APPENDIX B ///

SAFETY TECHNICAL MEMORANDUM

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TECHNICAL MEMORANDUM

Medford TSP Update

Safety Analysis

Date: October 19, 2017 Project #: 17342
To: Karl McNair, City of Medford
From: Meredyth Sanders, Ashleigh Ludwig, Matt Braughton, and Susan Wright, PE

As part of the City of Medford's Transportation System Plan (TSP) update, a safety analysis was completed to identify locations throughout the City where safety-focused treatments and projects may be needed.

The goals and objectives of the TSP Update prioritize safety for all users of Medford's transportation system, whether they choose to travel by foot, bicycle, transit or automobile. The safety analysis specifically aims to address the following goals and objectives:

Goals and Objectives	Role of the Safety Analysis
Goal 1 - Plan, Manage and Invest Comprehensively and Strategically	
Objective 1: Provide a street network that is safe, convenient, and attractive for all users traveling by foot, bicycle, transit or automobile.	The analysis identifies roadways and intersections where safety-focused projects may improve overall safety.
Objective 2: Improve access for people to walk and bike to public places especially schools, parks, employment centers, commercial areas, and other public facilities.	The analysis hones in on bicycle and pedestrian crash data to identify roadways and intersections where safety-focused projects may specifically improve safety for vulnerable users.
Objective 4: Remove impediments to mobility for more vulnerable citizens including those with challenged physical abilities, children, and older adults.	Vulnerable users tend to rely on transit services for mobility, and most transit trips begin and end with a walking or bicycling trip. The analysis builds on bicycle and pedestrian crash data to inform projects that may improve the safety of vulnerable users.

Objective 7: Promote active transportation as a means of improving public health.	The safety of streets and intersections can contribute to the adoption of active transportation as a viable mode. The analysis identifies roadways and intersections where safety-focused projects may specifically improve bicycle and pedestrian safety.
Goal 2 – Make Cost-Effective Investments	
Objective 10: Replace, mitigate, or enhance transportation facilities and conditions where the safety of the travelling public is at risk.	The analysis identifies roadways and intersections where safety-focused projects may improve overall safety.
Objective 14: Prioritize project selection based on safety improvements and their cost-effectiveness	The analysis identifies roadways and intersections where safety-focused projects may improve overall safety, and highlights overlapping planned projects from the TSP update for future planning and prioritization processes.
Goal 3 – Support a Complete Multimodal Transportation System	
Objective 15: Ensure that all new development contributes to a built environment that is safe for pedestrians and encourages walking to the greatest extent possible while connecting to the existing transportation system.	The analysis hones in on bicycle and pedestrian crash data to identify roadways and intersections where safety-focused projects may specifically improve safety for vulnerable users.

This memorandum summarizes the safety analysis methodology and results completed as part of the TSP Update.

BACKGROUND

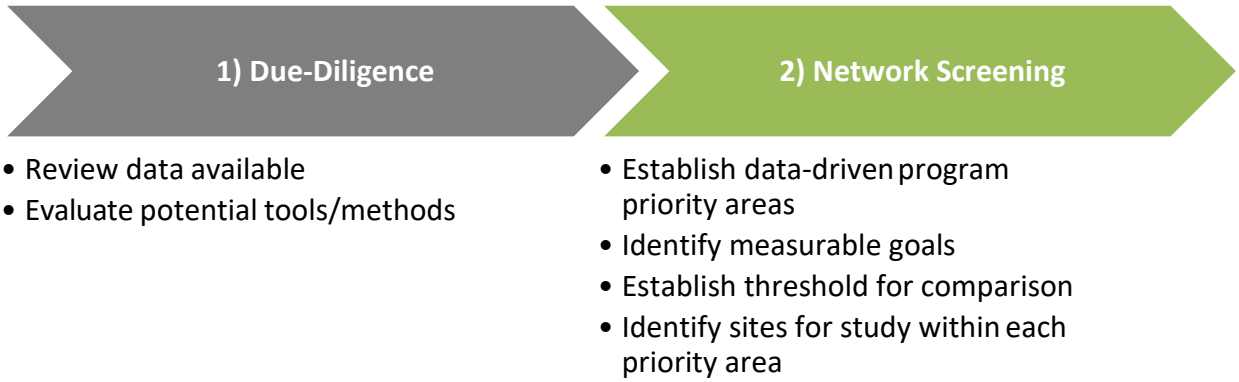
Cities and counties in Oregon are required to have a Transportation System Plan (TSP) that is updated on a regular basis per Oregon Administrative Rule (OAR) 660-012-0015. TSPs typically include a Safety Plan element that identifies elements (projects, programs, policies, and pilot projects) to address safety related issues. These elements are identified through data driven processes as well as from input from stakeholders and the public about their experiences within the City. This memorandum focuses on the data driven process used to identify potential safety issues within the City of Medford.

The safety analysis presented in this memorandum is grouped into two sections: crash trends overview and network screening. The crash trends overview section provides an overview of the data used for analysis and the general trends seen throughout the City as well as at the TSP study intersections. The network screening section applies a process from the American Association of State Highway and

Transportation Officials (AASHTO)'s *Highway Safety Manual*. Kittelson used this process to systematically evaluate all roads and intersections within the City of Medford rather than limiting the evaluation to previously identified study intersections and citywide trends.

The network screening process applied for the City of Medford is generally summarized in Figure 1. The network screening process, which is discussed in more detail in later sections of this memorandum, prioritizes City intersections and roadway segments (i.e., sites) based on multiple performance measures that take into account crash frequency, type, and severity.

Figure 1: City of Medford Safety Analysis Framework



CRASH TRENDS OVERVIEW

The Crash Trends Overview section presents a summary of the data analyzed for the safety analysis.

Reported Crash Data

Kittelson obtained reported crash data from the Oregon Department of Transportation (ODOT)'s Crash Analysis and Reporting Unit from January 1, 2011 to December 31, 2015. The 6,159 crashes reported in the City of Medford from 2011 through 2015 were analyzed in order to understand overarching safety trends in the City.

Crash Trends Summary

Kittelson evaluated the following general trends as part of the safety analysis:

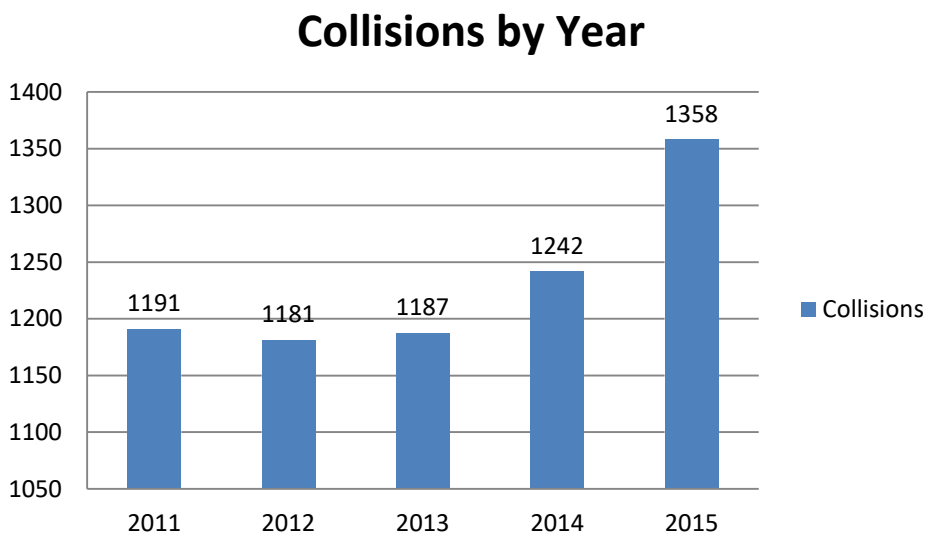
- Collisions by Year
- Collisions by Month
- Collisions by Day of Week
- Collisions by Time of Day
- Collisions by Crash Severity
- Collisions by Collision Type
- Collisions by Surface Condition
- Collisions involving Cyclists and Pedestrians

The following sections outline meaningful City-wide trends identified during Kittelson's crash data analysis. The full complete results of the crash trends analysis can be found in **Attachment A.**

Collisions by Year:

The annual number of collisions shows some fluctuation around a three-year average of 1,186 collisions per year between 2011 and 2013, and a steady increase in crashes between 2013 and 2015. Between 2013 and 2015, the number of annual collisions jumped from 1,187 collisions to 1,358 collisions. As shown in Figure 2, an overall increase in collisions occurred in the City of Medford between 2011 and 2015.

Figure 2: City of Medford Collisions, Year-to-Year, 2011-2015



Collisions by Time of Day

Crash data indicated collisions occur in the City of Medford throughout the day. Crashes are more prevalent in the afternoon and evening with 29% occurring from 3pm to 6 pm. This may be reflective of more people travelling during the afternoon and evening hours. Further analysis indicated that the time-of-day trends were similar across all years, with an increase in evening and late night collisions in 2015. Figure 3 summarizes the changes in time of day collision trends by year.

Collisions by Crash Severity

Between 2011 and 2015, 51.2% of all crashes were PDO (property damage only) crashes, 32.2% of all crashes were Injury C (Minor) crashes, 14.4% of all crashes were Injury B (Moderate) crashes, 2% of all crashes were Injury A (Serious) crashes, and 0.2% of all crashes were fatal crashes. The number of fatalities, Injury A crashes, Injury B crashes and PDO crashes has remained relatively constant per year. As shown in Figure 4, a minor increase in the frequency of Injury C crashes occurred in 2015.

Figure 3: City of Medford Collisions by Time of Day, 2011-2015

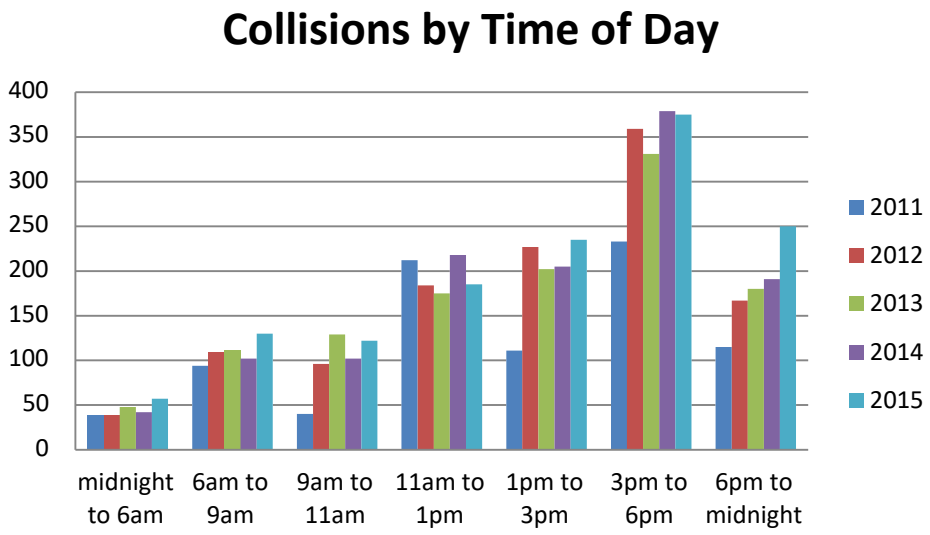
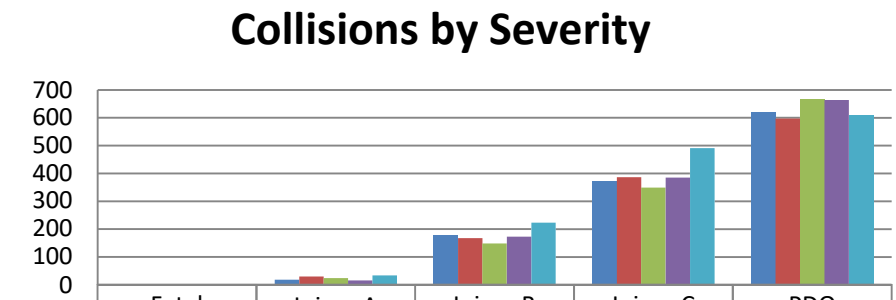
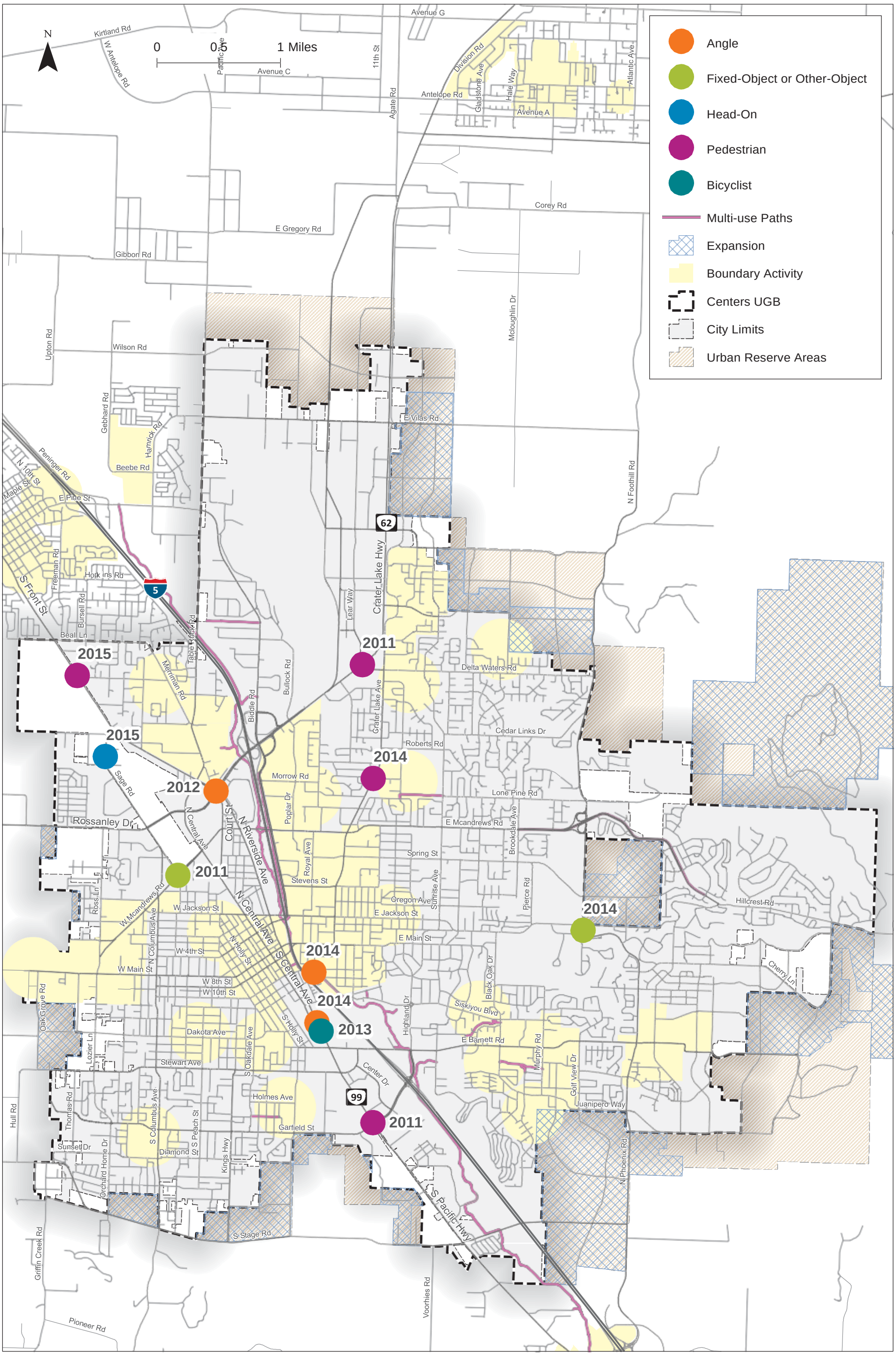


Figure 4: City of Medford Collisions by Severity, 2011-2015



	Fatal	Injury A	Injury B	Injury C	PDO
2011	3	18	177	373	620
2012	1	30	167	386	597
2013	1	24	148	349	665
2014	4	16	173	385	664
2015	2	34	223	491	608

Figure 5 shows the location and crash type of the fatal crashes that occurred in the City of Medford between 2011 and 2015. While the collision types associated with each of the fatalities varied, 36% (4 crashes) of the fatal crashes involved a pedestrian.



Fatal Crashes (2011-2015)
Medford, Oregon

Figure
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Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Collisions involving Cyclists and Pedestrians

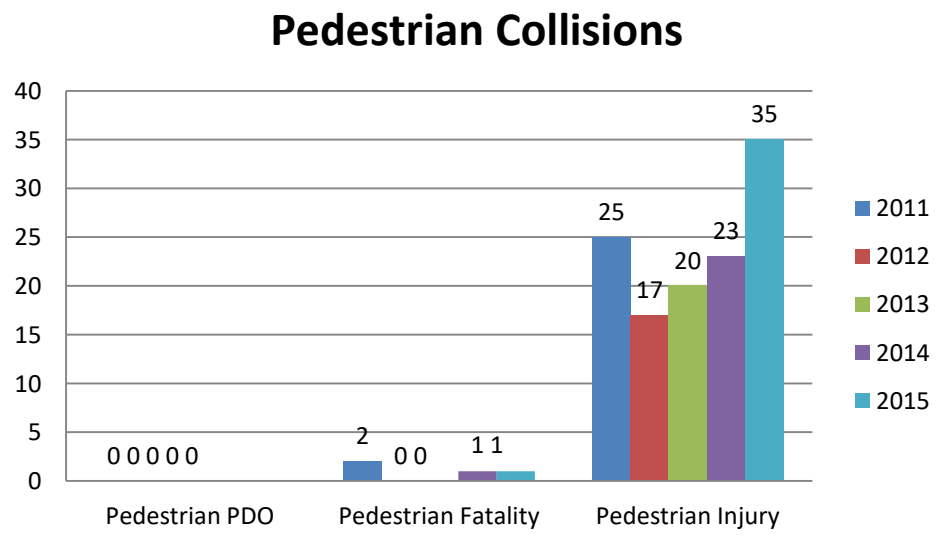
Of the 6,159 crashes that occurred in Medford between 2011 and 2015, 4.6% involved a pedestrian or cyclist. While pedestrian and cyclist crashes make up a low percent of total crashes in Medford, most cyclist and pedestrian crashes result in injury or fatality. 45% (5 crashes) of all fatal crashes that occurred in Medford between 2011 and 2015 involved a cyclist or pedestrian. The City of Medford has prioritized the safety of vulnerable users in its goals for the TSP update, so Kittelson further analyzed trends in bicycle and pedestrian plans to better understand roadway safety trends for some of Medford's vulnerable users.

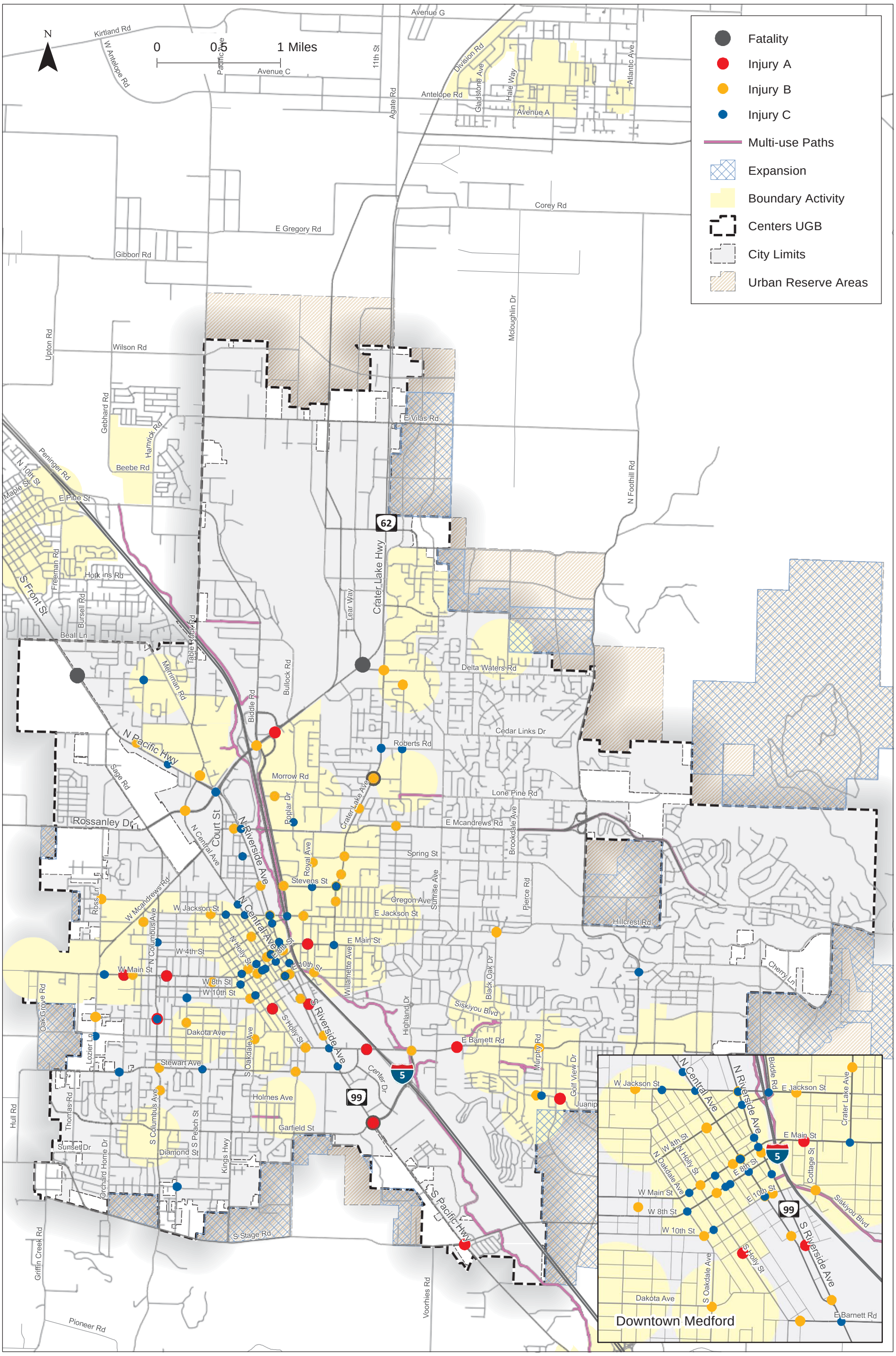
Pedestrian Collisions

Pedestrian collisions in Medford decreased between 2011 and 2012, but have steadily increased since 2012 to their highest annual number (36 crashes) in 2015. Most pedestrian crashes between 2011 and 2015 resulted in injury, and no pedestrian crashes were PDO crashes. Four pedestrian crashes resulted in a fatality, making up 36% of all fatal crashes that occurred in Medford over the five year study period. Figure 6 illustrates changes in pedestrian collisions between 2011 and 2015 by severity. Figure 7 shows all of the locations where pedestrian crashes have occurred in Medford.

While many pedestrian crashes occur in Downtown Medford, these crashes tend to result in low or moderately severe injury. Pedestrian crashes resulting in a severe injury or death tend to occur outside of Downtown Medford. The pedestrian fatalities that occurred in Medford between 2011 and 2015 occurred on North Pacific Highway (Rte. 99), South Pacific Highway (Rte. 99), Crater Lake Highway and Crater Lake Avenue.

