parking, width of shoulder and width of the bike lane on the side same side of the roadway as the pedestrian facility being evaluated.
[2]Sections with a substantial physical barrier/tall railing between the travel lanes and the walkway (like might be found on a bridge) can be lowered to PLTS 3.

Exhibit 14-24 PLTS based on General Land Use

PLTS	Overall Land Use	Blueprint for Urban Design Land Use Context
PLTS 1	Residential, central business districts (CBD), neighborhood commercial, parks and other public facilities, governmental buildings/plazas, offices/office parks	Traditional Downtown/CBD Urban Mix Residential Corridor
PLTS 2	Low density development, rural subdivisions, un-incorporated communities, strip commercial, mixed employment	Suburban Fringe Rural Community
PLTS 3	Light industrial, big-box/auto-oriented commercial	Commercial Corridor
PLTS 4	Heavy industrial, intermodal facilities, freeway interchanges	

https://www.oregon.gov/odot/Planning/Documents/APMv2_Ch14.pdf

Urban LTS Application

Exhibit 14-3 BLTS Criteria for Segment with Bike Lane and Adjacent Parking Lane

Prevailing or Posted Speed	1 Lane per direction			≥2 lanes per direction	
	≥ 15' bike lane + parking	14' – 14.5' bike lane + parking	≤ 13' bike lane + parking or Frequent blockage[1]	≥ 15' bike lane + parking	≤ 14.5' bike lane + parking or Frequent blockage[1]
≤25 mph	BLTS 1	BLTS 2	BLTS 3	BLTS 2	BLTS 3
30 mph	BLTS 1	BLTS 2	BLTS 3	BLTS 2	BLTS 3
35 mph	BLTS 2	BLTS 3	BLTS 3	BLTS 3	BLTS 3
≥40 mph	BLTS 2	BLTS 4	BLTS 4	BLTS 3	BLTS 4

[1]Typically occurs in urban areas (i.e. delivery trucks, parking maneuvers, stopped buses).

Exhibit 14-4 BLTS Criteria for Segment with Bike Lane, no Adjacent Parking Lane

Prevailing or Posted Speed	1 Lane per direction				≥2 lanes per direction	
	≥ 7' (Buffered bike lane)	5.5' – 7' Bike lane	≤ 5.5' Bike lane	Frequent bike lane blockage[1]	≥ 7' (Buffered bike lane)	<7' bike lane or frequent blockage[1]
≤30 mph	BLTS 1	BLTS 1	BLTS 2	BLTS 3	BLTS 1	BLTS 3
35 mph	BLTS 2	BLTS 3	BLTS 3	BLTS 3	BLTS 2	BLTS 3
≥40 mph	BLTS 3	BLTS 4	BLTS 4	BLTS 4	BLTS 3	BLTS 4

[1]Typically occurs in urban areas (i.e. delivery trucks, parking maneuvers, stopped buses).

Exhibit 14-5 Criteria for Urban/Suburban Mixed Traffic Segment – 30 mph or less

Number of Lanes	ADT (vph)[1]	Functional Class	Posted or Prevailing Speed (mph)		
			≤20	25	30
Unmarked Centerline	≤750	Local	BLTS 1	BLTS 1	BLTS 2
	750 - ≤1,500	Local /Collector	BLTS 1	BLTS 1	BLTS 2
	1,500 - ≤3,000	Collector	BLTS 2	BLTS 2	BLTS 2
	>3,000	Arterial	BLTS 2	BLTS 3	BLTS 3
1 through lane per direction	≤750	Local	BLTS 1	BLTS 1	BLTS 2
	750 - ≤1,500	Local /Collector	BLTS 2	BLTS 2	BLTS 2
	1,500 - ≤3,000	Collector	BLTS 2	BLTS 3	BLTS 3
	>3,000	Arterial	BLTS 3	BLTS 3	BLTS 3
2 through lanes per direction	≤8,000	Arterial	BLTS 3	BLTS 3	BLTS 3
	>8,000	Arterial	BLTS 3	BLTS 3	BLTS 4
3+ though lanes per direction	Any ADT	Arterial	BLTS 3	BLTS 3	BLTS 4

[1]ADT is both directions for two-way streets. For one-way streets use 1.5*ADT.