Figure 6: City of Medford Pedestrian Collisions, 2011-2015





Pedestrian Crashes (2011-2015)
Medford, Oregon

Figure **7**

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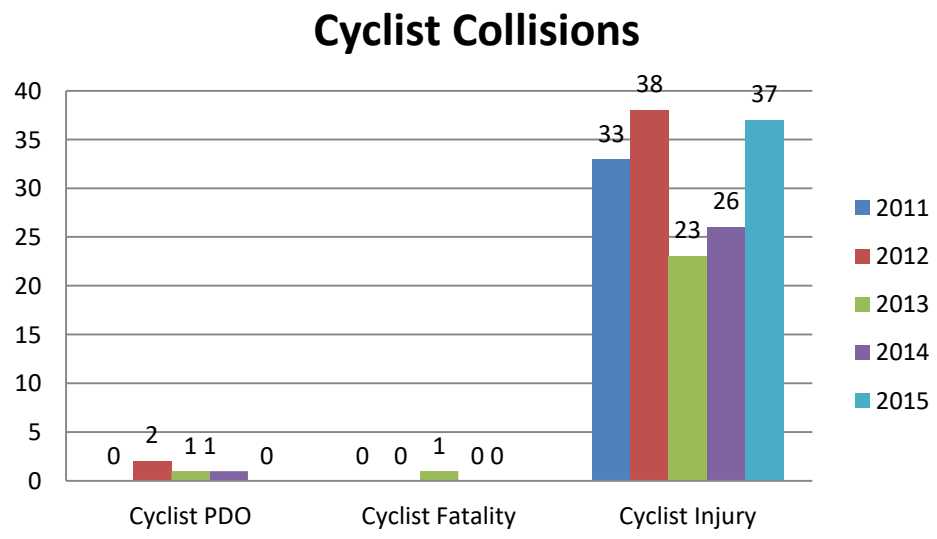
Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

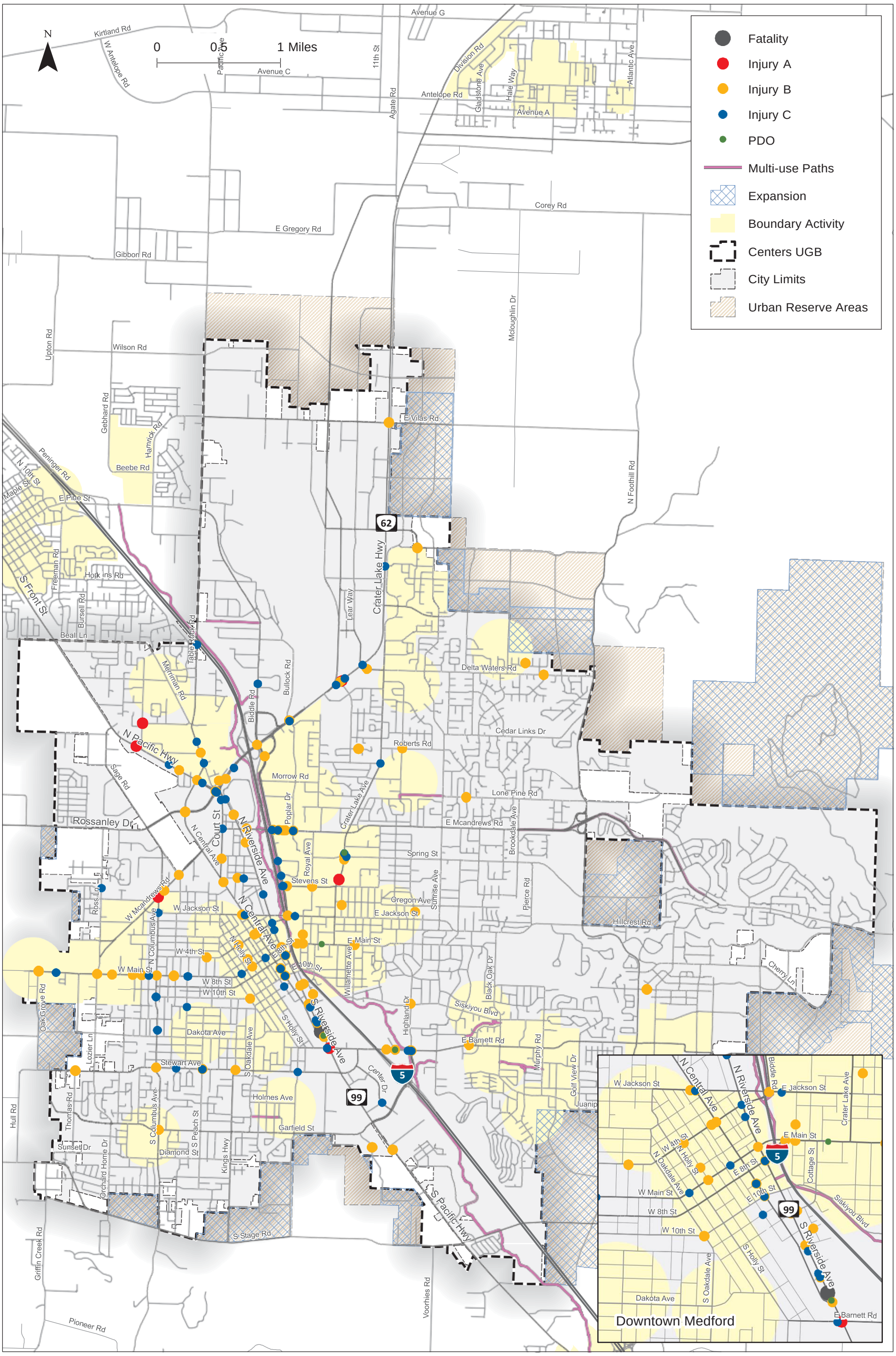
Bicycle Collisions

Cyclist collisions in Medford have fluctuated above and below an average of 32 collisions per year between 2011 and 2015. Cyclist collisions resulting in injury make up 97% of all cycling crashes in the City, and 2% of all cyclist crashes were PDO crashes. A cyclist crash in 2013 resulted in a fatality, making up 9% of all fatalities that occurred in Medford over the five year study period. Figure 8 illustrates changes in number of cyclist collisions between 2011 and 2015 by severity. Figure 9 shows all of the locations where cyclist crashes have occurred in Medford.

Cyclist crashes in Medford are less centrally-oriented than pedestrian crashes, with fewer clusters of cyclist crashes in Downtown Medford. While a slightly higher number of cyclist collisions occurred in Medford compared to pedestrian collisions, cyclists experienced fewer Injury A (Serious) crashes and fatalities than pedestrians. The pedestrian fatality that occurred in Medford between 2011 and 2015 occurred on South Pacific Highway (Rte. 99), just north of Barnett Road.

Figure 8: City of Medford Cyclist Collisions, 2011-2015





Bicyclist Crashes (2011-2015)
Medford, Oregon

Figure **9**

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Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Study Intersection Crash Rates

Kittelson analyzed the TSP study intersections individually and compared the resulting crash rates to the statewide averages for similar facilities. Reported crashes at study intersections are summarized in **Attachment B.** Intersection exposure was measured in terms of total entering vehicles (TEV), derived from the peak hour volumes used in the intersection operational analysis. The peak hour was assumed to be ten percent of the daily volume. The 90th percentile crash rates presented in **Attachment B** are identified in the ODOT Analysis and Procedures Manual (APM), Exhibit 4-1. The ODOT APM indicates that intersections that exceed the 90th percentile should be further analyzed. Table 1 summarizes reported crashes for all TSP study intersections that exceed the 90th percentile crash rates.

Table 1: Reported Crashes at Study Intersections that Exceed ODOT 90th Percentile Crash Rates

No.	Intersection Name	# of Crashes	TEV[1]	Crash Rate[2]	90th Percentile Crash Rates	Crash Type						Crash Severity				
						Bicycle	Fixed Object	Head On	Left Turn	Overturn[1]	Pedestrian	Fatality	Injury A	Injury B	Injury C	PDO[3]
6	Riverside & 4th	45	2,552	0.966	0.860	1	0	0	0	0	1	0	0	6	16	23
13	Central & 4th	37	1,736	1.168	0.860	2	1	0	4	0	0	0	0	6	14	17
54	Crater Lake Ave & Spring	33	1,680	1.076	0.860	5	0	0	2	0	1	0	0	6	9	18
55	Crater Lake Ave & McAndrews	56	3,381	0.908	0.860	0	0	0	4	0	0	0	0	6	23	27
60	Court & McAndrews	37	2,201	0.921	0.860	2	0	0	11	0	0	0	0	5	12	20
61	Biddle & McAndrews	71	3,588	1.084	0.860	2	1	0	6	1	0	0	1	6	29	35
63	Poplar / Town Center & McAndrews	44	2,279	1.058	0.860	2	1	0	1	0	0	0	0	5	11	28
66	Hwy 99 / Riv – Court & Hwy 62 / Hwy 234	75	4,290	0.958	0.860	5	3	0	4	0	1	1	1	12	28	33
72	Crater Lake Ave & Delta Waters	39	2,021	1.057	0.860	0	0	0	5	0	1	0	1	5	13	20
73	Crater Lake Hwy & Delta Waters	75	4,500	0.913	0.860	2	0	0	5	0	1	1	2	6	25	41

[1] Overturn crashes involve a vehicle that is turned over or flipped over as a result of the crash

77	Bullock / Poplar & Crater Lake Hwy	105	4,992	1.153	0.860	2	3	0	4	0	0	0	1	15	48	41
83	Barnett & Stewart	39	1,850	1.155	0.509	0	3	0	3	0	0	0	0	10	8	21
85	Center & Stewart	34	1,505	1.238	0.860	0	0	0	4	0	2	1	1	3	13	16
89	Black Oak & Barnett	36	1,959	1.007	0.860	0	1	0	3	0	0	0	0	3	12	21
90	Highland & Barnett	72	2,806	1.406	0.860	4	3	0	3	1	1	0	0	13	22	37
92	Riverside & Barnett	49	2,803	0.958	0.860	2	4	0	2	0	1	0	2	6	18	23
97	Crater Lake Ave & Roberts (E)	18	1,837	0.537	0.509	0	0	0	5	1	1	0	1	3	7	7
99	Poplar & Morrow	25	1,295	1.058	0.860	0	1	0	0	0	0	0	0	0	11	14
120	I-5 NB Ramps & Crater Lake Hwy	84	4,097	1.123	0.860	1	2	0	0	0	1	0	3	9	31	41
310	Crater Lake Ave & Vilas	14	756	1.015	0.408	0	0	0	0	0	0	0	0	2	0	12
313	Columbus & 4th	11	1,344	0.448	0.293	0	0	0	0	0	0	0	0	2	3	6
320	Foothill & Delta Waters	7	843	0.455	0.293	0	3	0	1	0	0	0	0	1	3	3
328	Highland & E. Main	8	951	0.461	0.293	0	0	0	0	0	0	0	0	0	4	4
401	Ross - Lozier & Main	41	2,199	1.022	0.860	1	0	0	9	0	0	0	0	3	21	17
403	Crater Lake Avenue & Owen	38	1,046	1.991	0.408	0	0	0	6	1	0	0	0	10	14	14
407	Crater Lake Hwy & Coker Butte	29	2,892	0.549	0.509	0	1	0	11	0	0	0	1	7	9	12
409	Table Rock & Biddle - Pine	34	1,927	0.967	0.509	0	0	0	0	0	0	0	2	8	13	11
430	Columbus & S Stage	6	787	0.418	0.408	0	0	0	0	0	0	0	0	2	4	0
437	N Pacific Hwy & Beall	22	2,171	0.555	0.509	0	0	0	0	0	0	0	1	5	8	8
803	Columbus & Jackson	25	1,323	1.035	0.408	1	0	0	1	0	0	0	1	2	9	13
826	I-5 (SMI) & Garfield	79	4,580	0.945	0.860	0	5	0	7	1	0	0	2	4	27	46

[1]TEV = Total Entering Vehicles

[2]Crash Rate = Crashes per million entering vehicles

[3]PDO = Property damage only

Statewide Priority Index System (SPIS)

ODOT developed the Statewide Priority Index System (SPIS) to identify and prioritize sites where countermeasures could be implemented to potentially reduce the number of crashes. Kittelson reviewed data from ODOT's 2015 SPIS list to identify Medford roadways that were identified in the top 5% of all state roadways for their high SPIS scores. As shown in Table 2, five off-highway roadway segments and two on-highway roadway segments in the City of Medford fell within the top 5%.

Table 2: Medford Roadways in the Top 5% of 2015 Statewide Priority Index System (SPIS) Scores

Roadway	Begins	Ends	Avg. SPIS Score	Percent
Off-Highway				
Barnett Road	Oregon and Pacific Railroad	West Winco Entrance	61.8	95%
Columbus Avenue	Meadows Lane	South of Prune Street	64.2	95%
Poplar Drive	Crater Lake Highway	South of Fred Meyer Entrance	59.8	95%
Riverside Avenue	North of Jackson Street	South of E 4th Street	65.2	95%
Table Rock Road	Woods Road	South of Wells Road	65.0	95%
On-Highway				
Crater Lake Highway (Rte. 62)	Milepost 0.05	Milepost 3.74	60.2	95%
Rogue Valley Highway (Rte. 99)	Milepost 5.3	Milepost 5.39	72.1	95%

Attachment C includes ODOT's official SPIS reports for on- and off-highway roadways that fall within the top 5% of 2015 SPIS scores.

All Roads Traffic Safety (ARTS)

ODOT's All Roads Traffic Safety (ARTS) program identifies locations from roadways under all jurisdictions that may be candidates for systemic safety treatments. Kittelson reviewed data from the ARTS Roadway Intersection Safety Implementation Plan and Pedestrian and Bicycle Safety Implementation Plan to identify Medford roadways and intersections that were identified in each plan.

The ARTS Roadway Intersection Implementation Plan recommends that safety countermeasures be implemented at 29 signalized intersections and 11 stop-controlled intersections in the City of Medford. The intersections and associated countermeasures are shown in **Attachment D**.

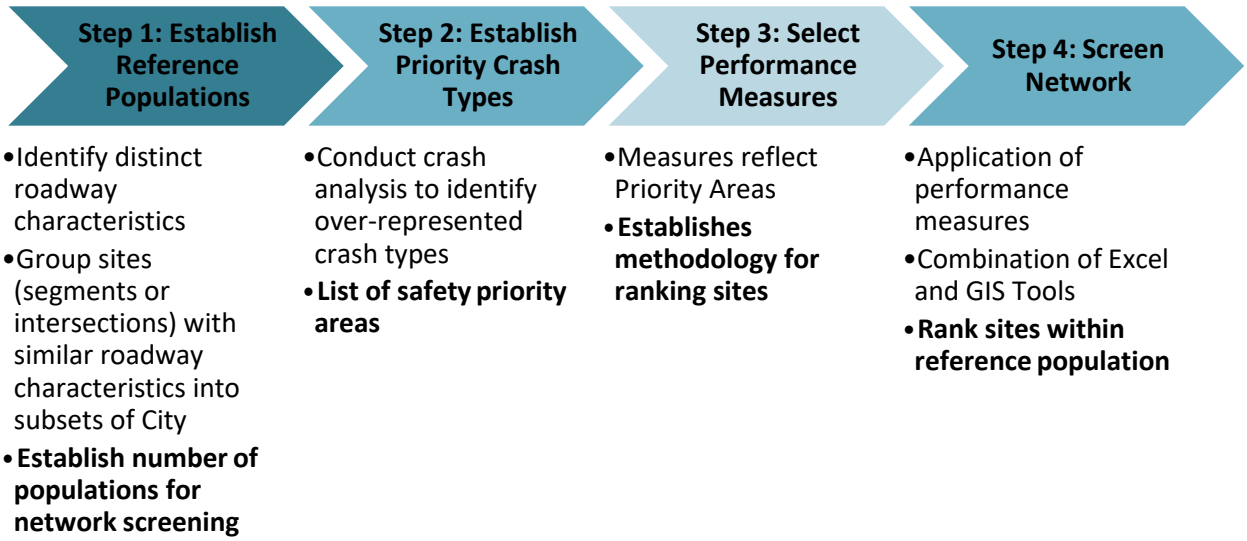
The ARTS Pedestrian and Bicycle Safety Implementation Plan identifies one pedestrian risk-based project corridor and eight pedestrian crash frequency and severity project corridors in the City of Medford. The plan also identifies one bicyclist risk-based project corridor and thirteen bicyclist crash frequency and severity project corridors in the City of Medford. The corridors are shown in **Attachment D.**

The intersections and segments identified through ODOT's ARTS program should be carried forward into the TSP.

AN INTRODUCTION TO NETWORK SCREENING

The network screening process is outlined in Chapter 4 of the HSM and can be described as a four step-process, shown in Figure 10. The first three steps in the process inform the screening analysis and the fourth step is conducting the analysis. Bold, bulleted text indicates the outcomes of each step.

Figure 10: Network Screening Process



Attachment E contains a presentation Kittelson gave to the City of Medford on February 10, 2017; the presentation documents the analysis conducted to establish reference populations (Step 1) and priority areas (Step 2). The key outcomes of each step in the network screening process are summarized in the following sections. The details are provided in the presentation presented in Attachment E.

NETWORK SCREENING PROCESS

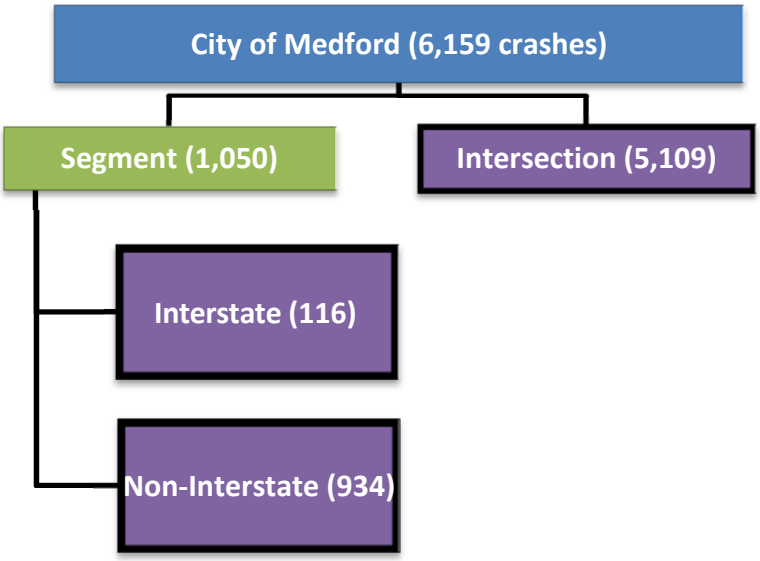
This section provides an overview of the network screening process Kittelson performed in support of the safety analysis for City of Medford's TSP update.

Reference Populations

To conduct the citywide network screening, Kittelson organized the City of Medford's roadway network into reference populations. The reference populations provide a grouping of similar sites within which safety performance is compared to provide a sense of which sites may have a greater potential for crash reduction than other sites.

In order to identify the reference populations for the analysis, Kittelson developed a crash tree showing the distribution of 6,159 total crashes by roadway type (i.e., segment or intersection) and functional classification.[2] These crash trees informed project discussions with the City that resulted in a final set of segment and intersection reference populations, summarized in Figure 11. The populations are identified as the lowest level of each arm in the charts (shown with a thick border). For example, one reference population includes interstate road segments. Interstate segments are separated from all other roadway segments because travel speeds, volumes, adjacent land uses, and cross-sections are likely different between the two populations and these characteristics influence the types of crashes that occur.

Figure 11: Reference Populations



[2] A crash reported within 250 feet of an intersection was classified as an intersection-related crash and all other crashes were classified as segment-related. A segment crash that occurred along a roadway that fell under the City's "Interstate" functional classification was classified as a segment interstate crash and all other crashes were assigned to the segment non-interstate reference population.

Priority Crash Types

Using the five most recent available years of crash data (covering January 1, 2011 through December 31, December 2015), Kittelson and the City identified priority crash types where the frequency of specific crash types exceeded the expected frequencies for that reference population. Crash charts supporting these recommendations are provided in **Attachment F**. For example, Table 3 illustrates the high frequency of overturning, pedestrian, fixed-object, head-on, bicyclist and left-turn crashes at intersections that led to their inclusion as priority crash types for the intersection reference population. The same crash types were identified for the segment non-interstate reference population. A variety of crash types were reported for the segment interstate reference population.

Table 3: Intersection Crash Type Prioritization

Intersection Crashes			
Crash Type	Percent of All Crashes	Percent of All Fatal and Severe Crashes	Ratio of Percent Fatal/Severe to Percent Total
Overturned	0%	4%	825%
Pedestrian	2%	14%	694%
Fixed object	7%	16%	238%
From opposite direction – Head-On	1%	1%	198%
Bicyclist	3%	5%	188%
From opposite direction – one left turn, one straight	9%	17%	186%
Entering at angle – all others	23%	24%	105%
Parked motor vehicle	3%	2%	60%
From same direction – all others	2%	1%	58%
From same direction – one turn, one straight	5%	2%	40%
From same direction – one stopped	33%	10%	31%
From same direction – both going straight	8%	2%	26%
Animal	0%	0%	0%
Entering at angle – one vehicle stopped	1%	0%	0%
From opposite direction – all others	1%	0%	0%
From opposite direction – one stopped	1%	0%	0%
Other object	0%	0%	0%

Performance Measures

The performance measures used in this analysis were identified based on the City's goals and the data available for analysis. Of the thirteen performance measures described by the HSM, Kittelson identified two performance measures for implementation within Medford. The performance measures were:

1) Equivalent Property Damage Only (EPDO) Average Crash Frequency;
2) Excess Proportion of Specific Crash Types

The measures were chosen based on their fit with the City's desires to:

- Be able to gauge the relative safety performance of similar intersections and road segments; and
- Identify locations where there is an overrepresentation of a specific crash type (e.g., an overrepresentation of pedestrian crashes could be identified using performance measure 2 listed above).

The following defines the performance measures referenced above. They were applied to the City of Medford's street network as part of the Medford TSP safety analysis.

- **Equivalent Property Damage Only (EPDO) Average Crash Frequency** performance measure identified sites with a high number of fatal or injury A (serious injury) crashes. In this method, crashes are weighted based on the societal costs of fatal, injury and property-damage only crashes to develop an equivalent property damage-only score that considers frequency and severity of crashes. Kittelson applied the following weighting in the safety analysis for the City of Medford: fatal and injury A crashes were assigned a weight of 100, injury B and injury C crashes were assigned a weight of 10 and PDO crashes were assigned a weight of 1. An example of this performance measure is an intersection with one injury A crash and three PDO crashes. This intersection would have a high (poor) EPDO score compared to an intersection with one injury B crash and five PDO crashes.
- **Excess Proportion of Specific Crash Types** performance measure identifies sites where the proportion of a crash type is greater than the proportion of the same crash type for the entire reference population. An example of this performance measure is a situation in which 53 percent of crashes at urban signalized intersections are angle crashes; however at a specific intersection 75 percent of crashes are angle crashes. The intersection would be flagged as a location with high proportion of angle crashes, with an excess proportion of 22 percent.

Network Screening

Using the 2011-2015 ODOT crash data for the City of Medford, Kittelson evaluated public roadways and intersections in Medford using Kittelson's GIS-based HSM network screening tool. As detailed in prior sections, the crash data was divided into intersection-related crashes and segment-related crashes, and segment crashes were further divided into Interstate and non-Interstate crashes. A crash reported within 250 feet of an intersection was classified as an intersection-related crash and other crashes were classified as segment-related.

A description of the parameters for each performance measure and each reference group type (intersections and roadway segments) are described in Table 4 below.

Table 4: Performance Measure Calculation Parameters

#	Performance Measure	Parameter	Description
1	**Equivalent Property Damage Only (EPDO) Average Crash Frequency**	*Crash Characteristic*	**Intersections & Segments**: The sum of fatal, injury A, Injury B, Injury C and PDO crashes associated with the intersections segments.
		Threshold	**Intersections & Segments**: Weighted EPDO score for each intersection segment.
2	**Excess Proportions of Specific Crash Types**[1]	*Crash Characteristic*	**Intersections & Segments:** Left-Turn, Fixed Object, Bicycle, Overturn, Head-On, Pedestrian
		Threshold	**Intersections & Segments:** Average proportion of the specific crash type for all locations within the reference population

[1] A variety of crash types were reported for the segment interstate reference population. No priority crash type was identified at interstate segments and those sites were prioritized based on equivalent property damage only (EPDO) average crash frequency

Using the above methodology and parameters for each reference population and performance measure combination, Kittelson evaluated the public roadways and intersections. The results are discussed in the following section.

NETWORK SCREENING RESULTS

Each reference population was screened to evaluate which of the performance measures were exceeded at sites in the City. For each performance measure and reference group, the results were sorted by their respective performance metric. The performance metrics by performance measure are described below:

- **Equivalent Property Damage Only (EPDO) Average Crash Frequency**: Frequency and severity of segment or intersection crashes
- **Excess Proportions of Specific Crash Types:** Segment or intersection excess proportions of the target crash type

Once these results were prioritized, the top twenty sites for each performance measure were listed and mapped. Maps and tables showing the top twenty locations by reference population for equivalent property damage only (EPDO) average crash frequency and excess proportion of specific crash types are provided in **Attachment G.**

The top twenty sites for the following reference populations went through a final screening in order to identify the intersections and segments that should be prioritized in Medford's TSP update:

- Intersection
- Non-Interstate Roadway Segments

The final screening process identifies sites with a combination of high EPDO scores and disproportionate crash types. In this method, intersections and segments are weighted based on their inclusion in the top twenty sites for EPDO average crash frequency and excess proportion of specific crash types. Kittelson applied the following weighting in the final screening for the City of Medford: reference populations in the top twenty sites for EPDO average crash frequency were assigned a weight of 1 and reference populations in the top twenty sites for any of the excess proportion of specific crash types were assigned a weight of 0.5. An example of this process is an intersection that falls within the top twenty sites for EPDO average crash frequency and excess proportion of the left-turn crash type. This intersection would have a combined score of 1.5, and would fall higher on the final screening list than an intersection that falls within the top twenty sites for excess proportion of both the left-turn and pedestrian crash type.

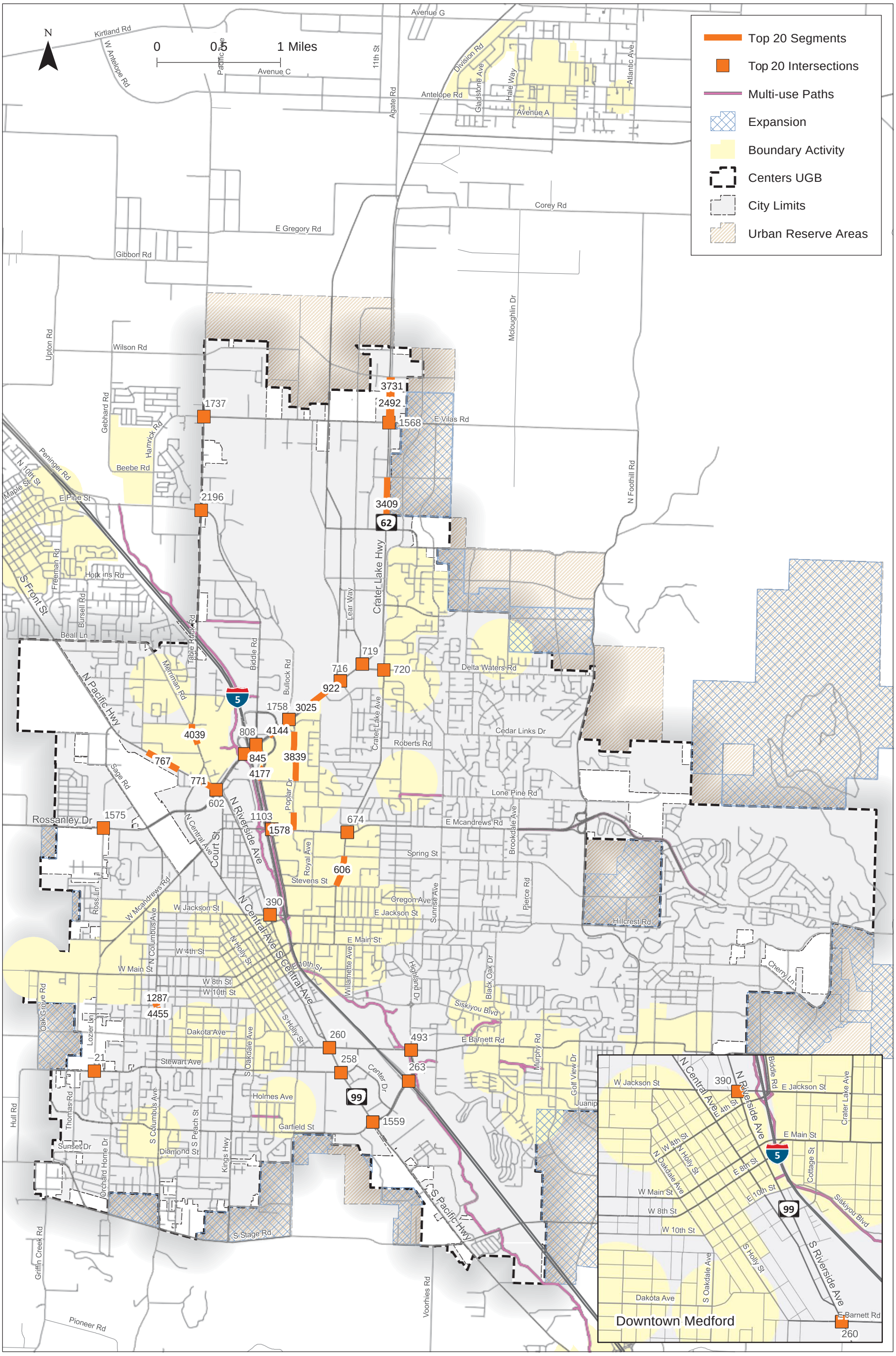
Several intersections and segments that were considered for inclusion in the final list for each reference population fell within the top twenty sites for EPDO average crash frequency, but did not fall within any other top twenty sites. These sites were sorted based on EPDO score, so that the sites with the highest EPDO scores were included within the final map and list.

Figure 12 shows the final top twenty locations by reference population, and Table 5 details the contributing factors that led to the inclusion of each site. Table 5 also shows safety indicators (ODOT-identified intersections and corridors) and projects from Medford's TSP update that overlap with each identified intersection and segment.

FINDINGS AND CONCLUSIONS

The network screening process conducted for the Medford TSP update highlights the top intersections and non-interstate segments that may have a greater potential for crash reduction than other sites in Medford. As shown in Table 5, two of the twenty final intersections have more than one contributing factor (performance measure), while ten of the twenty final segments have more than one contributing factor. All remaining intersections and segments were included in the final list due to their high EPDO scores.

Many of the intersections and non-interstate segments identified during the network screening process overlap with intersections that exceed ODOT's 90th percentile crash rating, roadway segments from ODOT's 2015 SPIS list, and sites included in ODOT's ARTS program plans. The intersections and segments identified in the final screening, along with all other ODOT SPIS and ARTS sites in the City of Medford, should be carried forward into the TSP to enhance the project selection process, prioritize safety, and remain consistent with ODOT's plans.



Top 20 Locations - Intersections and Segments
Combined EPDO Average Crash Frequency and Excess Proportion of Specific Crash Types
Medford, Oregon

Figure **12**

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KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Table 5: Top 20 Combined Locations, Contributing Factors, and Overlapping Indicators and Projects

Rank	Facility ID	Facility Location	Intersection/Non-Interstate Segment	Contributing Factors	Overlapping Safety Indicators	Overlapping TSP Projects
1	21	Lozier Lane & Stewart Avenue	Intersection	EPDO, Left-Turn	ARTS Intersection	
2	258	Stewart Avenue & Riverside Avenue	Intersection	EPDO, Head On	ODOT 90th Percentile Crash Rates	I17
3	1758	Crater Lake Highway & Bullock Road	Intersection	EPDO	ODOT 90th Percentile Crash Rates	I81
4	808	Crater Lake Highway & Exit 30 NB	Intersection	EPDO	ODOT 90th Percentile Crash Rates	
5	719	Crater Lake Highway & Delta Waters Road	Intersection	EPDO	ODOT 90th Percentile Crash Rates, ARTS Intersection	
6	602	Pacific Highway & Crater Lake Highway	Intersection	EPDO	ODOT 90th Percentile Crash Rates	I80
7	263	Garfield Street and I-5 On/Off-Ramps	Intersection	EPDO	ODOT 90th Percentile Crash Rates	I83
8	1737	Vilas Road & Table Rock Road	Intersection	EPDO	ARTS Intersection	
9	1103	McAndrews Road & Biddle Road	Intersection	EPDO	ODOT 90th Percentile Crash Rates, ARTS Intersection	
10	260	Riverside Avenue & Barnett Barnett Road	Intersection	EPDO	ODOT 90th Percentile Crash Rates, ARTS Intersection	
11	2196	Table Rock Road & Biddle Road	Intersection	EPDO	ODOT 90th Percentile Crash Rates	
12	716	Crater Lake Highway & Whittle Avenue	Intersection	EPDO		
13	390	Riverside Avenue & Jackson Street	Intersection	EPDO	ARTS Intersection	
14	1568	Crater Lake Highway & Vilas Road	Intersection	EPDO	ODOT 90th Percentile Crash Rates	I40
15	493	Barnett Road & Highland Drive	Intersection	EPDO	ODOT 90th Percentile Crash Rates	I78
16	1559	Garfield Street & Pacific Highway	Intersection	EPDO	ODOT 90th Percentile Crash Rates	

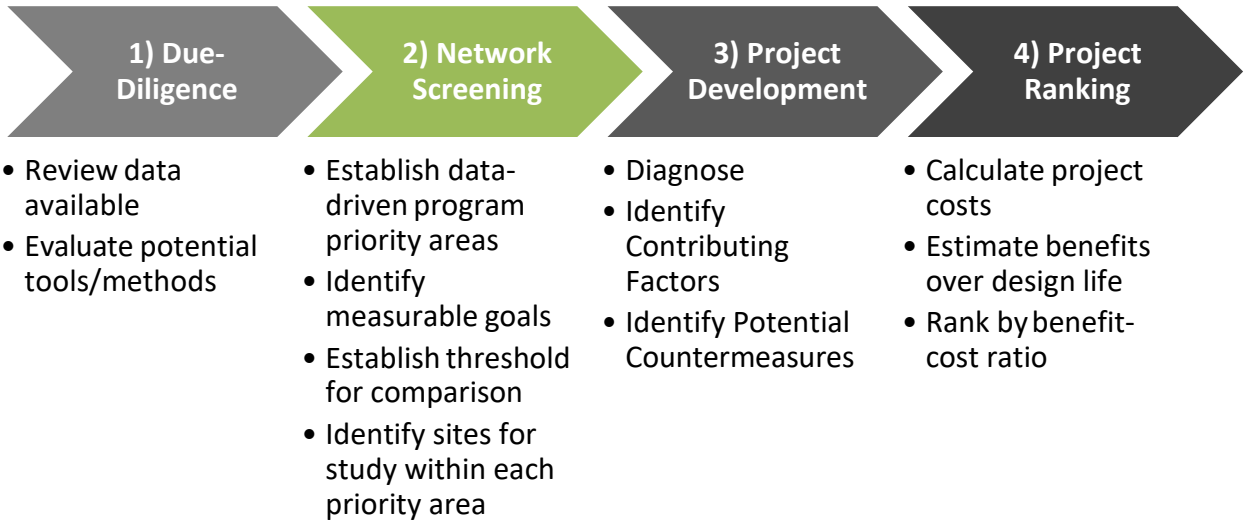
17	661	Crater Lake Highway & Exit 30 SB	Intersection	EPDO	ODOT 90th Percentile Crash Rates	
18	674	McAndrews Road & Crater Lake Avenue	Intersection	EPDO	ODOT 90th Percentile Crash Rates, ARTS Intersection	
19	720	Delta Waters Road & Crater Lake Avenue	Intersection	EPDO	ODOT 90th Percentile Crash Rates	I10
20	1575	Rossanley Drive & Ross Lane	Intersection	EPDO		
1	767	N Pacific Highway	Non-Interstate Segment	EPDO, Pedestrian, Overturning, Bicycle	Top 5% On-Highway SPIS	
2	606	Crater Lake Avenue	Non-Interstate Segment	EPDO, Pedestrian, Bicycle	ARTS Pedestrian Frequency and Severity Corridor, ARTS Bicycle Frequency and Severity Corridor	B109
3	1576	Poplar Drive	Non-Interstate Segment	EPDO, Pedestrian		
4	4144	Crater Lake Highway	Non-Interstate Segment	EPDO, Pedestrian	Top 5% On-Highway SPIS, ARTS Bike-Risk Based Corridor	
5	4039	Table Rock Road	Non-Interstate Segment	EPDO, Bicycle		B67
6	3731	Crater Lake Avenue	Non-Interstate Segment	EPDO, Left Turn	ARTS Pedestrian Frequency and Severity Corridor, ARTS Bicycle Frequency and Severity Corridor	
7	771	N Pacific Highway	Non-Interstate Segment	EPDO, Bicycle		
8	3409	Crater Lake Highway	Non-Interstate Segment	EPDO, Head On	Top 5% On-Highway SPIS, ARTS Bike Risk-Based Corridor, ARTS Ped Risk-Based Corridor	
9	1578	E McAndrews Road	Non-Interstate Segment	EPDO, Bicycle	ARTS Bicycle Frequency and Severity Corridor, ARTS Bicycle Frequency and Severity Corridor	

10	1287	S Columbus Avenue	Non-Interstate Segment	EPDO, Overturning	ARTS Pedestrian Frequency and Severity Corridor, ARTS Bicycle Frequency and Severity Corridor	I28, B151
11	845	Exit 30 NB On-Ramp	Non-Interstate Segment	EPDO		
12	4137	Crater Lake Highway	Non-Interstate Segment	EPDO	Top 5% On-Highway SPIS	
13	2492	Crater Lake Highway	Non-Interstate Segment	EPDO	Top 5% On-Highway SPIS, ARTS Bike Risk-Based Corridor, ARTS Ped Risk-Based Corridor	
14	3839	Poplar Drive	Non-Interstate Segment	EPDO	Top 5% Off-Highway SPIS	B22
15	922	Crater Lake Highway	Non-Interstate Segment	EPDO	Top 5% On-Highway SPIS, ARTS Bike Risk-Based Corridor, ARTS Ped Risk-Based Corridor	
16	4143	Crater Lake Highway	Non-Interstate Segment	EPDO	Top 5% On-Highway SPIS, ARTS Bike-Risk Based Corridor	
17	923	Crater Lake Highway	Non-Interstate Segment	EPDO	Top 5% On-Highway SPIS, ARTS Bike Risk-Based Corridor, ARTS Ped Risk-Based Corridor	
18	3025	Crater Lake Highway	Non-Interstate Segment	EPDO	Top 5% On-Highway SPIS, ARTS Bike Risk-Based Corridor, ARTS Ped Risk-Based Corridor	
19	4177	Biddle Road	Non-Interstate Segment	EPDO		B107
20	4455	S Columbus Avenue	Non-Interstate Segment	EPDO	Top 5% Off-Highway SPIS, ARTS Pedestrian Frequency and Severity Corridor, ARTS Bicycle Frequency and Severity Corridor	B151

Next Steps

With the top sites throughout the City identified through the network screening process, the evaluation of crash rates, and thorough a review of previous safety analysis (SPIS and ARTS), the City should move into the project development phase, as shown in Figure 13, to further evaluate the locations identified in this memorandum and work towards developing a Safety Program with prioritized project recommendations. The project development phase should include a detailed review of crash data, traffic data and characteristics, and geometry at each site. Site visits should be completed to observe conditions and behavior at each location when possible. The goal of this step is to diagnose possible issues to assist in developing the most appropriate safety treatment recommendations at each location. Once projects have been identified, further prioritization should occur using a cost/benefit analysis that considers the effectiveness of the proposed treatment and the cost of the treatment.

Figure 13: Steps in Network Screening Project Development Process



In addition to developing safety treatment recommendations for the top sites identified through the network screening process, the City should consider the top sites when prioritizing intersection, roadway and bicycle projects. Table 5 lists all proposed intersection, roadway and bicycle projects from the TSP Update that overlap with the top sites identified through the network screening process. The results of the analysis can and should provide insight into the City's project prioritization process so that the City of Medford can move forward towards meeting the goals of its Transportation System Plan.

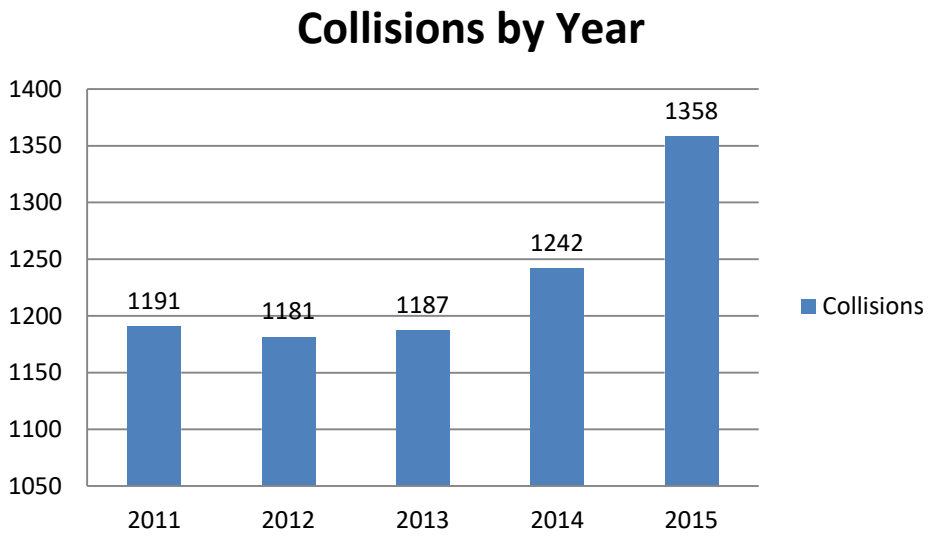
Attachment A

City-wide Crash Trends Analysis

Collisions by Year:

The annual number of collisions shows some fluctuation around a three-year average of 1,186 collisions per year between 2011 and 2013, and a steady increase in crashes between 2013 and 2015. Between 2013 and 2015, the number of annual collisions jumped from 1,187 collisions to 1,358 collisions. As shown in Figure 1, an overall increase in collisions occurred in the City of Medford between 2011 and 2015.

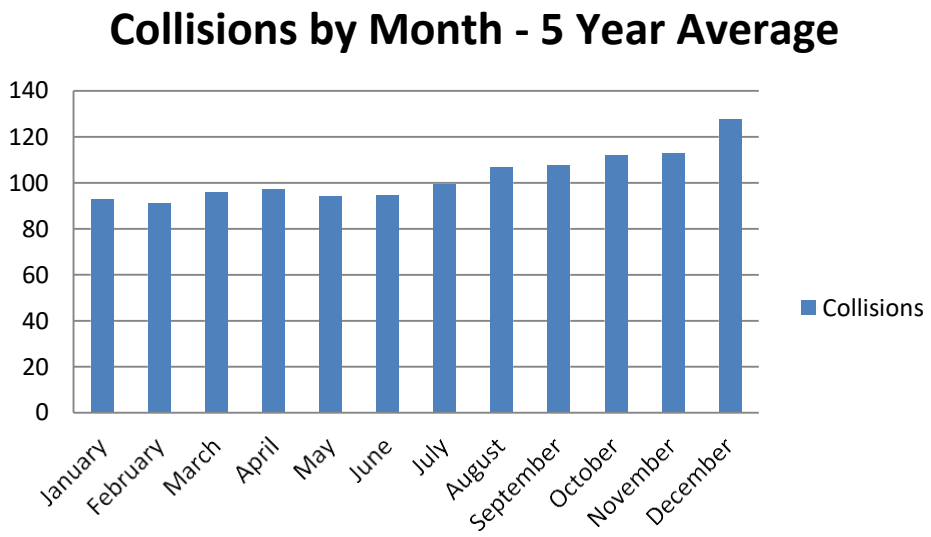
Figure 1: City of Medford Collisions, Year-to-Year, 2011-2015



Collisions by Month:

Considering crashes by time of year, average monthly collisions fluctuate between 80 and 100 collisions between January and July, with a higher frequency of crashes in the fall and winter months – specifically August through December. Figure 2 illustrates the monthly fluctuations.

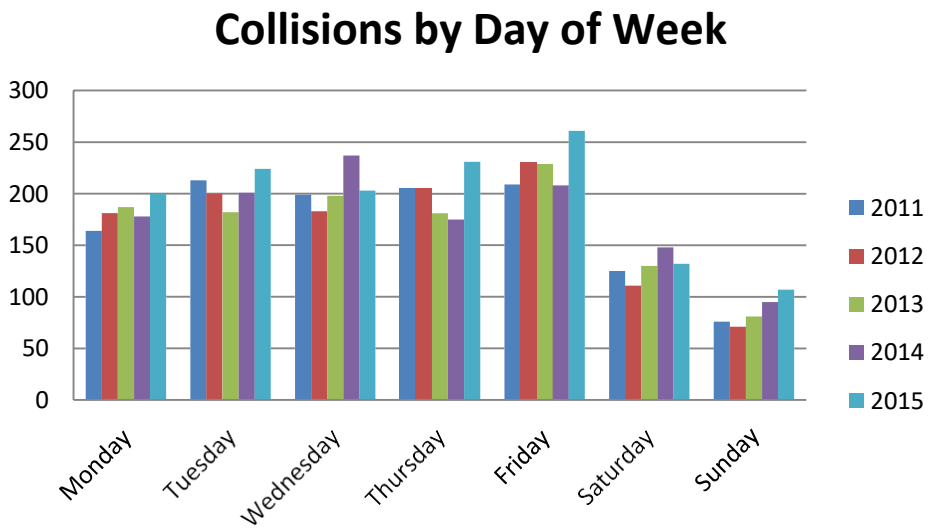
Figure 2: City of Medford Collisions, Monthly 2011-2015



Collisions by Day of Week

An analysis of annual numbers of collisions by weekday shows that collisions generally occur at the same frequency on weekdays, with a minor uptick in the frequency of collisions on Fridays. As shown in Figure 3, the City experiences a noticeable decrease in the frequency of collisions on weekends.