Segment #	Street	From	To	Context	Bike_Lanes (Y/N)	Parking (Y/N)	Speed	Exhibit	ADT	Paved Shoulder Width Left	Paved Shoulder Width Right	Num_Lanes	Func_Class	LTS
1	S Main St	UGB	Thompson Ave	Rural	N/A	N/A	45	14-16	6170	4'	4'	1 Thru/Direction	Arterial	3
2	S Main ST	Thompson Ave	OR 42	Urban	Y	N	30	14-4	9035	N/A	N/A	2 Thru/Direction	Arterial	3
3	Brockway Rd	UGB	OR 42	Rural	N/A	N/A	45	14-16	2496	2'	2'	1 Thru/Direction	Arterial	4
4	Brockway Rd	OR 42	Lookingglass Road	Rural	N/A	N/A	45	14-16	1421	2'	2'	1 Thru/Direction	Collector	3
5	Lookingglass Road	OR 42	Glenhart Ave	Urban	Y	N	40	14-4	14584	N/A	N/A	1 Thru/Direction	Arterial	4
6	Lookingglass Road	Glenhart Ave	Abraham Ave	Urban	N	N	30	14-5	3065	N/A	N/A	1 Thru/Direction	Arterial	3
7	Lookingglass Road	Abraham Ave	Brockway Rd	Urban	N	N	35	14-6	3330	N/A	N/A	1 Thru/Direction	Arterial	3
8	Lookingglass Road	Brockway Rd	UGB	Rural	N	N	45	14-16	1440	2-5'	2'	1 Thru/Direction	Collector	3
9	Abraham Ave	Lookingglass Road	OR 42	Urban	N	N	25	14-5	1775	N/A	N/A	1 Thru/Direction	Collector	3
10	Thompson Ave	Main St	Winston Section Rd	Urban	N	Y	25	14-5	1983	N/A	N/A	1 Thru/Direction	Collector	3
11	Winston Section Rd	Thompson Ave	Tokay St	Urban	N	N	25	14-5	N/A	N/A	N/A	1 Thru/Direction	Collector	2
12	Tokay St	Winston Rd	UGB	Urban	N	N	25	14-5	N/A	N/A	N/A	1 Thru/Direction	Collector	2
13	Pepsi Rd	OR 42	UGB	Urban	N	N	25	14-5	1620	N/A	N/A	1 Thru/Direction	Collector	3
14	Jorgen St	Rose Ave	OR 42	Urban	N	Y	25?	14-5	190	N/A	N/A	Unmarked Centerline	Collector	1
15	Jorgen St	OR 42	Grape Ave	Urban	N	N	25?	14-5	1040	N/A	N/A	1 Thru/Direction	Collector	2
16	Glenhart Ave	Lookingglass Road	OR 42	Urban	N	Y	25	14-5	N/A	N/A	N/A	1 Thru/Direction	Collector	2
17	Grape Ave	Jorgen St	Suksdorf St	Urban	N	N	25	14-5	660	N/A	N/A	1 Thru/Direction	Collector	1
18	Grape Ave	Suksdorf St	SE Hall St	Urban	Y (1 side)	N	25	14-4	660	N/A	N/A	1 Thru/Direction	Collector	1
19	Grape Ave	SE Hall St	Thompson Ave	Urban	N	N	25	14-5	660	N/A	N/A	1 Thru/Direction	Collector	1
20	Gregory Dr	Thompson Ave	Baker St	Urban	Y	N	25	14-4	539	N/A	N/A	1 Thru/Direction	Collector	1
21	Darrell Ave	Jorgen St	Suksdorf St	Urban	N	N	25	14-5	N/A	N/A	N/A	Unmarked Centerline	Collector	1
22	Darrell Ave	Suksdorf St	Thompson Ave	Urban	N	N	25	14-5	N/A	N/A	N/A	1 Thru/Direction	Collector	1
23	Brosi Orchard Rd	OR 42	UGB	Urban	N	N	25	14-5	253	N/A	N/A	1 Thru/Direction	Collector	1
24	Sherry St	OR 42	Glenhart Ave	Urban	N	N	25?	14-5	N/A	N/A	N/A	Unmarked Centerline	Collector	1
25	Sherry St	Glenhart Ave	Civil Bend Ave	Urban	N	N	25?	14-5	N/A	N/A	N/A	1 Thru/Direction	Collector	1
26	Cary St	OR 42	Lookingglass Road	Urban	N	Y	25?	14-5	980	N/A	N/A	1 Thru/Direction	Collector	2
27	Civil Bend Ave	OR 42	Lookingglass Road	Urban	Y	N	25?	14-4	N/A	N/A	N/A	1 Thru/Direction	Collector	2

Exhibit 14-6 BLTS Criteria for Urban/Suburban Mixed Traffic Segment – 35 mph or more

Number of Lanes	ADT (vph)[1]	Functional Class	Posted or Prevailing Speed (mph)		
			35	40	>45
Unmarked Centerline	≤750	Local	BLTS 2	BLTS 3	BLTS 3
	750 - ≤1,500	Local /Collector	BLTS 3	BLTS 3	BLTS 4
	1,500 - ≤3,000	Collector	BLTS 3	BLTS 4	BLTS 4
	>3,000	Arterial	BLTS 3	BLTS 4	BLTS 4
1 through lane per direction	≤750	Local	BLTS 2	BLTS 3	BLTS 3
	750 - ≤1,500	Local /Collector	BLTS 3	BLTS 3	BLTS 4
	1,500 - ≤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 direction	Any ADT	Arterial	BLTS 4	BLTS 4	BLTS 4

[1]ADT is both directions for two-way streets. For one-way streets use 1.5*ADT.

Rural LTS Application

Exhibit 14-16 BLTS Rural Segment Criteria with posted speeds 45 mph or greater[1,2,3]

Daily Volume (vpd)	Paved Shoulder Width		
	0 – <4 ft	4 - <6 ft	≥6 ft
<400	BLTS R2	BLTS R2	BLTS R2
400 - 1500	BLTS R3	BLTS R2	BLTS R2
1500 - 7000[4]	BLTS R4	BLTS R3	BLTS R2
> 7000	BLTS R4	BLTS R4	BLTS R3