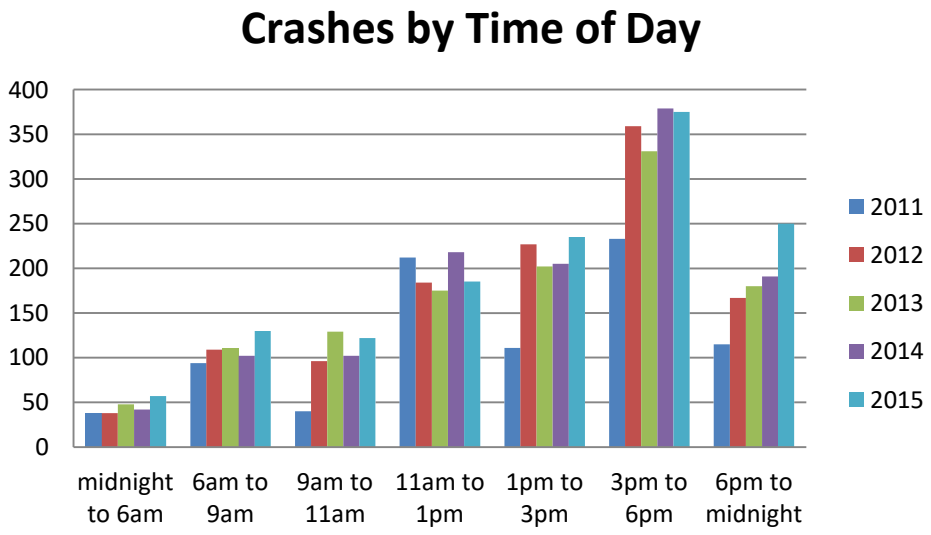
Figure 3: City of Medford Collisions by Day of Week, 2011-2015



Collisions by Time of Day

Crash data indicated collisions occur in the City of Medford throughout the day. Crashes are more prevalent in the afternoon and evening with 29% occurring from 3pm to 6 pm. This may be reflective of more people travelling during the afternoon and evening hours. Further analysis indicated that the time-of-day trends were similar across all years, with an increase in evening and late night collisions in 2015. Figure 4 summarizes the changes in time of day crash trends by year.

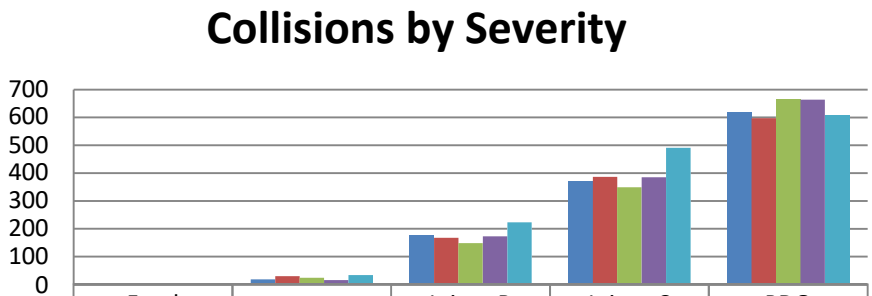
Figure 4: City of Medford Collisions by Time of Day, 2011-2015



Collisions by Crash Severity

Between 2011 and 2015, 51.2% of all crashes were PDO (property damage only) crashes, 32.2% of all crashes were Injury C (Minor) crashes, 14.4% of all crashes were Injury B (Moderate) crashes, 2% of all crashes were Injury A (Serious) crashes, and 0.2% of all crashes were fatal crashes. The number of fatalities, Injury A crashes, Injury B crashes and PDO crashes has remained relatively constant per year. As shown in Figure 5, a minor increase in the frequency of Injury C crashes occurred in 2015.

Figure 5: City of Medford Collisions by Severity, 2011-2015

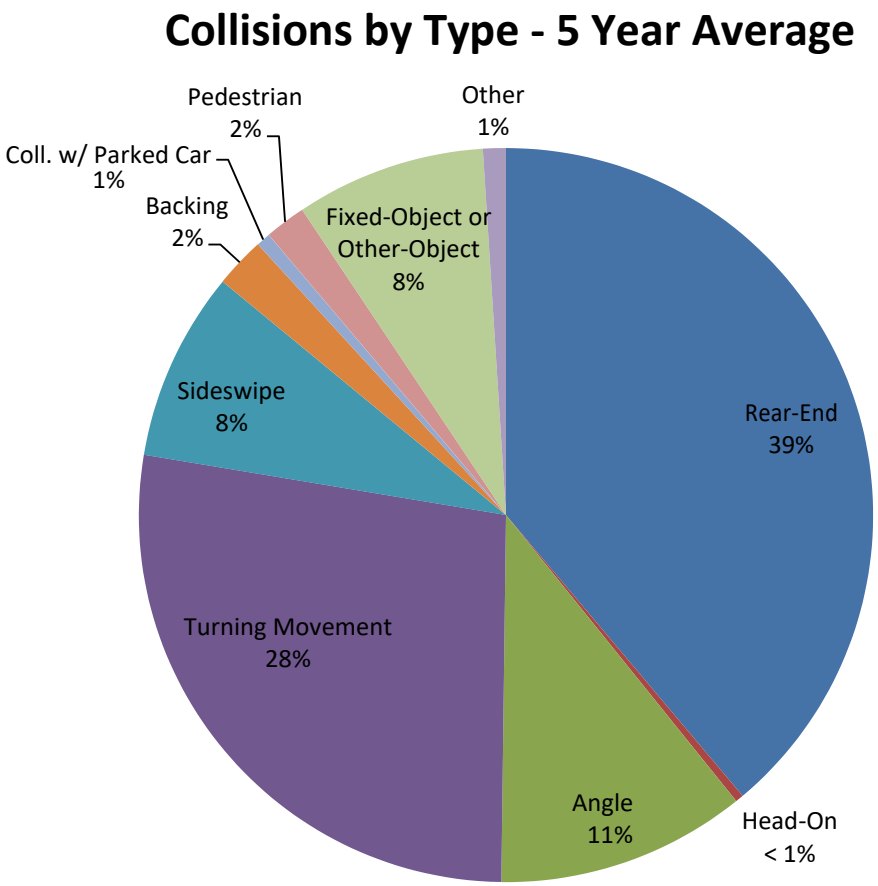


	Fatal	Injury A	Injury B	Injury C	PDO
2011	3	18	177	373	620
2012	1	30	167	386	597
2013	1	24	148	349	665
2014	4	16	173	385	664
2015	2	34	223	491	608

Collisions by Type

Crash data indicate that the most common collision types in the City of Medford are rear-end, turning movement and angle crashes, which together make up 78% of all collisions. Figure 6 shows all of the collision types that occurred in Medford between 2011 and 2015.

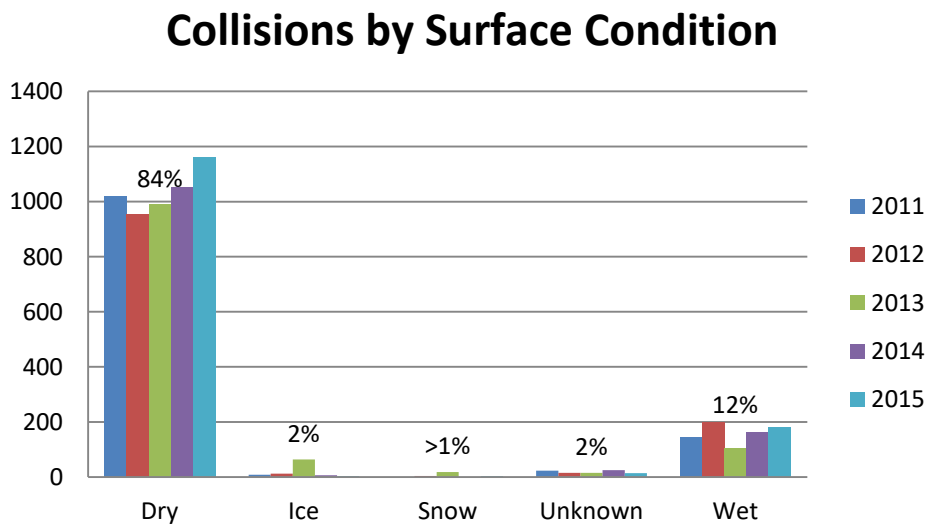
Figure 6: City of Medford Collisions by Type, 2011-2015



Collisions by Surface Condition

An analysis of annual numbers of collisions by roadway surface condition shows that the majority of collisions (84%) occur under dry surface conditions. Figure 7 shows the annual change in crashes by surface condition, by year.

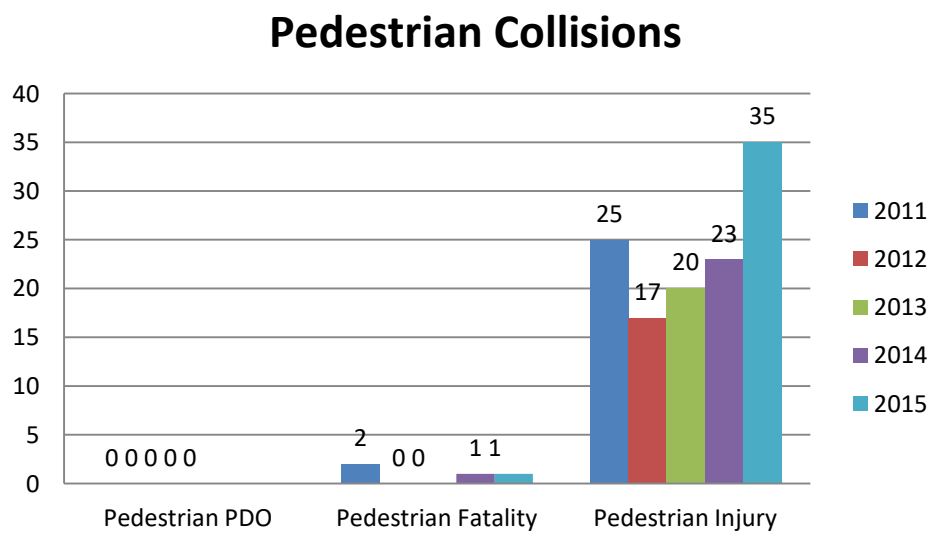
Figure 7: City of Medford Collisions by Surface Condition, 2011-2015



Pedestrian Collisions

Pedestrian collisions in Medford decreased between 2011 and 2012, but have steadily increased since 2012 to their highest annual number (36 crashes) in 2015. Most pedestrian crashes between 2011 and 2015 resulted in injury, and no pedestrian crashes were PDO crashes. Four pedestrian crashes resulted in a fatality, making up 36% of all fatalities that occurred in Medford over the five year study period. Figure 8 illustrates changes in pedestrian collisions between 2011 and 2015 by severity.

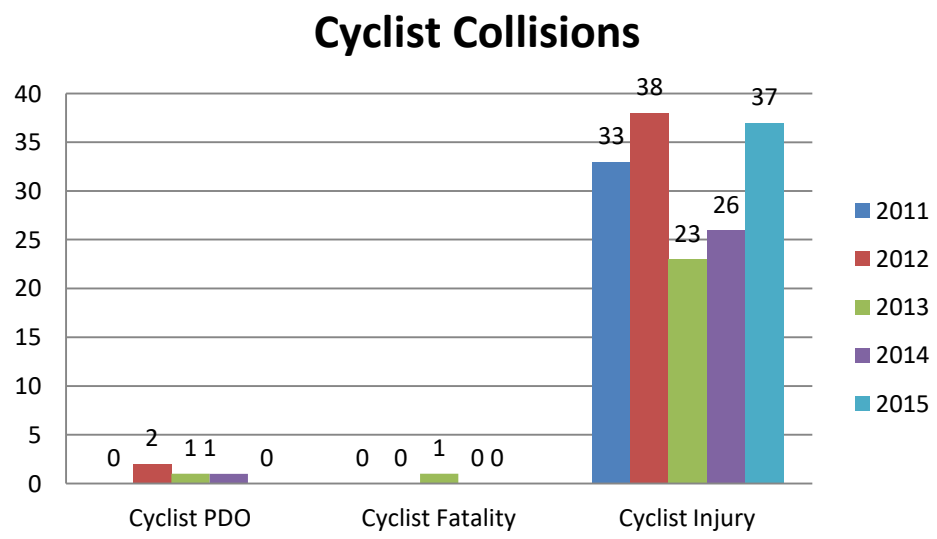
Figure 8: City of Medford Pedestrian Collisions, 2011-2015



Bicycle Collisions

Cyclist collisions in Medford have fluctuated above and below an average of 32 collisions per year between 2011 and 2015. Cyclist collisions resulting in injury make up 97% of all cycling crashes in the City, and 2% of all cyclist crashes were PDO crashes. A cyclist crash in 2013 resulted in a fatality, making up 9% of all fatalities that occurred in Medford over the five year study period. Figure 9 illustrates changes in cyclist collisions between 2011 and 2015 by severity.

Figure 9: City of Medford Cyclist Collisions, 2011-2015



Attachment B

Medford Study Intersections –
Reported Crash Summary

No.	Intersection Name	# of Crashes	TEV	Crash Rate	90th Percentile Crash Rates	Crash Type						Crash Severity				
						Bicycle	Fixed Object	Head On	Left Turn	Overturn	Pedestrian	Fatality	Injury A	Injury B	Injury C	PDO
6	Riverside & 4th	45	2,552	0.966	0.860	1	0	0	0	0	1	0	0	6	16	23
13	Central & 4th	37	1,736	1.168	0.860	2	1	0	4	0	0	0	0	6	14	17
21	Riverside & 10Th	22	2,000	0.603	0.860	0	1	0	1	0	1	0	0	4	7	11
41	Columbus & W Main	27	2,004	0.738	0.860	1	1	0	2	0	0	0	0	3	8	16
43	Biddle / 4th & Jackson	20	2,173	0.504	0.860	1	3	0	2	0	1	0	0	3	8	9
44	Hawthorne & Jackson	5	1,081	0.253	0.860	0	0	0	0	0	1	0	0	2	1	2
45	Biddle & Stevens	23	2,038	0.618	0.860	3	0	0	1	0	1	0	0	4	10	9
48	Biddle & Crater Lake Hwy Ramps	12	1,957	0.336	0.860	1	0	0	1	0	0	0	0	1	3	8
50	Crater Lake Ave & Main	13	1,632	0.436	0.509	0	0	0	0	0	1	0	0	0	9	4
51	Crater Lake Ave & Jackson	20	1,951	0.562	0.860	0	0	0	0	0	0	0	0	1	9	10
52	Crater Lake Ave & Stevens	27	2,057	0.719	0.860	0	0	0	6	0	3	0	0	5	11	11
54	Crater Lake Ave & Spring	33	1,680	1.076	0.860	5	0	0	2	0	1	0	0	6	9	18
55	Crater Lake Ave & McAndrews	56	3,381	0.908	0.860	0	0	0	4	0	0	0	0	6	23	27
60	Court & McAndrews	37	2,201	0.921	0.860	2	0	0	11	0	0	0	0	5	12	20
61	Biddle & McAndrews	71	3,588	1.084	0.860	2	1	0	6	1	0	0	1	6	29	35
62	Dwy / Royal & McAndrews	22	2,852	0.423	0.509	0	3	0	6	0	0	0	1	4	8	9
63	Poplar / Town Center & McAndrews	44	2,279	1.058	0.860	2	1	0	1	0	0	0	0	5	11	28
64	Columbus & McAndrews	6	1,295	0.254	0.860	1	2	0	1	0	0	0	1	1	0	4

65	Sage / Summit & McAndrews	23	2,020	0.624	0.860	1	2	0	5	0	0	1	0	5	5	12
66	Hwy 99 / Riv - Court & Hwy 62 / Hwy 234	75	4,290	0.958	0.860	5	3	0	4	0	1	1	1	12	28	33
69	N Pacific Hwy & W Table Rock / N Central	43	3,128	0.753	0.860	1	3	1	1	0	1	0	0	2	21	20
70	Crater Lake Hwy & Cardinal	5	2,629	0.104	0.293	0	1	0	0	0	0	0	1	1	1	2
72	Crater Lake Ave & Delta Waters	39	2,021	1.057	0.860	0	0	0	5	0	1	0	1	5	13	20
73	Crater Lake Hwy & Delta Waters	75	4,500	0.913	0.860	2	0	0	5	0	1	1	2	6	25	41
74	Crater Lake Ave & Brookhurst	17	1,510	0.617	0.860	0	0	0	7	0	3	1	0	6	3	7
75	I - 5 SB Ramps & Crater Lake Hwy	50	3,896	0.703	0.860	0	2	0	0	0	0	0	1	2	18	29
77	Bullock / Poplar & Crater Lake Hwy	105	4,992	1.153	0.860	2	3	0	4	0	0	0	1	15	48	41
80	King / Kings Hwy & Stewart	23	1,946	0.648	0.860	1	2	0	5	0	0	0	0	5	9	9
83	Barnett & Stewart	39	1,850	1.155	0.509	0	3	0	3	0	0	0	0	10	8	21
84	Riverside / S Pacific & Stewart	35	3,721	0.515	0.860	0	3	1	2	0	0	0	1	5	12	17
85	Center & Stewart	34	1,505	1.238	0.860	0	0	0	4	0	2	1	1	3	13	16
87	S Pac Hwy & Garfield	34	2,964	0.629	0.860	0	0	0	4	0	2	1	1	3	13	16
88	Murphy & Barnett	18	1,620	0.609	0.860	0	1	0	7	0	1	0	0	5	3	10
89	Black Oak & Barnett	36	1,959	1.007	0.860	0	1	0	3	0	0	0	0	3	12	21
90	Highland & Barnett	72	2,806	1.406	0.860	4	3	0	3	1	1	0	0	13	22	37

91	Alba / NB Off Ramp & Barnett	8	2,615	0.168	0.509	2	0	0	1	0	0	0	0	1	4	3
92	Riverside & Barnett	49	2,803	0.958	0.860	2	4	0	2	0	1	0	2	6	18	23
93	Black Oak & Siskiyou	6	1,224	0.269	0.860	0	1	0	0	0	0	0	0	0	3	3
95	Springbrook & McAndrews	23	1,771	0.712	0.860	0	1	0	7	0	0	0	0	5	7	11
97	Crater Lake Ave & Roberts (E)	18	1,837	0.537	0.509	0	0	0	5	1	1	0	1	3	7	7
99	Poplar & Morrow	25	1,295	1.058	0.860	0	1	0	0	0	0	0	0	0	11	14
100	N Phoenix & Barnett	3	1,232	0.133	0.860	0	0	0	0	0	0	0	0	0	1	2
101	Biddle & Crater Lake Hwy Ramps / Hilton	10	1,760	0.311	0.860	0	0	0	2	1	0	0	0	3	2	5
103	Springbrook & Roberts	8	1,371	0.320	0.860	0	2	0	3	0	0	0	1	1	1	5
108	Biddle & Lawnsdale	12	1,745	0.377	0.860	0	0	1	3	0	0	0	0	3	6	3
109	N Central & Hwy 238	17	1,961	0.475	0.860	1	6	0	0	0	1	0	0	4	3	10
110	Sage Rd & Hwy 238	27	2,462	0.601	0.860	0	0	0	2	0	0	0	1	2	7	17
111	Phoenix & Hillcrest	10	1,342	0.408	0.860	0	3	0	3	0	0	1	0	4	0	5
119	Table Rock & Merriman	7	1,404	0.273	0.860	0	3	0	0	0	0	0	0	1	3	3
120	I-5 NB Ramps & Crater Lake Hwy	84	4,097	1.123	0.860	1	2	0	0	0	1	0	3	9	31	41
306	Foothill & Cedar Links	5	817	0.335	0.509	0	1	0	0	0	0	0	0	1	0	4
310	Crater Lake Ave & Vilas	14	756	1.015	0.408	0	0	0	0	0	0	0	0	2	0	12
311	Crater Lake Ave & Coker Butte	0	640	0.000	0.509	0	0	0	0	0	0	0	0	0	0	0
313	Columbus & 4th	11	1,344	0.448	0.293	0	0	0	0	0	0	0	0	2	3	6
320	Foothill & Delta Waters	7	843	0.455	0.293	0	3	0	1	0	0	0	0	1	3	3

321	Springbrook & Delta Waters	8	1,186	0.370	0.860	0	0	0	0	0	0	0	0	1	4	3
325	Foothill & Lone Pine	6	940	0.350	0.408	0	1	0	1	0	0	0	0	2	2	2
328	Highland & E. Main	8	951	0.461	0.293	0	0	0	0	0	0	0	0	0	4	4
330	Pierce & Hillcrest	0	815	0.000	0.293	0	0	0	0	0	0	0	0	0	0	0
331	Valley View & Hillcrest	6	1,002	0.328	0.408	0	0	0	0	0	0	0	0	0	2	4
341	Ross Ln & McAndrews Rd	5	1,391	0.197	0.860	0	1	0	0	0	0	0	0	1	2	2
343	Ross & Highway 238	-	1,044	-	0.509	0	0	0	0	0	0	0	0	0	0	0
346	Kings Hwy & Garfield	4	579	0.379	0.408	0	0	0	2	1	0	0	0	2	2	0
401	Ross - Lozier & Main	41	2,199	1.022	0.860	1	0	0	9	0	0	0	0	3	21	17
403	Crater Lake Avenue & Owen	38	1,046	1.991	0.408	0	0	0	6	1	0	0	0	10	14	14
405	N Pacific Hwy & Sage	16	2,134	0.411	0.860	0	1	0	0	0	0	0	1	3	3	9
407	Crater Lake Hwy & Coker Butte	29	2,892	0.549	0.509	0	1	0	11	0	0	0	1	7	9	12
408	Crater Lake Hwy & Vilas	48	3,803	0.692	0.860	1	0	0	6	0	0	0	1	6	21	20
409	Table Rock & Biddle - Pine	34	1,927	0.967	0.509	0	0	0	0	0	0	0	2	8	13	11
412	Foothill & EB Mc Andrews Ramps	1	919	0.060	0.860	0	0	0	0	0	0	0	0	0	0	1
413	Foothill & WB Mc Andrews Ramps	2	1,025	0.107	0.860	0	1	0	0	0	0	0	0	1	0	1
430	Columbus & S Stage	6	787	0.418	0.408	0	0	0	0	0	0	0	0	2	4	0
437	N Pacific Hwy & Beall	22	2,171	0.555	0.509	0	0	0	0	0	0	0	1	5	8	8
803	Columbus & Jackson	25	1,323	1.035	0.408	1	0	0	1	0	0	0	1	2	9	13

821	Mcloughlin & Delta Waters	0	437	0.000	0.293	0	0	0	0	0	0	0	0	0	0	0
824	Sunrise & Jackson	6	1,673	0.197	0.860	0	0	0	3	0	0	0	0	1	1	4
826	I-5 (SMI) & Garfield	79	4,580	0.945	0.860	0	5	0	7	1	0	0	2	4	27	46

*The intersection of Ross Lane and Highway 238 falls outside of Medford's City limits, and was not included in the safety study

Attachment C

Statewide Priority Index System
Facilities in Medford

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region

3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
138	OR-138	1	-0.38	-0.29	10,400	41	0	1	7	13	20	Roseburg	Douglas	OAK ST. (2ND RT.)	95	86.97
138	OR-138	1	-0.37	-0.28	10,400	41	0	1	7	13	20	Roseburg	Douglas	OAK ST. (2ND RT.)	95	86.97
138	OR-138	1	-0.36	-0.27	10,400	41	0	1	7	13	20	Roseburg	Douglas	OAK ST. (2ND RT.)	95	86.97
138	OR-138	1	-0.39	-0.31	10,400	39	0	1	6	13	19	Roseburg	Douglas	OAK ST. (2ND RT.)	95	86.26
138	OR-138	1	-0.38	-0.30	10,400	39	0	1	6	13	19	Roseburg	Douglas	OAK ST. (2ND RT.)	95	86.26
272	OR-238	1	34.86	34.95	5,700	18	0	2	5	4	7		Jackson	W MAIN ST.	95	80.48
272	OR-238	1	34.87	34.96	5,700	18	0	2	5	4	7		Jackson	W MAIN ST.	95	80.48
022	OR-62	1	1.57	1.66	24,744	39	0	1	3	15	20	Medford	Jackson	DELTA WATERS RD.	95	79.10
022	OR-62	1	1.56	1.65	26,266	39	0	1	3	15	20	Medford	Jackson	DELTA WATERS RD.	95	78.68
022	OR-62	1	1.56	1.64	27,788	40	0	1	3	15	21	Medford	Jackson	DELTA WATERS RD.	95	78.60
022	OR-62	1	1.55	1.63	29,311	41	0	1	3	16	21	Medford	Jackson	DELTA WATERS RD.	95	78.52
022	OR-62	1	1.54	1.62	30,833	42	0	1	3	16	22	Medford	Jackson	DELTA WATERS RD.	95	78.46
022	OR-62	1	1.52	1.60	33,877	42	0	1	2	17	22	Medford	Jackson	DELTA WATERS RD.	95	77.84
022	OR-62	1	1.53	1.61	32,355	40	0	1	3	17	19	Medford	Jackson	DELTA WATERS RD.	95	77.59
272	OR-238	1	34.85	34.94	6,033	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	77.54
138	OR-138	1	-0.33	-0.23	10,400	34	0	1	5	9	19	Roseburg	Douglas	OAK ST. (2ND RT.)	95	77.51
022	OR-62	1	1.51	1.59	35,400	41	0	1	2	16	22	Medford	Jackson	DELTA WATERS RD.	95	77.30
022	OR-62	1	0.49	0.59	37,800	42	0	2	6	13	21	Medford	Jackson		95	77.16
022	OR-62	1	0.50	0.60	37,800	42	0	2	6	13	21	Medford	Jackson		95	77.16
272	OR-238	1	34.84	34.93	6,366	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	77.09
022	OR-62	1	6.00	6.08	22,111	33	0	1	4	14	14		Jackson		95	76.91
022	OR-62	1	0.46	0.56	37,800	41	0	2	6	14	19	Medford	Jackson		95	76.90
022	OR-62	1	5.99	6.07	22,588	33	0	1	4	14	14		Jackson		95	76.76
272	OR-238	1	34.83	34.92	6,700	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	76.65
022	OR-62	1	0.47	0.57	37,800	40	0	2	6	13	19	Medford	Jackson		95	76.63
022	OR-62	1	0.48	0.58	37,800	40	0	2	6	13	19	Medford	Jackson		95	76.63
022	OR-62	1	0.52	0.61	37,800	40	0	2	6	12	20	Medford	Jackson		95	76.63

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
022	OR-62	1	1.58	1.68	23,222	36	0	1	3	14	18	Medford	Jackson	DELTA WATERS RD.	95	76.60
022	OR-62	1	1.59	1.69	21,700	35	0	1	3	14	17	Medford	Jackson	DELTA WATERS RD.	95	76.58
022	OR-62	1	0.53	0.62	37,800	39	0	2	6	12	19	Medford	Jackson		95	76.36
272	OR-238	1	34.82	34.91	7,033	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	76.25
022	OR-62	1	0.54	0.63	37,800	38	0	2	5	11	20	Medford	Jackson		95	76.09
022	OR-62	1	5.96	6.04	24,022	29	0	2	3	12	12		Jackson		95	75.88
272	OR-238	1	34.81	34.90	7,366	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	75.87
022	OR-62	1	0.55	0.64	37,800	36	0	2	5	9	20	Medford	Jackson		95	75.52
272	OR-238	1	34.80	34.89	7,700	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	75.51
022	OR-62	1	6.03	6.12	20,200	29	0	1	4	14	10		Jackson		95	75.35
022	OR-62	1	6.03	6.11	20,677	29	0	1	4	14	10		Jackson		95	75.19
272	OR-238	1	34.79	34.88	8,033	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	75.17
022	OR-62	1	6.02	6.10	21,155	29	0	1	4	14	10		Jackson		95	75.04
240	OR-540	1	1.76	1.85	18,300	23	0	2	2	9	10	North Bend	Coos	MYRTLE ST.	95	75.03
240	OR-540	1	1.77	1.86	18,300	23	0	2	2	9	10	North Bend	Coos	MYRTLE ST.	95	75.03
022	OR-62	1	5.95	6.03	24,500	27	0	2	3	11	11		Jackson		95	74.97
035	OR-42	1	75.65	75.74	17,311	22	0	2	3	7	10		Douglas	SW CARNES RD.	95	74.89
035	OR-42	1	75.66	75.75	17,366	22	0	2	3	7	10		Douglas	SW CARNES RD.	95	74.87
272	OR-238	1	34.78	34.87	8,366	17	0	2	4	4	7		Jackson	LEG (TO W MAIN ST.)	95	74.85
022	OR-62	1	6.28	6.37	17,422	22	0	2	3	10	7		Jackson	ANTELOPE RD.	95	74.84
022	OR-62	1	5.98	6.06	23,066	32	0	1	4	13	14		Jackson		95	74.60
240	OR-540	1	1.72	1.81	18,300	22	0	2	1	9	10	North Bend	Coos		95	74.53
240	OR-540	1	1.73	1.82	18,300	22	0	2	1	9	10	North Bend	Coos		95	74.53
240	OR-540	1	1.75	1.84	18,300	22	0	2	1	9	10	North Bend	Coos	MYRTLE ST.	95	74.53
035	OR-42	1	75.64	75.73	17,255	21	0	2	3	7	9		Douglas	SW CARNES RD.	95	74.39
035	OR-42	1	75.67	75.76	17,422	21	0	2	3	7	9		Douglas	SW CARNES RD.	95	74.33
035	OR-42	1	75.68	75.77	17,477	21	0	2	3	7	9		Douglas	SW CARNES RD.	95	74.31
022	OR-62	1	6.25	6.34	19,088	22	0	2	3	9	8		Jackson	ANTELOPE RD.	95	74.27

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
022	OR-62	1	6.27	6.36	17,977	21	0	2	3	9	7		Jackson	ANTELOPE RD.	95	74.13
022	OR-62	1	6.24	6.34	19,644	22	0	2	3	9	8		Jackson	ANTELOPE RD.	95	74.09
240	OR-540	1	1.71	1.80	18,300	21	0	2	1	8	10	North Bend	Coos		95	74.02
240	OR-540	1	1.74	1.83	18,300	21	0	2	1	9	9	North Bend	Coos	MYRTLE ST.	95	74.02
022	OR-62	1	6.26	6.35	18,533	21	0	2	3	9	7		Jackson	ANTELOPE RD.	95	73.94
035	OR-42	1	75.69	75.78	17,533	20	0	2	3	7	8		Douglas	SW CARNES RD.	95	73.75
009	US-101	1	235.31	235.41	9,900	40	0	0	6	14	20	North Bend	Coos	CALIFORNIA AVE.	95	73.75
022	OR-62	1	6.31	6.39	16,311	19	0	2	3	8	6		Jackson	ANTELOPE RD.	95	73.64
022	OR-62	1	6.33	6.41	15,200	18	0	2	3	7	6		Jackson	ANTELOPE RD.	95	73.48
022	OR-62	1	6.29	6.38	16,866	19	0	2	3	8	6		Jackson	ANTELOPE RD.	95	73.43
022	OR-62	1	6.23	6.33	20,200	21	0	2	3	8	8		Jackson	ANTELOPE RD.	95	73.43
022	OR-62	1	6.01	6.09	21,633	29	0	1	3	14	11		Jackson		95	73.39
240	OR-540	1	1.70	1.79	18,300	20	0	2	1	8	9	North Bend	Coos	STATE ST.	95	73.32
022	OR-62	1	6.32	6.40	15,755	18	0	2	3	7	6		Jackson	ANTELOPE RD.	95	73.26
022	OR-62	1	0.05	0.14	31,800	26	1	1	5	8	11	Medford	Jackson		95	73.13
035	OR-42	1	75.63	75.72	17,200	19	0	2	3	6	8		Douglas	SW CARNES RD.	95	72.98
240	OR-540	1	1.78	1.87	18,300	19	0	2	2	9	6	North Bend	Coos	MYRTLE ST.	95	72.94
035	OR-42	1	75.70	75.79	17,588	19	0	2	2	7	8		Douglas	SW CARNES RD.	95	72.85
022	OR-62	1	0.56	0.65	37,800	27	0	2	4	6	15	Medford	Jackson		95	72.64
022	OR-62	1	5.97	6.05	23,544	31	0	1	4	12	14		Jackson		95	72.43
482	US-199	1	-0.08	0.01	22,033	26	1	0	4	13	8	Grants Pass	Josephine	E PARK ST.	95	71.55
138	OR-138	1	-0.34	-0.24	10,400	29	0	1	5	7	16	Roseburg	Douglas	OAK ST. (2ND RT.)	95	71.50
035	OR-42	1	75.71	75.80	17,644	19	0	2	2	6	9		Douglas	SW CARNES RD.	95	71.33
138	OR-138	1	-0.35	-0.25	10,400	28	0	1	5	7	15	Roseburg	Douglas	OAK ST. (2ND RT.)	95	70.87
035	OR-42	1	75.72	75.81	17,700	18	0	2	2	6	8		Douglas	SW CARNES RD.	95	70.57
035	OR-42	1	76.22	76.31	18,600	16	0	2	2	7	5		Douglas	LEG (FROM GRANT SMITH RD.)	95	70.26
060	OR-99	1	0.18	0.27	4,755	19	0	1	7	4	7	Grants Pass	Josephine	LEG (TO HWY. 482)	95	69.57
025	US-199	1	1.98	2.07	20,300	14	1	1	5	5	2	Grants Pass	Josephine	DOWELL RD.	95	69.37

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
025	US-199	1	1.99	2.08	20,300	14	1	1	5	5	2	Grants Pass	Josephine	DOWELL RD.	95	69.37
025	US-199	1	2.00	2.09	20,300	14	1	1	5	5	2	Grants Pass	Josephine	DOWELL RD.	95	69.37
025	US-199	1	2.01	2.10	20,300	14	1	1	5	5	2	Grants Pass	Josephine	DOWELL RD.	95	69.37
025	US-199	1	2.02	2.12	20,300	14	1	1	5	5	2	Grants Pass	Josephine	DOWELL RD.	95	69.37
025	US-199	1	2.03	2.13	20,300	14	1	1	5	5	2	Grants Pass	Josephine	DOWELL RD.	95	69.37
060	OR-99	1	0.19	0.28	4,900	19	0	1	7	4	7	Grants Pass	Josephine	LEG (TO HWY. 482)	95	69.29
060	OR-99	1	0.20	0.29	4,900	19	0	1	7	4	7	Grants Pass	Josephine		95	69.29
482	US-199	1	-0.07	0.02	22,811	25	1	0	3	13	8	Grants Pass	Josephine	E PARK ST.	95	69.24
482	US-199	1	-0.06	0.04	23,588	25	1	0	3	13	8	Grants Pass	Josephine	E PARK ST.	95	69.04
272	OR-238	1	0.19	0.28	15,200	25	0	1	3	11	10	Grants Pass	Josephine	HWY. 272 M.P. 0.19	95	68.93
482	US-199	1	-0.06	0.04	24,366	25	1	0	3	13	8	Grants Pass	Josephine	E PARK ST.	95	68.85
482	US-199	1	-0.04	0.05	25,144	25	1	0	3	13	8	Grants Pass	Josephine	E PARK ST.	95	68.67
009	US-101	1	235.41	235.50	9,800	33	0	0	6	13	14	North Bend	Coos	SHERMAN AVE.	95	68.46
025	OR-99	1	-2.45	-2.34	12,200	41	0	0	7	10	24	Grants Pass	Josephine	VINE ST.	95	67.83
270	OR-140	1	2.20	2.29	5,800	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.69
270	OR-140	1	2.21	2.30	5,811	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.68
270	OR-140	1	2.22	2.31	5,822	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.67
270	OR-140	1	2.23	2.32	5,833	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.66
270	OR-140	1	2.24	2.33	5,844	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.65
270	OR-140	1	2.25	2.34	5,855	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.64
270	OR-140	1	2.26	2.35	5,866	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.63
001	I-5	1	107.92	108.01	26,300	13	0	3	1	3	6		Douglas		95	67.63
001	I-5	1	107.93	108.02	26,300	13	0	3	1	3	6		Douglas		95	67.63
001	I-5	1	107.94	108.03	26,300	13	0	3	1	3	6		Douglas		95	67.63
001	I-5	1	107.95	108.04	26,300	13	0	3	1	3	6		Douglas		95	67.63
270	OR-140	1	2.27	2.36	5,877	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.61
270	OR-140	1	2.28	2.37	5,888	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.61
270	OR-140	1	2.29	2.38	5,900	6	0	4	1	1	0		Jackson	KERSHAW RD.	95	67.60

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
022	OR-62	1	0.38	0.46	32,466	31	0	1	1	13	16	Medford	Jackson	001BL CONN. M.P. 3C30.95	95	67.47
272	OR-238	1	0.20	0.29	15,200	25	0	1	3	10	11	Grants Pass	Josephine	SW UNION AVE.	95	67.43
272	OR-238	1	0.21	0.30	15,200	25	0	1	3	10	11	Grants Pass	Josephine	SW UNION AVE.	95	67.43
025	US-199	1	1.97	2.06	20,300	13	1	1	4	5	2	Grants Pass	Josephine	DOWELL RD.	95	67.35
025	US-199	1	2.04	2.14	20,300	13	1	1	5	4	2	Grants Pass	Josephine	DOWELL RD.	95	67.35
025	US-199	1	2.05	2.15	20,300	13	1	1	5	4	2	Grants Pass	Josephine	DOWELL RD.	95	67.35
482	US-199	1	-0.02	0.07	26,700	25	1	0	3	12	9	Grants Pass	Josephine	E PARK ST.	95	66.83
482	US-199	1	-0.04	0.07	25,922	24	1	0	3	12	8	Grants Pass	Josephine	E PARK ST.	95	66.41
025	OR-99	1	-2.46	-2.35	11,500	40	0	0	6	10	24	Grants Pass	Josephine	VINE ST.	95	66.36
001	I-5	1	107.90	107.99	26,300	11	0	3	1	3	4		Douglas		95	66.27
001	I-5	1	107.91	108.00	26,300	11	0	3	1	3	4		Douglas		95	66.27
060	OR-99	1	0.21	0.31	4,900	17	0	1	6	4	6	Grants Pass	Josephine		95	65.90
022	OR-62	1	0.39	0.47	33,133	31	0	1	1	12	17	Medford	Jackson	001BL CONN. M.P. 3C30.95	95	65.86
272	OR-238	1	0.23	0.31	15,200	13	0	2	1	6	4	Grants Pass	Josephine		95	65.76
272	OR-238	1	0.24	0.33	15,200	13	0	2	1	6	4	Grants Pass	Josephine		95	65.76
272	OR-238	1	0.24	0.32	15,200	13	0	2	1	6	4	Grants Pass	Josephine		95	65.76
035	OR-42	1	76.18	76.27	18,399	22	0	1	2	12	7		Douglas	LEG (FROM GRANT SMITH RD.)	95	65.66
001	I-5	1	107.87	107.96	26,300	10	0	3	1	3	3		Douglas		95	65.53
001	I-5	1	107.88	107.97	26,300	10	0	3	1	3	3		Douglas		95	65.53
001	I-5	1	107.89	107.98	26,300	10	0	3	1	3	3		Douglas		95	65.53
482	US-199	1	0.97	1.06	23,600	35	0	0	7	14	14	Grants Pass	Josephine	BEACON DR.	95	65.48
482	US-199	1	0.98	1.07	23,600	35	0	0	7	14	14	Grants Pass	Josephine	BEACON DR.	95	65.48
022	OR-62	1	0.40	0.48	33,800	30	0	1	1	12	16	Medford	Jackson	001BL CONN. M.P. 3C30.95	95	65.25
035	OR-42	1	76.17	76.26	18,299	21	0	1	2	12	6		Douglas	LEG (FROM GRANT SMITH RD.)	95	65.02
272	OR-238	1	0.13	0.21	21,888	36	0	0	10	10	16	Grants Pass	Josephine	HWY. 272 M.P. 0.19	95	65.02
025	US-199	1	1.96	2.05	20,300	12	1	1	4	4	2	Grants Pass	Josephine	DOWELL RD.	95	64.97
009	US-101	1	235.33	235.43	9,877	32	0	0	5	12	15	North Bend	Coos		95	64.80
009	US-101	1	235.32	235.42	9,888	32	0	0	5	12	15	North Bend	Coos		95	64.79

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
240	OR-540	1	1.69	1.78	18,300	16	0	2	0	5	9	North Bend	Coos	STATE ST.	95	64.34
009	US-101	1	235.40	235.49	9,811	31	0	0	6	11	14	North Bend	Coos		95	64.26
272	OR-238	1	0.18	0.27	16,155	22	0	1	2	10	9	Grants Pass	Josephine	HWY. 272 M.P. 0.19	95	63.51
482	US-199	1	0.18	0.27	25,466	24	0	1	3	10	10	Grants Pass	Josephine	M ST.	95	63.51
482	US-199	1	0.95	1.04	23,600	34	0	0	6	14	14	Grants Pass	Josephine	BEACON DR.	95	63.48
482	US-199	1	0.96	1.05	23,600	34	0	0	6	14	14	Grants Pass	Josephine	BEACON DR.	95	63.48
035	OR-42	1	76.19	76.28	18,499	21	0	1	2	11	7		Douglas	LEG (FROM GRANT SMITH RD.)	95	63.46
035	OR-42	1	76.20	76.29	18,600	21	0	1	2	11	7		Douglas	LEG (FROM GRANT SMITH RD.)	95	63.42
482	US-199	1	0.17	0.26	25,877	24	0	1	3	10	10	Grants Pass	Josephine	M ST.	95	63.42
482	US-199	1	0.16	0.25	26,288	24	0	1	3	10	10	Grants Pass	Josephine	M ST.	95	63.33
482	US-199	1	0.22	0.31	23,822	23	0	1	3	10	9	Grants Pass	Josephine	M ST.	95	63.27
022	OR-62	1	3.64	3.73	26,900	24	0	1	4	9	10	Medford	Jackson	E VILAS RD.	95	63.21
482	US-199	1	0.21	0.30	24,233	23	0	1	3	10	9	Grants Pass	Josephine	M ST.	95	63.18
482	US-199	1	0.20	0.29	24,644	23	0	1	3	10	9	Grants Pass	Josephine	M ST.	95	63.08
482	US-199	1	0.19	0.28	25,055	23	0	1	3	10	9	Grants Pass	Josephine	M ST.	95	62.99
035	OR-42	1	76.16	76.25	18,199	20	0	1	2	11	6		Douglas	LEG (FROM GRANT SMITH RD.)	95	62.86
009	US-101	1	235.34	235.44	9,866	31	0	0	5	11	15	North Bend	Coos		95	62.71
025	OR-99	1	-2.49	-2.38	9,400	35	0	0	5	9	21	Grants Pass	Josephine		95	62.50
025	US-199	1	0.57	0.66	32,000	42	0	0	2	16	24	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	95	62.22
025	US-199	1	0.58	0.68	32,000	42	0	0	2	16	24	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	95	62.22
009	US-101	1	235.39	235.48	9,822	30	0	0	5	11	14	North Bend	Coos		95	62.13
009	US-101	1	235.38	235.47	9,833	30	0	0	5	11	14	North Bend	Coos		95	62.12
009	US-101	1	235.37	235.46	9,844	30	0	0	5	11	14	North Bend	Coos		95	62.11
009	US-101	1	235.36	235.45	9,855	30	0	0	5	11	14	North Bend	Coos		95	62.10
025	OR-99	1	-2.48	-2.37	10,100	35	0	0	5	9	21	Grants Pass	Josephine		95	61.84
025	OR-99	1	-2.47	-2.36	10,800	36	0	0	5	9	22	Grants Pass	Josephine	VINE ST.	95	61.79
272	OR-238	1	0.26	0.34	15,200	10	0	2	1	5	2	Grants Pass	Josephine		95	61.27
063	OR-99	1	5.30	5.38	16,300	21	0	1	1	10	9	Medford	Jackson		95	61.26

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
022	OR-62	1	3.65	3.74	26,900	23	0	1	4	8	10	Medford	Jackson	E VILAS RD.	95	61.11
240	OR-540	1	0.11	0.20	13,111	12	1	1	0	4	6	North Bend	Coos	MCPHERSON AVE.	95	61.09
063	OR-99	1	9.75	9.84	14,511	11	0	2	0	5	4		Jackson	SOUTH STAGE RD.	95	61.04
022	OR-62	1	2.16	2.25	21,700	21	0	1	6	6	8	Medford	Jackson	OWEN DR.	95	61.02
063	OR-99	1	9.76	9.85	14,633	11	0	2	0	5	4		Jackson	SOUTH STAGE RD.	95	61.00
240	OR-540	1	0.16	0.25	16,000	13	1	1	2	2	7	North Bend	Coos	MEADE AVE.	95	60.99
063	OR-99	1	9.77	9.86	14,755	11	0	2	0	5	4		Jackson	SOUTH STAGE RD.	95	60.96
272	OR-238	1	0.17	0.26	17,111	21	0	1	2	9	9	Grants Pass	Josephine	HWY. 272 M.P. 0.19	95	60.94
482	US-199	1	1.16	1.25	23,088	19	1	0	1	12	5	Grants Pass	Josephine	TERRY LN.	95	60.84
035	OR-42	1	76.14	76.23	17,999	19	0	1	2	10	6		Douglas	LEG (FROM GRANT SMITH RD.)	95	60.71
035	OR-42	1	76.15	76.24	18,099	19	0	1	2	10	6		Douglas	LEG (FROM GRANT SMITH RD.)	95	60.68
482	US-199	1	0.79	0.87	23,266	31	0	0	4	15	12	Grants Pass	Josephine	F ST.	95	60.51
482	US-199	1	0.80	0.88	23,333	31	0	0	4	15	12	Grants Pass	Josephine	F ST.	95	60.49
022	OR-62	1	0.37	0.45	31,800	26	0	1	1	10	14	Medford	Jackson	001BL CONN. M.P. 3C30.95	95	60.46
482	US-199	1	0.94	1.03	23,600	31	0	0	5	14	12	Grants Pass	Josephine	BEACON DR.	95	60.42
482	US-199	1	0.99	1.08	23,600	31	0	0	7	12	12	Grants Pass	Josephine	BEACON DR.	95	60.42
001	I-5	1	120.38	120.46	40,200	5	1	2	0	2	0		Douglas		95	60.23
001	I-5	1	120.39	120.47	40,200	5	1	2	0	2	0		Douglas		95	60.23
001	I-5	1	120.40	120.48	40,200	5	1	2	0	2	0		Douglas		95	60.23
001	I-5	1	120.41	120.49	40,200	5	1	2	0	2	0		Douglas		95	60.23
001	I-5	1	120.42	120.50	40,200	5	1	2	0	2	0		Douglas		95	60.23
035	OR-42	1	76.13	76.22	17,899	18	0	1	2	10	5		Douglas		95	60.00
482	US-199	1	0.23	0.32	23,411	20	0	1	3	9	7	Grants Pass	Josephine	M ST.	95	59.94
138	OR-138	1	-0.32	-0.22	11,011	33	0	0	5	9	19	Roseburg	Douglas	OAK ST. (2ND RT.)	95	59.92
482	US-199	1	0.93	1.02	23,600	30	0	0	5	14	11	Grants Pass	Josephine	BEACON DR.	95	59.88
025	US-199	1	0.56	0.65	32,000	40	0	0	2	15	23	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	95	59.83
025	US-199	1	0.59	0.69	32,000	40	0	0	2	15	23	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	95	59.83
138	OR-138	1	-0.40	-0.32	10,400	17	0	1	3	7	6	Roseburg	Douglas		95	59.72

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region

3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
482	US-199	1	1.18	1.27	22,066	19	1	0	0	12	6	Grants Pass	Josephine	TERRY LN.	95	59.57
482	US-199	1	1.17	1.26	22,577	19	1	0	0	12	6	Grants Pass	Josephine	TERRY LN.	95	59.45
022	OR-62	1	0.36	0.44	31,800	24	0	1	1	10	12	Medford	Jackson	HWY. 022 M.P. 0.36	95	59.34
063	OR-99	1	5.31	5.39	16,300	18	0	1	1	10	6	Medford	Jackson		95	59.05
482	US-199	1	0.15	0.24	26,700	22	0	1	3	8	10	Grants Pass	Josephine	M ST.	95	59.03
240	OR-540	1	0.10	0.19	12,533	11	1	1	0	3	6	North Bend	Coos	MCPHERSON AVE.	95	58.80
001	I-5	1	107.96	108.05	26,300	13	0	2	1	3	7		Douglas		95	58.79
240	OR-540	1	0.15	0.24	15,422	12	1	1	1	2	7	North Bend	Coos	MEADE AVE.	95	58.74
022	OR-62	1	0.41	0.49	34,466	26	0	1	0	10	15	Medford	Jackson	001BL CONN. M.P. 3C30.95	95	58.56
060	OR-99	1	0.14	0.23	4,177	13	0	1	5	2	5	Grants Pass	Josephine	LEG (TO HWY. 482)	95	58.50
482	US-199	1	0.78	0.86	23,200	30	0	0	4	14	12	Grants Pass	Josephine	F ST.	95	58.49
240	OR-540	1	0.07	0.16	10,800	10	1	1	0	3	5	North Bend	Coos	MCPHERSON AVE.	95	58.49
025	US-199	1	0.60	0.70	32,000	37	0	0	2	15	20	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	95	58.46
272	OR-238	1	0.16	0.26	18,066	20	0	1	2	8	9	Grants Pass	Josephine	HWY. 272 M.P. 0.19	95	58.40
482	US-199	1	1.00	1.09	23,600	30	0	0	7	11	12	Grants Pass	Josephine	BEACON DR.	95	58.38
063	OR-99	1	9.78	9.87	14,877	10	0	2	0	4	4		Jackson	SOUTH STAGE RD.	95	58.37
271	OR-234	1	10.65	10.75	2,500	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	58.25
271	OR-234	1	10.66	10.76	2,500	5	0	2	1	1	1		Jackson	TABLE ROCK RD.	95	58.25
271	OR-234	1	10.68	10.77	2,500	5	0	2	1	1	1		Jackson	TABLE ROCK RD.	95	58.25
240	OR-540	1	0.08	0.17	11,377	10	1	1	0	3	5	North Bend	Coos	MCPHERSON AVE.	95	58.20
060	OR-99	1	0.15	0.24	4,322	13	0	1	5	2	5	Grants Pass	Josephine	LEG (TO HWY. 482)	95	58.20
001	I-5	1	125.03	125.12	40,866	12	1	1	1	4	5	Roseburg	Douglas		95	58.14
240	OR-540	1	0.13	0.22	14,266	11	1	1	1	2	6	North Bend	Coos	MEADE AVE.	95	58.12
271	OR-234	1	10.63	10.74	2,544	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	58.12
271	OR-234	1	10.62	10.73	2,588	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	57.98
240	OR-540	1	0.09	0.18	11,955	10	1	1	0	3	5	North Bend	Coos	MCPHERSON AVE.	95	57.94
240	OR-540	1	0.14	0.23	14,844	11	1	1	1	2	6	North Bend	Coos	MEADE AVE.	95	57.93
060	OR-99	1	0.16	0.25	4,466	13	0	1	5	2	5	Grants Pass	Josephine	LEG (TO HWY. 482)	95	57.91

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
060	OR-99	1	0.12	0.21	3,888	12	0	1	5	2	4	Grants Pass	Josephine	LEG (TO HWY. 482)	95	57.89
482	US-199	1	0.81	0.90	23,400	29	0	0	3	15	11	Grants Pass	Josephine	F ST.	95	57.88
482	US-199	1	0.82	0.91	23,466	29	0	0	3	15	11	Grants Pass	Josephine	F ST.	95	57.87
271	OR-234	1	10.61	10.72	2,633	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	57.85
482	US-199	1	0.83	0.92	23,533	29	0	0	3	15	11	Grants Pass	Josephine	F ST.	95	57.84
482	US-199	1	0.83	0.93	23,600	29	0	0	3	15	11	Grants Pass	Josephine	F ST.	95	57.83
482	US-199	1	0.84	0.94	23,600	29	0	0	3	15	11	Grants Pass	Josephine	F ST.	95	57.83
482	US-199	1	1.42	1.51	19,555	22	0	1	4	5	12	Grants Pass	Josephine	AGNESS AVE.	95	57.79
271	OR-234	1	10.60	10.71	2,677	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	57.73
482	US-199	1	1.43	1.52	19,833	22	0	1	4	5	12	Grants Pass	Josephine	AGNESS AVE.	95	57.70
060	OR-99	1	0.17	0.26	4,611	13	0	1	5	2	5	Grants Pass	Josephine	LEG (TO HWY. 482)	95	57.63
271	OR-234	1	12.52	12.61	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.53	12.62	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.54	12.63	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.55	12.63	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.56	12.64	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.57	12.65	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.58	12.66	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.59	12.67	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.60	12.67	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	12.61	12.68	2,500	11	0	1	2	3	5		Jackson	ANTIOCH RD.	95	57.61
271	OR-234	1	10.59	10.70	2,722	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	57.60
001	I-5	1	125.05	125.14	37,400	11	1	1	1	4	4	Roseburg	Douglas		95	57.58
060	OR-99	1	0.13	0.22	4,033	12	0	1	5	2	4	Grants Pass	Josephine	LEG (TO HWY. 482)	95	57.57
271	OR-234	1	10.58	10.69	2,766	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	57.48
001	I-5	1	125.04	125.13	39,133	11	1	1	1	4	4	Roseburg	Douglas		95	57.47
025	US-199	1	0.55	0.64	32,000	38	0	0	1	15	22	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	95	57.42
022	OR-62	1	0.42	0.50	35,133	24	0	1	0	10	13	Medford	Jackson	001BL CONN. M.P. 3C30.95	95	57.37

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
138	OR-138	1	-0.31	-0.22	11,622	32	0	0	4	9	19	Roseburg	Douglas	OAK ST. (2ND RT.)	95	57.37
271	OR-234	1	10.57	10.68	2,811	5	0	2	1	1	1		Jackson	LEG (TO TABLE ROCK RD.)	95	57.36
240	OR-540	1	0.12	0.21	13,688	10	1	1	1	2	5	North Bend	Coos	MEADE AVE.	90	57.26
025	OR-99	1	-2.50	-2.39	8,700	30	0	0	5	7	18	Grants Pass	Josephine		90	57.22
482	US-199	1	1.41	1.50	19,277	21	0	1	4	5	11	Grants Pass	Josephine	AGNESS AVE.	90	57.21
260	OR-260	1	5.87	5.95	1,700	4	2	0	1	0	1		Josephine		90	56.98
260	OR-260	1	5.88	5.96	1,700	4	2	0	1	0	1		Josephine		90	56.98
260	OR-260	1	5.89	5.97	1,700	4	2	0	1	0	1		Josephine		90	56.98
260	OR-260	1	5.90	5.98	1,700	4	2	0	1	0	1		Josephine		90	56.98
063	OR-99	1	5.31	5.40	16,300	17	0	1	1	9	6	Medford	Jackson		90	56.78
063	OR-99	1	5.32	5.41	16,300	17	0	1	1	9	6	Medford	Jackson		90	56.78
482	US-199	1	0.24	0.33	23,000	17	0	1	3	8	5	Grants Pass	Josephine	M ST.	90	56.44
482	US-199	1	1.15	1.24	23,600	17	1	0	1	10	5	Grants Pass	Josephine	TERRY LN.	90	56.31
001	I-5	1	6.46	6.55	15,000	8	0	2	3	1	2		Jackson		90	56.05
001	I-5	1	6.47	6.56	15,000	8	0	2	3	1	2		Jackson		90	56.05
001	I-5	1	6.48	6.57	15,000	8	0	2	3	1	2		Jackson		90	56.05
001	I-5	1	6.49	6.58	15,000	8	0	2	3	1	2		Jackson		90	56.05
001	I-5	1	6.50	6.59	15,000	8	0	2	3	1	2		Jackson		90	56.05
001	I-5	1	6.51	6.60	15,000	8	0	2	4	0	2		Jackson		90	56.05
001	I-5	1	6.52	6.62	15,000	8	0	2	4	0	2		Jackson		90	56.05
001	I-5	1	6.53	6.63	15,000	8	0	2	4	0	2		Jackson		90	56.05
022	OR-62	1	0.44	0.54	37,133	22	0	1	1	9	11	Medford	Jackson		90	55.99
063	OR-99	1	1.37	1.45	6,033	6	1	1	3	0	1		Jackson	SCENIC AVE.	90	55.96
022	OR-62	1	2.69	2.77	21,700	18	0	1	4	6	7	Medford	Jackson	COKER BUTTE RD.	90	55.95
063	OR-99	1	1.38	1.46	6,055	6	1	1	3	0	1		Jackson	SCENIC AVE.	90	55.94
063	OR-99	1	1.39	1.47	6,077	6	1	1	3	0	1		Jackson	SCENIC AVE.	90	55.93
063	OR-99	1	1.40	1.48	6,100	6	1	1	3	0	1		Jackson	SCENIC AVE.	90	55.90
063	OR-99	1	1.41	1.49	6,100	6	1	1	3	0	1		Jackson	SCENIC AVE.	90	55.90

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
482	US-199	1	1.40	1.49	19,000	19	0	1	4	5	9	Grants Pass	Josephine	AGNESS AVE.	90	55.89
138	OR-138	1	-0.41	-0.33	10,400	16	0	1	2	6	7	Roseburg	Douglas	SPRUCE ST.	90	55.83
022	OR-62	1	0.43	0.52	35,800	24	0	1	0	9	14	Medford	Jackson	001BL CONN. M.P. 3C30.95	90	55.78
022	OR-62	1	5.86	5.96	24,500	9	0	2	1	3	3		Jackson	MERRY LN.	90	55.45
022	OR-62	1	5.87	5.97	24,500	9	0	2	1	3	3		Jackson	MERRY LN.	90	55.45
022	OR-62	1	5.89	5.98	24,500	9	0	2	1	3	3		Jackson	MERRY LN.	90	55.45
022	OR-62	1	5.90	5.99	24,500	9	0	2	1	3	3		Jackson	MERRY LN.	90	55.45
035	OR-42	1	76.21	76.30	18,600	16	0	1	2	8	5		Douglas	LEG (FROM GRANT SMITH RD.)	90	55.26
022	OR-62	1	2.17	2.26	21,700	17	0	1	4	6	6	Medford	Jackson	OWEN DR.	90	55.22
482	US-199	1	0.85	0.95	23,600	27	0	0	3	14	10	Grants Pass	Josephine	F ST.	90	55.21
482	US-199	1	0.86	0.96	23,600	27	0	0	3	14	10	Grants Pass	Josephine	F ST.	90	55.21
022	OR-62	1	0.65	0.74	37,800	32	0	0	4	13	15	Medford	Jackson	LEG (FROM 022AT CONN.)	90	55.14
482	US-199	1	-0.10	-0.01	20,477	25	0	0	4	13	8	Grants Pass	Josephine	E PARK ST.	90	54.91
025	OR-99	1	-1.00	-0.91	15,877	27	0	0	5	10	12	Grants Pass	Josephine	NW D ST.	90	54.87
025	OR-99	1	-1.01	-0.93	15,888	27	0	0	5	10	12	Grants Pass	Josephine	NW D ST.	90	54.87
025	OR-99	1	-1.02	-0.94	15,900	27	0	0	5	10	12	Grants Pass	Josephine	NW D ST.	90	54.86
001	I-5	1	6.54	6.64	15,000	7	0	2	4	0	1		Jackson		90	54.79
001	I-5	1	6.55	6.65	15,000	7	0	2	4	0	1		Jackson		90	54.79
482	US-199	1	-0.09	0.00	21,255	25	0	0	4	13	8	Grants Pass	Josephine	E PARK ST.	90	54.67
025	OR-99	2	-0.52	-0.44	16,999	25	0	0	2	14	9	Grants Pass	Josephine	SE M ST.	90	54.64
482	US-199	1	0.92	1.01	23,600	26	0	0	5	12	9	Grants Pass	Josephine	BEACON DR.	90	54.62
063	OR-99	1	9.79	9.88	15,000	8	0	2	0	3	3		Jackson	SOUTH STAGE RD.	90	54.55
063	OR-99	1	5.33	5.42	16,300	16	0	1	1	8	6	Medford	Jackson		90	54.48
025	OR-99	2	-0.51	-0.43	17,499	25	0	0	2	14	9	Grants Pass	Josephine	SE M ST.	90	54.44
063	OR-99	1	3.64	3.73	16,100	14	0	1	4	6	3		Jackson	BEALL LN.	90	54.35
063	OR-99	1	3.65	3.74	16,100	14	0	1	4	6	3		Jackson	BEALL LN.	90	54.35
035	OR-42	1	7.96	8.05	8,300	6	0	2	2	1	1		Coos		90	54.29
035	OR-42	1	7.97	8.06	8,300	6	0	2	2	1	1		Coos		90	54.29

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Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
035	OR-42	1	7.98	8.07	8,300	6	0	2	2	1	1		Coos		90	54.29
035	OR-42	1	7.99	8.08	8,300	6	0	2	2	1	1		Coos		90	54.29
035	OR-42	1	8.00	8.09	8,300	6	0	2	2	1	1		Coos		90	54.29
025	OR-99	2	-0.53	-0.45	16,499	24	0	0	2	14	8	Grants Pass	Josephine	SE M ST.	90	54.20
025	US-199	1	0.54	0.63	32,000	34	0	0	1	14	19	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	90	54.04
022	OR-62	1	1.40	1.47	35,400	18	0	1	2	8	7	Medford	Jackson	WHITTLE AVE.	90	53.75
025	US-199	1	0.61	0.71	32,000	33	0	0	2	13	18	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	90	53.55
022	OR-62	1	2.70	2.78	22,755	17	0	1	4	5	7	Medford	Jackson	COKER BUTTE RD.	90	53.49
022	OR-62	1	2.71	2.79	23,811	17	0	1	5	4	7	Medford	Jackson	COKER BUTTE RD.	90	53.27
022	OR-62	1	1.35	1.43	35,400	17	0	1	2	8	6	Medford	Jackson	WHITTLE AVE.	90	53.11
022	OR-62	1	1.36	1.44	35,400	17	0	1	2	8	6	Medford	Jackson	WHITTLE AVE.	90	53.11
022	OR-62	1	1.39	1.46	35,400	17	0	1	3	7	6	Medford	Jackson	WHITTLE AVE.	90	53.11
025	OR-99	2	-0.50	-0.42	17,999	25	0	0	2	13	10	Grants Pass	Josephine	SE M ST.	90	52.75
063	OR-99	1	1.32	1.41	5,922	5	1	1	2	0	1		Jackson	SCENIC AVE.	90	52.63
063	OR-99	1	1.33	1.42	5,944	5	1	1	2	0	1		Jackson	SCENIC AVE.	90	52.61
063	OR-99	1	1.34	1.43	5,966	5	1	1	2	0	1		Jackson	SCENIC AVE.	90	52.59
063	OR-99	1	1.35	1.44	5,988	5	1	1	2	0	1		Jackson	SCENIC AVE.	90	52.58
025	OR-99	2	-0.49	-0.41	18,499	25	0	0	2	13	10	Grants Pass	Josephine	SE M ST.	90	52.57
063	OR-99	1	1.36	1.45	6,011	5	1	1	2	0	1		Jackson	SCENIC AVE.	90	52.56
482	US-199	1	-0.11	-0.02	19,700	23	0	0	4	12	7	Grants Pass	Josephine	E PARK ST.	90	52.39
022	OR-62	1	2.76	2.85	29,088	17	0	1	5	4	7	Medford	Jackson	COKER BUTTE RD.	90	52.38
022	OR-62	1	2.72	2.81	24,866	16	0	1	5	4	6	Medford	Jackson	COKER BUTTE RD.	90	52.34
022	OR-62	1	2.76	2.86	30,144	17	0	1	5	4	7	Medford	Jackson	COKER BUTTE RD.	90	52.23
022	OR-62	1	2.73	2.82	25,922	16	0	1	5	4	6	Medford	Jackson	COKER BUTTE RD.	90	52.16
025	OR-99	1	-0.99	-0.89	15,855	25	0	0	5	9	11	Grants Pass	Josephine	NW D ST.	90	52.13
025	OR-99	1	-1.00	-0.90	15,866	25	0	0	5	9	11	Grants Pass	Josephine	NW D ST.	90	52.12
022	OR-62	1	2.74	2.83	26,977	16	0	1	5	4	6	Medford	Jackson	COKER BUTTE RD.	90	51.99
063	OR-99	1	3.61	3.70	16,100	13	0	1	4	5	3		Jackson	BEALL LN.	90	51.96

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Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
063	OR-99	1	3.62	3.71	16,100	13	0	1	4	5	3		Jackson	BEALL LN.	90	51.96
063	OR-99	1	3.63	3.72	16,100	13	0	1	4	5	3		Jackson	BEALL LN.	90	51.96
063	OR-99	1	3.66	3.75	16,100	13	0	1	3	6	3		Jackson	BEALL LN.	90	51.96
001	I-5	1	123.93	124.04	41,400	16	1	0	4	6	5		Douglas		90	51.92
022	OR-62	1	0.44	0.53	36,466	20	0	1	1	7	11	Medford	Jackson		90	51.89
022	OR-62	1	2.75	2.84	28,033	16	0	1	5	4	6	Medford	Jackson	COKER BUTTE RD.	90	51.83
022	OR-62	1	1.34	1.42	35,400	17	0	1	2	7	7	Medford	Jackson	WHITTLE AVE.	90	51.61
001	I-5	1	123.94	124.05	41,400	15	1	0	4	6	4		Douglas		90	51.25
001	I-5	1	123.99	124.09	41,400	15	1	0	4	6	4	Roseburg	Douglas		90	51.25
022	OR-62	1	0.66	0.74	37,800	30	0	0	2	13	15	Medford	Jackson	LEG (FROM 022AT CONN.)	90	51.17
022	OR-62	1	0.67	0.75	37,800	30	0	0	2	13	15	Medford	Jackson	LEG (FROM 022AT CONN.)	90	51.17
035	OR-42	1	7.91	8.00	8,300	5	0	2	2	0	1		Coos	OLD CITY-COUNTY RD.	90	51.03
035	OR-42	1	7.92	8.01	8,300	5	0	2	2	0	1		Coos	OLD CITY-COUNTY RD.	90	51.03
035	OR-42	1	7.93	8.02	8,300	5	0	2	2	0	1		Coos	OLD CITY-COUNTY RD.	90	51.03
035	OR-42	1	7.94	8.03	8,300	5	0	2	2	0	1		Coos	OLD CITY-COUNTY RD.	90	51.03
035	OR-42	1	7.95	8.04	8,300	5	0	2	2	0	1		Coos		90	51.03
063	OR-99	1	3.60	3.69	16,100	12	0	1	4	5	2		Jackson	BEALL LN.	90	51.03
138	OR-138	1	0.01	0.10	9,700	12	0	1	3	4	4	Roseburg	Douglas	WINCHESTER ST.	90	50.87
231	OR-138	1	13.65	13.74	1,800	7	0	1	2	1	3		Douglas	TYEE RD.	90	50.75
231	OR-138	1	13.66	13.76	1,800	7	0	1	2	1	3		Douglas	TYEE RD.	90	50.75
231	OR-138	1	13.67	13.77	1,800	7	0	1	2	1	3		Douglas	TYEE RD.	90	50.75
231	OR-138	1	13.68	13.78	1,800	7	0	1	2	1	3		Douglas	TYEE RD.	90	50.75
021	OR-66	1	0.95	1.04	9,500	13	0	1	0	6	6	Ashland	Jackson	YMCA WAY	90	50.57
001	I-5	1	124.00	124.11	41,400	14	1	0	4	6	3	Roseburg	Douglas		90	50.56
272	OR-238	1	23.10	23.19	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56
272	OR-238	1	23.11	23.20	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56
272	OR-238	1	23.12	23.21	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56
272	OR-238	1	23.13	23.22	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56

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Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
272	OR-238	1	23.14	23.23	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56
272	OR-238	1	23.15	23.24	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56
272	OR-238	1	23.16	23.25	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56
272	OR-238	1	23.17	23.26	2,600	3	1	1	1	0	0		Jackson	GYDA LN.	90	50.56
025	US-199	1	0.53	0.62	32,000	30	0	0	1	13	16	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	90	50.55
025	OR-99	1	-2.53	-2.43	6,600	23	0	0	5	4	14	Grants Pass	Josephine		90	50.37
009	US-101	1	236.40	236.49	14,733	26	0	0	8	4	14	North Bend	Coos	NEWMARK ST.	90	50.30
009	US-101	1	236.45	236.54	18,400	26	0	0	8	5	13	North Bend	Coos	NEWMARK ST.	90	50.22
022	OR-62	1	0.45	0.55	37,800	28	0	0	4	11	13	Medford	Jackson		90	50.15
022	OR-62	1	1.31	1.40	35,400	17	0	1	2	6	8	Medford	Jackson	WHITTLE AVE.	90	50.11
022	OR-62	1	1.32	1.40	35,400	17	0	1	2	6	8	Medford	Jackson	WHITTLE AVE.	90	50.11
022	OR-62	1	1.33	1.41	35,400	17	0	1	2	6	8	Medford	Jackson	WHITTLE AVE.	90	50.11
009	US-101	1	236.46	236.55	19,133	26	0	0	8	5	13	North Bend	Coos	NEWMARK ST.	90	49.96
009	US-101	1	236.41	236.50	15,466	26	0	0	8	4	14	North Bend	Coos	NEWMARK ST.	90	49.94
009	US-101	1	317.41	317.50	2,300	3	0	2	0	0	1		Curry		90	49.84
009	US-101	1	317.42	317.51	2,300	3	0	2	0	0	1		Curry		90	49.84
009	US-101	1	317.43	317.52	2,300	3	0	2	0	0	1		Curry		90	49.84
009	US-101	1	317.44	317.53	2,300	3	0	2	0	0	1		Curry		90	49.84
009	US-101	1	317.45	317.54	2,300	3	0	2	0	0	1		Curry		90	49.84
009	US-101	1	317.46	317.55	2,300	3	0	2	0	0	1		Curry		90	49.84
025	OR-99	1	-2.54	-2.45	5,900	21	0	0	5	4	12	Grants Pass	Josephine		90	49.80
272	OR-238	1	0.12	0.20	22,844	25	0	0	8	6	11	Grants Pass	Josephine	HWY. 272 M.P. 0.19	90	49.73
009	US-101	1	236.47	236.56	19,866	26	0	0	8	5	13	North Bend	Coos	NEWMARK ST.	90	49.71
009	US-101	1	236.42	236.51	16,200	26	0	0	8	4	14	North Bend	Coos	NEWMARK ST.	90	49.61
272	OR-238	1	0.11	0.19	23,800	25	0	0	8	6	11	Grants Pass	Josephine	HWY. 272 M.P. 0.19	90	49.49
009	US-101	1	236.48	236.57	20,600	26	0	0	8	5	13	North Bend	Coos	NEWMARK ST.	90	49.48
025	OR-99	1	-2.52	-2.42	7,300	23	0	0	5	4	14	Grants Pass	Josephine		90	49.46
022	OR-62	1	1.37	1.45	35,400	16	0	1	2	6	7	Medford	Jackson	WHITTLE AVE.	90	49.44

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Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
022	OR-62	1	1.38	1.46	35,400	16	0	1	2	6	7	Medford	Jackson	WHITTLE AVE.	90	49.44
021	OR-66	1	0.96	1.05	9,744	12	0	1	0	6	5	Ashland	Jackson	TOLMAN CREEK RD.	90	49.34
270		1	-0.59	-0.50	3,200	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	49.34
009	US-101	1	236.43	236.52	16,933	26	0	0	8	4	14	North Bend	Coos	NEWMARK ST.	90	49.29
482	US-199	1	0.91	1.00	23,600	22	0	0	5	10	7	Grants Pass	Josephine	BEACON DR.	90	49.19
021	OR-66	1	0.97	1.06	9,988	12	0	1	0	6	5	Ashland	Jackson	TOLMAN CREEK RD.	90	49.18
025	US-199	1	0.75	0.84	32,388	22	0	0	8	8	6	Grants Pass	Josephine	ROAD (JOSEPHINE COUNTY FAIRGROUNDS)	90	49.09
270		1	-0.58	-0.49	3,355	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	49.09
025	OR-99	2	-1.13	-1.04	15,700	13	0	1	5	2	5	Grants Pass	Josephine	NE C ST.	90	49.09
001	I-5	1	123.95	124.06	41,400	14	1	0	4	5	4		Douglas		90	49.06
001	I-5	1	123.97	124.07	41,400	14	1	0	4	5	4	Roseburg	Douglas		90	49.06
001	I-5	1	123.98	124.08	41,400	14	1	0	4	5	4	Roseburg	Douglas		90	49.06
021	OR-66	1	0.98	1.08	10,233	12	0	1	0	6	5	Ashland	Jackson	TOLMAN CREEK RD.	90	49.03
025	OR-99	2	-0.94	-0.85	15,000	22	0	0	4	9	9	Grants Pass	Josephine	NE F ST.	90	49.01
009	US-101	1	236.44	236.53	17,666	26	0	0	8	4	14	North Bend	Coos	NEWMARK ST.	90	49.00
270		1	-0.57	-0.48	3,511	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	48.84
025	OR-99	2	-0.47	-0.39	19,500	22	0	0	2	12	8	Grants Pass	Josephine	SE M ST.	90	48.80
022	OR-62	1	3.63	3.72	27,377	25	0	0	3	11	11	Medford	Jackson	E VILAS RD.	90	48.69
025	OR-99	2	-0.54	-0.46	15,999	20	0	0	2	12	6	Grants Pass	Josephine	SE M ST.	90	48.66
025	OR-99	1	-2.51	-2.41	8,000	23	0	0	5	4	14	Grants Pass	Josephine		90	48.66
022	OR-62	1	0.72	0.80	37,800	28	0	0	4	10	14	Medford	Jackson	LEG (FROM 022AT CONN.)	90	48.65
270		1	-0.56	-0.47	3,666	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	48.62
022	OR-62	1	3.62	3.71	27,855	25	0	0	3	11	11	Medford	Jackson	E VILAS RD.	90	48.60
231	OR-138	1	13.69	13.79	1,800	6	0	1	2	1	2		Douglas	TYEE RD.	90	48.49
270		1	-0.55	-0.46	3,822	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	48.41
022	OR-62	1	0.86	0.95	41,933	13	0	1	4	5	3	Medford	Jackson	BULLOCK RD.	90	48.31
270		1	-0.54	-0.45	3,977	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	48.21
270		1	-0.53	-0.44	4,133	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	48.02

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Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
272	OR-238	1	0.05	0.14	23,800	25	0	0	7	6	12	Grants Pass	Josephine		90	47.99
272	OR-238	1	0.07	0.15	23,800	25	0	0	8	5	12	Grants Pass	Josephine		90	47.99
272	OR-238	1	0.08	0.16	23,800	25	0	0	8	5	12	Grants Pass	Josephine		90	47.99
272	OR-238	1	0.09	0.17	23,800	25	0	0	8	5	12	Grants Pass	Josephine		90	47.99
272	OR-238	1	0.10	0.18	23,800	25	0	0	8	5	12	Grants Pass	Josephine		90	47.99
270		1	-0.52	-0.43	4,288	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	47.85
270		1	-0.51	-0.42	4,444	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	47.69
025	US-199	1	0.72	0.81	32,155	22	0	0	7	8	7	Grants Pass	Josephine	ROAD (JOSEPHINE COUNTY FAIRGROUNDS)	90	47.63
025	US-199	1	0.73	0.82	32,233	22	0	0	7	8	7	Grants Pass	Josephine	ROAD (JOSEPHINE COUNTY FAIRGROUNDS)	90	47.61
025	OR-99	2	-1.09	-1.01	15,700	13	0	1	4	2	6	Grants Pass	Josephine	NE C ST.	90	47.59
022	OR-62	1	0.85	0.94	41,244	14	0	1	3	5	5	Medford	Jackson	BULLOCK RD.	90	47.57
270		1	-0.50	-0.41	4,600	3	0	2	1	0	0		Jackson	ANTELOPE RD.	90	47.53
025	US-199	1	0.74	0.83	32,311	21	0	0	7	8	6	Grants Pass	Josephine	ROAD (JOSEPHINE COUNTY FAIRGROUNDS)	90	47.01
272	OR-238	1	37.99	38.08	13,300	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.99
025	US-199	1	0.76	0.85	32,466	21	0	0	8	7	6	Grants Pass	Josephine	ROAD (JOSEPHINE COUNTY FAIRGROUNDS)	90	46.99
025	US-199	1	0.77	0.86	32,544	21	0	0	8	7	6	Grants Pass	Josephine	ROAD (JOSEPHINE COUNTY FAIRGROUNDS)	90	46.97
272	OR-238	1	38.00	38.09	13,455	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.92
022	OR-62	1	0.84	0.93	40,555	13	0	1	3	5	4	Medford	Jackson	BULLOCK RD.	90	46.91
240	OR-540	1	0.87	0.96	9,500	11	0	1	0	5	5	North Bend	Coos	12TH ST.	90	46.89
272	OR-238	1	38.01	38.10	13,611	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.86
025	OR-99	2	-0.56	-0.47	15,000	19	0	0	2	11	6	Grants Pass	Josephine	SE M ST.	90	46.84
009	US-101	1	239.30	239.40	26,300	17	0	1	2	3	11		Coos	HARRIET RD.	90	46.81
009	US-101	1	239.31	239.41	26,300	17	0	1	2	3	11		Coos	HARRIET RD.	90	46.81
272	OR-238	1	38.02	38.11	13,766	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.79
025	OR-99	2	-0.48	-0.40	18,999	21	0	0	2	11	8	Grants Pass	Josephine	SE M ST.	90	46.79
272	OR-238	1	38.03	38.12	13,922	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.73
025	OR-99	1	-0.95	-0.85	15,944	26	0	0	3	7	16	Grants Pass	Josephine	NW E ST.	90	46.72
272	OR-238	1	38.04	38.13	14,077	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.67

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region 3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
025	OR-99	2	-1.12	-1.03	15,700	12	0	1	4	2	5	Grants Pass	Josephine	NE C ST.	90	46.65
025	OR-99	2	-1.11	-1.02	15,700	12	0	1	4	2	5	Grants Pass	Josephine	NE C ST.	90	46.65
025	OR-99	2	-1.10	-1.02	15,700	12	0	1	4	2	5	Grants Pass	Josephine	NE C ST.	90	46.65
025	OR-99	2	-0.55	-0.47	15,499	19	0	0	2	11	6	Grants Pass	Josephine	SE M ST.	90	46.63
025	OR-99	1	-1.97	-1.88	12,400	19	0	0	6	6	7	Grants Pass	Josephine	NE MIDLAND AVE.	90	46.61
025	OR-99	1	-1.96	-1.87	12,400	19	0	0	6	6	7	Grants Pass	Josephine	NE MIDLAND AVE.	90	46.61
272	OR-238	1	38.05	38.14	14,233	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.61
272	OR-238	1	38.06	38.15	14,388	13	0	1	1	4	7		Jackson	SAGE RD.	90	46.55
021	OR-66	1	0.92	1.01	9,500	12	0	1	1	3	7	Ashland	Jackson	YMCA WAY	90	46.51
021	OR-66	1	0.92	1.00	9,500	12	0	1	1	3	7	Ashland	Jackson	YMCA WAY	90	46.51
021	OR-66	1	0.93	1.02	9,500	12	0	1	1	3	7	Ashland	Jackson	YMCA WAY	90	46.51
021	OR-66	1	0.94	1.03	9,500	12	0	1	0	4	7	Ashland	Jackson	YMCA WAY	90	46.51
272	OR-238	1	38.07	38.16	14,544	13	0	1	1	4	7	Medford	Jackson	SAGE RD.	90	46.49
022	OR-62	1	3.61	3.70	28,333	24	0	0	2	11	11	Medford	Jackson	E VILAS RD.	90	46.43
009	US-101	1	236.49	236.58	20,600	23	0	0	7	5	11	North Bend	Coos	NEWMARK ST.	90	46.12
009	US-101	1	239.28	239.37	26,300	16	0	1	2	3	10		Coos	HARRIET RD.	90	46.10
009	US-101	1	239.29	239.38	26,300	16	0	1	2	3	10		Coos	HARRIET RD.	90	46.10
025	OR-99	2	-0.95	-0.86	15,066	20	0	0	4	8	8	Grants Pass	Josephine	NE F ST.	90	46.05
022	OR-62	1	0.88	0.97	43,311	12	0	1	3	5	3	Medford	Jackson	BULLOCK RD.	90	45.99
022	OR-62	1	3.60	3.69	28,811	26	0	0	2	10	14	Medford	Jackson	E VILAS RD.	90	45.98
025	US-199	1	0.62	0.72	32,000	27	0	0	1	11	15	Grants Pass	Josephine	LEG (TO HWY 025 DECREASING RDWY)	90	45.98
272	OR-238	1	0.06	0.14	23,800	24	0	0	7	5	12	Grants Pass	Josephine		90	45.89
009	US-101	1	357.69	357.79	19,677	14	0	1	1	4	8	Brookings	Curry	BRIDGE ST.	90	45.85
009	US-101	1	357.70	357.80	19,866	14	0	1	1	4	8	Brookings	Curry	BRIDGE ST.	90	45.80
009	US-101	1	238.93	239.05	15,000	14	1	0	3	1	9	Coos Bay	Coos	JOHNSON AVE.	90	45.74
009	US-101	1	238.95	239.06	15,000	14	1	0	3	1	9	Coos Bay	Coos	JOHNSON AVE.	90	45.74
001	I-5	1	120.36	120.45	40,200	4	0	2	0	2	0		Douglas		90	45.73
001	I-5	1	120.37	120.46	40,200	4	0	2	0	2	0		Douglas		90	45.73

Oregon Department of Transportation

2015 - On-State, Top 10% SPIS Sites - By Score

Region

3

Rd	Rte	Rdwy	BMP	EMP	ADT	Crash	Fatal	A	B	C	PDO	City	County	Connection	Percent	SPIS
001	I-5	1	120.43	120.51	40,200	4	1	1	0	2	0		Douglas		90	45.73
001	I-5	1	68.15	68.24	19,300	12	0	1	4	2	5		Josephine		90	45.69
022	OR-62	1	0.73	0.81	37,800	25	0	0	3	10	12	Medford	Jackson	LEG (FROM 022AV CONN.)	90	45.58
025	OR-99	1	-0.97	-0.87	15,833	24	0	0	3	7	14	Grants Pass	Josephine	NW E ST.	90	45.48
025	US-199	1	29.03	29.13	8,100	3	0	2	1	0	0	Cave Junction	Josephine	HAMILTON AVE.	90	45.41
025	US-199	1	29.04	29.13	8,100	3	0	2	1	0	0	Cave Junction	Josephine	HAMILTON AVE.	90	45.41
025	US-199	1	29.05	29.14	8,100	3	0	2	1	0	0	Cave Junction	Josephine	HAMILTON AVE.	90	45.41
025	US-199	1	29.06	29.15	8,100	3	0	2	1	0	0	Cave Junction	Josephine	HAMILTON AVE.	90	45.41
025	US-199	1	29.07	29.16	8,100	3	0	2	1	0	0	Cave Junction	Josephine	HAMILTON AVE.	90	45.41
025	US-199	1	29.08	29.17	8,100	3	0	2	1	0	0	Cave Junction	Josephine	HAMILTON AVE.	90	45.41
025	US-199	1	29.09	29.18	8,100	3	0	2	1	0	0		Josephine	HAMILTON AVE.	90	45.41
025	US-199	1	29.10	29.19	8,100	3	0	2	1	0	0		Josephine	HAMILTON AVE.	90	45.41
021	OR-66	1	0.91	0.99	9,500	11	0	1	1	3	6	Ashland	Jackson	YMCA WAY	90	45.39
022	OR-62	1	3.59	3.68	29,288	25	0	0	2	10	13	Medford	Jackson	E VILAS RD.	90	45.33
025	OR-99	1	-1.19	-1.08	16,844	20	0	0	2	10	8	Grants Pass	Josephine	NW A ST.	90	45.33
009	US-101	1	239.32	239.42	26,300	17	0	1	0	4	12		Coos	FLANAGAN RD.	90	45.31
009	US-101	1	239.33	239.43	26,300	17	0	1	0	4	12		Coos	FLANAGAN RD.	90	45.31
272	OR-238	1	0.04	0.13	23,800	23	0	0	7	5	11	Grants Pass	Josephine		90	45.28
022	OR-62	1	0.87	0.96	42,622	11	0	1	3	5	2	Medford	Jackson	BULLOCK RD.	90	45.26
272	OR-238	1	23.18	23.27	2,600	2	1	1	0	0	0		Jackson		90	45.20
272	OR-238	1	23.19	23.28	2,600	2	1	1	0	0	0		Jackson		90	45.20
025	OR-99	1	-1.18	-1.07	17,233	20	0	0	2	10	8	Grants Pass	Josephine	NW A ST.	90	45.19

Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin City to End **		Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
N Riverside Avenue			MIDDLEFORD ALY	1584 \ 161	341	Medford		10,788	30	0	1	6	10	13	95	77.81
N Riverside Ave			MIDDLEFORD ALY	1637 \ 161	341	Medford		11,277	29	0	1	6	9	13	95	75.31
Kershaw Road			LAKE OF THE WOODS HWY	3116 \ 180	230			4,700	13	0	2	3	3	5	95	72.47
Kershaw Road			LAKE OF THE WOODS HWY	3168 \ 180	240			4,700	13	0	2	3	3	5	95	72.47
Kershaw Road			LAKE OF THE WOODS HWY	3063 \ 180	219			4,700	11	0	2	3	2	4	95	68.46
N 10th Street			KNOLL DR	1056 \ 310	154	Central Point		3,766	26	0	0	2	13	11	95	67.16
Kershaw Road			LAKE OF THE WOODS HWY	2957 \ 180	200			4,700	10	0	2	3	2	3	95	67.09
Kershaw Road			LAKE OF THE WOODS HWY	3010 \ 180	209			4,700	10	0	2	3	2	3	95	67.09
Table Rock Road			WELLS RD	53 \ 180	0	Medford		19,100	24	0	1	4	10	9	95	66.73
Table Rock Road			WELLS RD	0\0	0	Medford		19,100	24	0	1	4	10	9	95	66.73
Table Rock Road			WOODS RD	740 \ 180	0	Medford		19,100	24	0	1	4	10	9	95	66.73
Table Rock Road			WOODS RD	687 \ 180	0	Medford		19,100	24	0	1	4	10	9	95	66.73
Table Rock Road			WOODS RD	634 \ 180	360	Medford		19,100	24	0	1	4	10	9	95	66.73
N 10th Street			KNOLL DR	1004 \ 308	151	Central Point		4,133	26	0	0	2	13	11	95	66.20
E Pine Street			N 9TH ST	317 \ 58	237	Central Point		13,500	26	0	1	3	8	14	95	65.96
Kershaw Road			LAKE OF THE WOODS HWY	2904 \ 180	192			4,700	9	0	2	3	2	2	95	65.63
E Pine Street			N 9TH ST	423 \ 61	240	Central Point		15,700	27	0	1	3	8	15	95	65.46
S Columbus Avenue			WINCHESTER AVE	581 \ 359	179	Medford		12,300	13	0	2	2	4	5	95	65.44
E Pine Street			N 9TH ST	370 \ 60	239	Central Point		14,600	26	0	1	3	8	14	95	65.36
E Pine Street			N 9TH ST	476 \ 63	243	Central Point		16,800	27	0	1	3	8	15	95	64.97
N 10th Street			KNOLL DR	792 \ 300	139	Central Point		5,600	26	0	0	2	14	10	95	64.67

Notes:

* Distance in feet and Direction in degrees (0-359) from the referecence location to the segment begin point. Distance is measured along the road. Direction is measured straight line, aka 'as the crow flies'.

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Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin to End **	City	Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
N 10th Street			KNOLL DR	951 \ 305	148	Central Point		4,500	25	0	0	2	13	10	95	64.59
Table Rock Road			WELLS RD	159 \ 180	0	Medford		19,100	23	0	1	3	10	9	95	64.59
Table Rock Road			WELLS RD	106 \ 180	0	Medford		19,100	23	0	1	3	10	9	95	64.59
E Pine Street			CENTRAL POINT CONN. NO. 4 CONN	370 \ 261	250	Central Point		21,200	26	0	1	3	9	13	95	64.29
E Pine Street			CENTRAL POINT CONN. NO. 4 CONN	317 \ 262	251	Central Point		22,300	26	0	1	3	9	13	95	63.97
N 10th Street			KNOLL DR	898 \ 303	146	Central Point		4,866	25	0	0	2	13	10	95	63.81
Freeman Road			N 9TH ST	264 \ 56	236	Central Point		13,500	25	0	1	3	7	14	95	63.80
S Riverside Avenue			RIVERSIDE AVE. CONN. NO. 1 CONN	106 \ 334	333	Medford		15,200	14	2	0	2	3	7	95	63.66
W Barnett Road			KENYON ST	1584 \ 90	88	Medford		7,477	11	0	2	2	2	5	95	63.46
N 10th Street			KNOLL DR	740 \ 298	133	Central Point		5,966	25	0	0	2	14	9	95	63.33
N 10th Street			KNOLL DR	845 \ 301	144	Central Point		5,233	25	0	0	2	13	10	95	63.09
S Columbus Avenue			WINCHESTER AVE	634 \ 358	177	Medford		12,300	12	0	2	2	3	5	95	62.94
N 10th Street			KNOLL DR	687 \ 296	128	Central Point		6,333	25	0	0	2	14	9	95	62.76
E Barnett Road			KENYON ST	1637 \ 90	89	Medford		8,366	11	0	2	2	2	5	95	62.70
E Pine Street			N 9TH ST	528 \ 63	244	Central Point		17,900	24	0	1	3	8	12	95	62.65
E Barnett Road			KENYON ST	1743 \ 90	89	Medford		10,144	12	0	2	2	2	6	95	62.59
Table Rock Road			WOODS RD	581 \ 180	360	Medford		19,100	22	0	1	4	8	9	95	62.43
Table Rock Road			WOODS RD	528 \ 180	360	Medford		19,100	22	0	1	4	8	9	95	62.43
Table Rock Road			WOODS RD	476 \ 180	360	Medford		19,100	22	0	1	4	8	9	95	62.43
Kershaw Road			LAKE OF THE WOODS HWY	2852 \ 180	187			4,700	7	0	2	3	2	0	95	62.35
E Pine Street			CENTRAL POINT CONN. NO. 4 CONN	476 \ 259	246	Central Point		19,000	24	0	1	3	8	12	95	62.26
N 10th Street			KNOLL DR	634 \ 293	121	Central Point		6,700	25	0	0	2	14	9	95	62.24

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Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin to End **	City	Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
N 10th Street			KNOLL DR	581 \ 289	114	Central Point		6,700	25	0	0	2	14	9	95	62.24
E Barnett Road			KENYON ST	1690 \ 90	89	Medford		9,255	11	0	2	2	2	5	95	62.05
E Pine Street			CENTRAL POINT CONN. NO. 4 CONN	423 \ 259	248	Central Point		20,100	24	0	1	3	8	12	95	61.90
Poplar Drive			N FRED MEYER DR	53 \ 180	344	Medford		14,300	25	0	1	1	8	15	95	61.88
E Barnett Road			KENYON ST	1796 \ 90	90	Medford		11,033	13	0	2	1	2	8	95	61.60
E Barnett Road			KENYON ST	1848 \ 90	90	Medford		11,922	13	0	2	1	2	8	95	61.13
E Barnett Road			KENYON ST	1901 \ 89	90	Medford		12,811	13	0	2	1	2	8	95	60.70
E Barnett Road			KENYON ST	1954 \ 89	90	Medford		13,700	13	0	2	1	2	8	95	60.32
Poplar Drive			N FRED MEYER DR	106 \ 180	348	Medford		14,300	22	0	1	0	9	12	95	59.84
S Riverside Avenue			RIVERSIDE AVE. CONN. NO. 1 CONN	159 \ 333	333	Medford		15,200	11	2	0	1	3	5	95	59.32
Kershaw Road			LAKE OF THE WOODS HWY	2799 \ 180	183			4,700	6	0	2	2	2	0	95	58.99
N Riverside Ave			MIDDLEFORD ALY	1690 \ 161	341	Medford		11,766	28	0	0	6	9	13	95	57.83
Poplar Drive			N FRED MEYER DR	0\0	340	Medford		14,300	23	0	1	1	6	15	95	57.54
N Riverside Ave			MIDDLEFORD ALY	1743 \ 161	341	Medford		12,255	28	0	0	6	9	13	95	57.50
W Barnett Road			KENYON ST	1532 \ 90	88	Medford		6,588	8	0	2	1	1	4	90	57.25
W Barnett Road			KENYON ST	1479 \ 90	88	Medford		5,700	7	0	2	1	1	3	90	56.57
N Central Avenue			E 3RD ST	370 \ 145	325	Medford		12,800	26	0	0	4	11	11	90	55.87
Poplar Drive			N FRED MEYER DR	159 \ 180	353	Medford		14,300	18	0	1	0	8	9	90	55.37
N Riverside Ave			MIDDLEFORD ALY	1796 \ 161	341	Medford		12,744	26	0	0	5	9	12	90	54.40
N Riverside Avenue			MIDDLEFORD ALY	1901 \ 161	341	Medford		13,966	27	0	0	5	9	13	90	54.34
N Riverside Avenue			MIDDLEFORD ALY	1954 \ 161	341	Medford		14,577	27	0	0	5	9	13	90	54.01
N Riverside Ave			MIDDLEFORD ALY	2007 \ 162	342	Medford		15,188	27	0	0	5	9	13	90	53.70

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Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin to End **	City	Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
E Jackson St			MARY BEE LN	1690 \ 90	269	Medford		7,111	22	0	0	2	10	10	90	53.42
N Riverside Ave			MIDDLEFORD ALY	2060 \ 162	342	Medford		15,800	27	0	0	5	9	13	90	53.41
E Jackson St			MARY BEE LN	1637 \ 90	270	Medford		7,155	22	0	0	2	10	10	90	53.37
E Jackson Street			MARY BEE LN	1584 \ 90	270	Medford		7,200	22	0	0	2	10	10	90	53.31
Crater Lake Avenue			ROBERTS RD	792 \ 203	22	Medford		18,900	24	0	0	2	14	8	90	53.30
Stewart Avenue			OAK GROVE RD	1637 \ 270	270	Medford		15,600	7	0	2	1	2	2	90	53.16
Poplar Drive			GOLDEN LN	687 \ 180	0	Medford		11,400	25	0	0	4	9	12	90	53.12
Stewart Avenue			CHERRY ST	1796 \ 90	270	Medford		15,600	8	0	2	1	1	4	90	52.90
E Jackson St			MARY BEE LN	1901 \ 90	269	Medford		6,933	21	0	0	2	10	9	90	52.84
E Jackson St			MARY BEE LN	1848 \ 90	269	Medford		6,977	21	0	0	2	10	9	90	52.79
E Jackson St			MARY BEE LN	1796 \ 90	269	Medford		7,022	21	0	0	2	10	9	90	52.73
E Jackson St			MARY BEE LN	1743 \ 90	269	Medford		7,066	21	0	0	2	10	9	90	52.68
N Riverside Avenue			MIDDLEFORD ALY	1848 \ 161	341	Medford		13,355	26	0	0	5	8	13	90	52.54
Poplar Drive			GOLDEN LN	740 \ 180	360	Medford		11,400	24	0	0	4	9	11	90	52.43
Poplar Drive			GOLDEN LN	634 \ 180	0	Medford		11,400	24	0	0	4	9	11	90	52.43
Kershaw Road			LAKE OF THE WOODS HWY	3221 \ 180	250			4,700	11	0	1	3	2	5	90	51.96
Crater Lake Avenue			ROBERTS RD	740 \ 203	23	Medford		18,900	23	0	0	2	13	8	90	51.15
S Columbus Avenue			WINCHESTER AVE	792 \ 354	171	Medford		12,300	6	0	2	1	1	2	90	51.12
S Columbus Avenue			WINCHESTER AVE	740 \ 355	173	Medford		12,300	6	0	2	1	1	2	90	51.12
S Columbus Avenue			WINCHESTER AVE	687 \ 357	175	Medford		12,300	6	0	2	1	1	2	90	51.12
N Central Avenue			E 3RD ST	476 \ 145	325	Medford		12,800	23	0	0	3	10	10	90	50.85
N Central Avenue			E 3RD ST	423 \ 145	325	Medford		12,800	23	0	0	3	10	10	90	50.85

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Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin to End **	City	Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
E Jackson St			BRIDGE #007137 - Bear Creek, Jackson St	0\0	269	Medford		6,888	20	0	0	2	9	9	90	50.58
S Columbus Avenue			WINCHESTER AVE	528 \ 359	179	Medford		12,300	13	0	1	2	5	5	90	50.44
S Columbus Avenue			WINCHESTER AVE	476 \ 359	179	Medford		12,300	13	0	1	2	5	5	90	50.44
Stewart Avenue			OAK GROVE RD	1584 \ 270	270	Medford		15,600	6	0	2	1	1	2	90	50.31
Stewart Avenue			OAK GROVE RD	1690 \ 270	270	Medford		15,600	6	0	2	1	1	2	90	50.31
Grant Avenue			OAK GROVE RD	1743 \ 270	270	Medford		15,600	6	0	2	1	1	2	90	50.31
Stewart Avenue			OAK GROVE RD	1796 \ 270	270	Medford		15,600	6	0	2	1	1	2	90	50.31
S Riverside Avenue			RIVERSIDE AVE. CONN. NO. 1 CONN	423 \ 333	334	Medford		15,200	14	1	0	1	6	6	90	50.16
S Riverside Avenue			RIVERSIDE AVE. CONN. NO. 1 CONN	476 \ 333	333	Medford		15,200	14	1	0	1	6	6	90	50.16
S Riverside Avenue			MALL ENTRANCE RD	528 \ 154	334	Medford		15,200	14	1	0	1	6	6	90	50.16
Crater Lake Avenue			TEMPLE DR	317 \ 198	20	Medford		18,300	13	0	1	2	6	4	90	49.83
Crater Lake Avenue			TEMPLE DR	264 \ 200	21	Medford		18,300	13	0	1	2	6	4	90	49.83
Poplar Drive			GOLDEN LN	581 \ 180	0	Medford		11,400	22	0	0	4	8	10	90	49.50
Poplar Drive			GOLDEN LN	528 \ 180	1	Medford		11,400	22	0	0	4	8	10	90	49.50
E Pine Street			CENTRAL POINT CONN. NO. 2 CONN	106 \ 92	90			24,100	14	0	1	3	5	5	90	49.45
E Pine Street			PENNINGER FRONTAGE RD	159 \ 271	90			24,100	14	0	1	3	5	5	90	49.45
E Pine Street			PENNINGER FRONTAGE RD	106 \ 272	90			24,100	14	0	1	3	5	5	90	49.45
E McAndrews Road			GARDENDALE AVE	1954 \ 271	91	Medford		22,744	27	0	0	1	12	14	90	49.43
E McAndrews Road			GARDENDALE AVE	2165 \ 271	91	Medford		23,633	27	0	0	1	12	14	90	49.19
E McAndrews Road			GARDENDALE AVE	1320 \ 270	90	Medford		22,300	29	0	0	3	9	17	90	49.19

Notes:

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Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin City to End **		Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
E McAndrews Road			BRIDGE #20043 - Bear Creek, McAndrews St	53 \ 270	90	Medford		24,077	27	0	0	1	12	14	90	49.08
Table Rock Road			W GREGORY RD	264 \ 180	0			14,211	12	1	0	4	3	4	90	48.65
E Pine Street			PENNINGER FRONTAGE RD	53 \ 274	90			24,100	13	0	1	3	5	4	90	48.64
E Pine Street			PENNINGER FRONTAGE RD	0\0	89			24,100	13	0	1	3	5	4	90	48.64
Crater Lake Avenue			ROBERTS RD	1004 \ 199	14	Medford		18,633	19	0	0	3	12	4	90	48.51
Modoc Road			SAMS VALLEY HWY	26031 \ 200	258			3,300	7	0	1	4	1	1	90	48.48
Modoc Road			SAMS VALLEY HWY	26084 \ 200	252			3,300	7	0	1	4	1	1	90	48.48
Modoc Road			SAMS VALLEY HWY	26136 \ 200	243			3,300	7	0	1	4	1	1	90	48.48
Modoc Road			SAMS VALLEY HWY	26189 \ 200	233			3,300	7	0	1	4	1	1	90	48.48
Modoc Road			SAMS VALLEY HWY	26242 \ 200	223			3,300	7	0	1	4	1	1	90	48.48
Modoc Road			SAMS VALLEY HWY	26295 \ 200	213			3,300	7	0	1	4	1	1	90	48.48
Modoc Road			SAMS VALLEY HWY	26348 \ 200	203			3,300	7	0	1	4	1	1	90	48.48
Modoc Road			SAMS VALLEY HWY	26400 \ 200	194			3,300	7	0	1	4	1	1	90	48.48
Table Rock Road			W GREGORY RD	317 \ 180	0			14,933	12	1	0	4	3	4	90	48.40
N Foothill Road			DODSON DR	4172 \ 11	218			6,300	10	1	0	1	4	4	90	48.39
Bank Street			MALL ENTRANCE RD	476 \ 154	334	Medford		15,200	12	1	0	1	6	4	90	48.31
E Jackson Street			MARY BEE LN	845 \ 90	270	Medford		6,833	19	0	0	6	4	9	90	48.29
Table Rock Road			W GREGORY RD	370 \ 180	0			15,655	12	1	0	4	3	4	90	48.16
E Jackson Street			MARY BEE LN	898 \ 90	270	Medford		6,955	19	0	0	6	4	9	90	48.14
S Columbus Avenue			WINCHESTER AVE	951 \ 355	170	Medford		12,300	5	0	2	0	1	2	90	48.06
S Columbus Avenue			WINCHESTER AVE	898 \ 355	170	Medford		12,300	5	0	2	0	1	2	90	48.06
S Columbus Avenue			WINCHESTER AVE	845 \ 354	170	Medford		12,300	5	0	2	0	1	2	90	48.06

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County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin to End **	City	Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
S Riverside Avenue			BOYD ST	1796 \ 150	334	Medford		16,000	12	0	1	2	5	4	90	48.05
S Riverside Avenue			BOYD ST	1743 \ 149	334	Medford		16,000	12	0	1	2	5	4	90	48.05
Crater Lake Avenue			TEMPLE DR	423 \ 194	15	Medford		18,300	11	0	1	2	6	2	90	47.98
Crater Lake Avenue			TEMPLE DR	370 \ 196	17	Medford		18,300	11	0	1	2	6	2	90	47.98
Table Rock Road			W GREGORY RD	423 \ 180	0			16,377	12	1	0	4	3	4	90	47.94
E Pine Street			N 4TH ST	53 \ 56	235	Central Point		13,500	12	0	1	1	5	5	90	47.43
E McAndrews Road			BRIDGE #20043 - Bear Creek, McAndrews St	0\0	91	Medford		23,855	26	0	0	1	11	14	90	47.06
N Foothill Road			DODSON DR	4119 \ 10	214			6,300	9	1	0	1	4	3	90	47.01
Crater Lake Avenue			ROBERTS RD	951 \ 201	17	Medford		18,700	19	0	0	2	12	5	90	46.99
S Columbus Avenue			WINCHESTER AVE	423 \ 360	180	Medford		12,300	11	0	1	2	4	4	90	46.90
S Columbus Avenue			WINCHESTER AVE	370 \ 360	180	Medford		12,300	11	0	1	2	4	4	90	46.90
S Columbus Avenue			WINCHESTER AVE	317 \ 360	179	Medford		12,300	11	0	1	2	4	4	90	46.90
S Columbus Avenue			WINCHESTER AVE	159 \ 0	180	Medford		12,300	11	0	1	1	5	4	90	46.90
Crater Lake Avenue			ROBERTS RD	845 \ 202	21	Medford		18,833	21	0	0	2	11	8	90	46.84
Cottage Street			E 9TH ST	212 \ 180	0	Medford		2,800	7	1	0	1	2	3	90	46.82
E McAndrews Road			GARDENDALE AVE	1215 \ 270	90	Medford		21,811	27	0	0	2	9	16	90	46.70
E McAndrews Road			GARDENDALE AVE	2007 \ 271	91	Medford		22,966	25	0	0	1	11	13	90	46.70
Table Rock Road			W GREGORY RD	159 \ 180	360			12,766	11	1	0	3	3	4	90	46.69
Poplar Drive			GOLDEN LN	476 \ 180	0	Medford		11,400	20	0	0	4	7	9	90	46.50
Poplar Drive			GOLDEN LN	423 \ 180	359	Medford		11,400	20	0	0	4	7	9	90	46.50
E Jackson St			BRIDGE #007137 - Bear Creek, Jackson St	53 \ 90	269	Medford		6,844	17	0	0	2	8	7	90	46.47

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Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin to End **	City	Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
N Front Street			LAUREL ST	423 \ 145	325	Central Point		10,400	14	0	1	2	1	10	90	46.46
Modoc Road			SAMS VALLEY HWY	26453 \ 201	187			3,300	6	0	1	4	1	0	90	46.46
Table Rock Road			W GREGORY RD	212 \ 180	0			13,488	11	1	0	3	3	4	90	46.41
N Central Avenue			E 5TH ST	53 \ 146	325	Medford		12,800	21	0	0	3	8	10	90	46.41
Crater Lake Avenue			GRANDVIEW AVE	0\0	10	Medford		18,500	18	0	0	3	11	4	90	46.32
S Front Street			LAUREL ST	476 \ 145	325	Central Point		10,644	14	0	1	2	1	10	90	46.31
Crater Lake Avenue			ROBERTS RD	1056 \ 199	12	Medford		18,566	18	0	0	3	11	4	90	46.29
S Front Street			LAUREL ST	528 \ 145	325	Central Point		10,888	14	0	1	2	1	10	90	46.16
Lozier Lane			ARGYLE CT	106 \ 180	1	Medford		7,966	18	0	0	1	9	8	90	46.13
Kershaw Road			LAKE OF THE WOODS HWY	3274 \ 180	257			4,700	9	0	1	2	1	5	90	46.13
Crater Lake Avenue			ROBERTS RD	687 \ 204	24	Medford		18,900	20	0	0	2	11	7	90	46.13
Crater Lake Avenue			ROBERTS RD	634 \ 204	24	Medford		18,900	20	0	0	2	11	7	90	46.13
Crater Lake Avenue			SALING AVE	3010 \ 181	0	Medford		18,900	14	0	1	2	3	8	90	46.04
Crater Lake Avenue			SALING AVE	2957 \ 181	0	Medford		18,900	14	0	1	2	3	8	90	46.04
Poplar Drive			GOLDEN LN	370 \ 180	358	Medford		11,400	19	0	0	4	7	8	90	45.72
Stewart Avenue			OAK GROVE RD	1373 \ 270	270	Medford		15,600	11	0	1	2	4	4	90	45.69
N Central Avenue			E 5TH ST	159 \ 145	325	Medford		12,800	20	0	0	3	8	9	90	45.66
N Central Avenue			E 5TH ST	106 \ 146	325	Medford		12,800	20	0	0	3	8	9	90	45.66
N Central Avenue			E 5TH ST	0\0	325	Medford		12,800	20	0	0	3	8	9	90	45.66
N Central Avenue			E 3RD ST	634 \ 145	325	Medford		12,800	20	0	0	3	8	9	90	45.66
N Central Avenue			E 3RD ST	528 \ 145	325	Medford		12,800	20	0	0	3	8	9	90	45.66
Poplar Drive			N FRED MEYER DR	317 \ 180	0	Medford		14,300	12	0	1	0	5	6	90	45.62

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Oregon Department of Transportation

2015 - Off-State, 10% SPIS Sites - By Score

County

Jackson

	Segment Begin Location															
Rd Name	Rd No.	MP	Ref. Location Desc.	Dist. \ Dir. *	Direction from Begin to End **	City	Intersection	ADT	Crash	Fatal	A	B	C	PDO	Percent	SPIS
Lozier Lane			ARGYLE CT	53 \ 180	1	Medford		8,500	18	0	0	1	9	8	90	45.61
E Jackson Street			MARY BEE LN	951 \ 90	270	Medford		7,077	18	0	0	5	4	9	90	45.61
S Riverside Avenue			BOYD ST	1690 \ 149	334	Medford		16,000	11	0	1	1	5	4	90	45.57
N Foothill Road			DODSON DR	4224 \ 11	222			6,300	9	1	0	0	4	4	90	45.51
Crater Lake Avenue			ROBERTS RD	898 \ 201	19	Medford		18,766	19	0	0	2	11	6	90	45.47
E Jackson Street			MARY BEE LN	1004 \ 90	270	Medford		7,200	18	0	0	5	4	9	90	45.46
S Riverside Avenue			RIVERSIDE AVE. CONN. NO. 1 CONN	212 \ 333	333	Medford		15,200	12	1	0	1	4	6	90	45.31
Table Rock Road			SCHULZ RD	370 \ 180	0			19,100	4	0	2	0	1	1	90	45.29
Table Rock Road			SCHULZ RD	317 \ 180	0			19,100	4	0	2	0	1	1	90	45.29
E McAndrews Road			GARDENDALE AVE	2060 \ 271	91	Medford		23,188	25	0	0	1	10	14	90	45.14
Lozier Lane			ARGYLE CT	0\0	2	Medford		9,033	18	0	0	1	9	8	90	45.14
E McAndrews Road			GARDENDALE AVE	2112 \ 271	91	Medford		23,411	25	0	0	1	10	14	90	45.08
E 8th Street			S BARTLETT ST	212 \ 55	235	Medford		5,900	19	0	0	1	6	12	90	45.08

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Attachment D

All Roads Traffic Safety Facilities in Medford

ARTS Bicycle and Pedestrian Safety Implementation Plan - Medford Oregon - Pedestrian Risk-Based Project Corridor

Corridor Rank	Corridor ID	Highway Name	Start^	End^	Length (Miles)	City	Total Number of Segments within Corridor	Number of Fatalities (2007-2011)	Number of Severe Injuries (2007-2011)	Number of Minor or Moderate Injuries (2007-2011)	Number of Pedestrians Involved but not Injured (2007-2011)	Number of Segments with ADT > 18,000	Number of Segments with ADT between 12,000 and 18,000	Number of Segments that are Undivided 4-Lane	Number of Segments that have Posted Speed Limit above 40 mph	Number of Segments with Posted Speed Limit of 35 or 40 mph	Number of Segments with Pedestrian Activated Flashers or Beacons	Number of Segments with at Least 1 Transit Stop within 100 feet	Number of Segments with at Least 1 Signal within 100' of Segment	Average Pedestrian Score
2	R-2	CRATER LAKE	1	7.1	6.71	Medford	67	4	1	2	0	56	10	7	64	3	0	4	12	8.4

ARTS Bicycle and Pedestrian Safety Implementation Plan - Medford Oregon - Bicyclist Risk-Based Project Corridor

Corridor Rank	Corridor ID	Highway Name	Highway Number	Start^	End^	Length (Miles)	City	Total Number of Segments in Corridor	Number of Fatalities (2007-2011)	Number of Severe Injuries (2007-2011)	Number of Minor or Moderate Injuries (2007-2011)	Number of Bicyclists Involved but not Injured (2007-2011)	Driveway Density (Average Number of Driveway Access Points per Segment)	Number of Segments that have Posted Speed Limit above 40 mph	Number of Segments with Posted Speed Limit of 35 or 40 mph	Number of Segments with ADT > 18,000	Number of Segments with ADT between 12,000 and 18,000	Number of Segments that Lack of Bicycle Facility - Right Side	Number of Segments that Lack of Bicycle Facility - Left Side	Number of Segments with at Least 1 Transit Stop within 100 feet	Number of Segments that are Undivided 4-Lane	Number of Segments with at Least 1 Signal within 100' of Segment	Average Bicycle Score
2	R-3	CRATER LAKE	22	0.5	4.4	3.9	Medford	38	0	0	6	0	1.8	35	3	37	0	14	12	2	4	8	9.74

ARTS Bicycle and Pedestrian Safety Implementation Plan - Medford Oregon - Pedestrian Crash Frequency and Severity Project Corridors												
Corridor Rank	Corridor ID	Roadway/Highway Name	Start^	End^	Length (Miles)	City	Jurisdiction	Number of Fatalities (2007-2011)	Number of Severe Injuries (2007-2011)	Number of Minor or Moderate Injuries (2007-2011)	Number of Pedestrians Involved but not Injured (2007-2011)	Total Pedestrian Score
2	F-11	Riverside Ave	0	8.13	2.46	Medford	Municipal Street	1	2	15	0	39
3	F-9	Main St	0	5.2	2.69	Medford	Municipal Street	0	4	8	0	28
4	F-6	Crater Lake Ave	0	1.82	1.82	Medford	Municipal Street	0	0	10	0	20
9	F-8	Jackson St	0.04	2.02	1.88	Medford	Municipal Street	1	0	5	0	13
10	F-1	10th St	0.16	1.42	1.27	Medford	Municipal Street	0	0	5	0	10
11	F-2	8th St	2.88	4.1	1.22	Medford	Municipal Street	0	1	3	0	9
11	F-7	Delta Waters Rd	0.44	1.92	1.47	Medford	County	1	0	3	0	9
12	F-5	Columbus Ave	0.16	1.35	1.1	Medford	Municipal Street	0	0	3	1	7

ARTS Bicycle and Pedestrian Safety Implementation Plan - Medford Oregon - Bicycle Crash Frequency and Severity Project Corridors												
Corridor Rank	Corridor ID	Roadway/ Highway Name	Start^	End^	Length (Miles)	City	Jurisdiction	Number of Fatalities (2007-2011)	Number of Severe Injuries (2007-2011)	Number of Minor or Moderate Injuries (2007-2011)	Number of Bicyclists Involved but not Injured (2007-2011)	Total Bicycle Score
1	F-21	Riverside Ave	0	8.13	2.51	Medford	Municipal Street	0	0	23	0	46
2	F-11	Central Ave	0	7.81	2.15	Medford	Municipal Street	0	0	16	0	32
3	F-19	McAndrews Rd	0.47	3.41	2.84	Medford	Municipal Street	0	0	15	0	30
4	F-18	Main St	0	4.97	3.13	Medford	Municipal Street	0	1	13	0	29
6	F-9	Barnett Rd	0	1.59	1.35	Medford	Municipal Street	0	0	9	0	18
6	F-10	Biddle Rd	6.75	7.85	1.11	Medford	Municipal Street	0	0	9	0	18
6	F-12	Columbus Ave	0.16	2.11	1.96	Medford	Municipal Street	0	0	9	0	18
7	F-13	Crater Lake Ave	0	1.82	1.82	Medford	Municipal Street	0	0	8	1	17
10	F-17	Jackson St	0.04	1.66	1.53	Medford	Municipal Street	0	0	6	0	12
11	F-4	10th St	0.25	1.42	1.17	Medford	Municipal Street	0	0	5	0	10
11	F-5	4th St	7.85	8.92	1.07	Medford	Municipal Street	0	0	5	0	10
12	F-24	Stewart Ave	1.34	3.24	1.89	Medford	County	0	0	3	2	8
14	F-23	Stevens St	0	0.76	0.78	Medford	Municipal Street	0	0	3	0	6

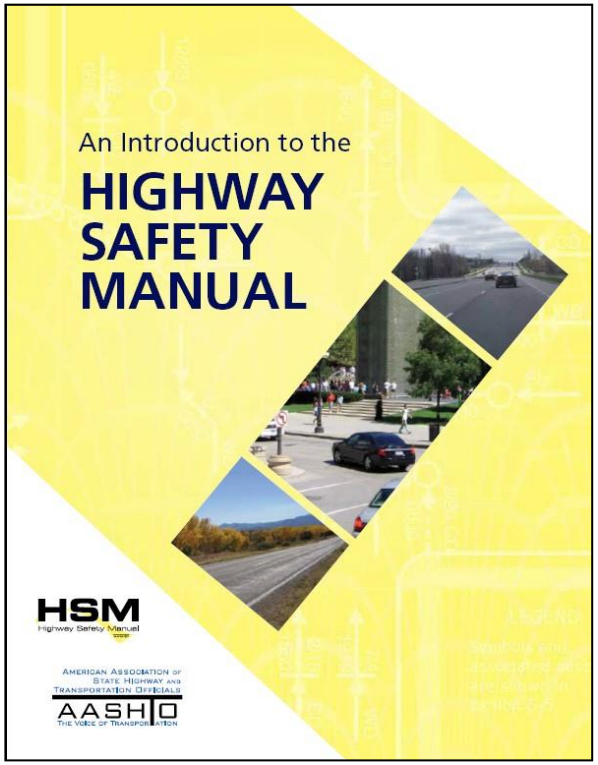
ARTS Intersection Safety Implementation Plan - Medford Oregon		
Intersection	**TCD**	**Type of Applicable Countermeasures**
Columbus Ave & Jackson St	Stop	Basic Set of Sign and Marking Improvements--Enhanced Signing Treatments-------
Main St & Willamette Ave	Stop	Basic Set of Sign and Marking Improvements--Enhanced Signing Treatments-------
Crater Lake Ave & Roberts Rd	Stop	Basic Set of Sign and Marking Improvements-------New or Upgraded Lighting--
Morningside St & Table Rock Rd	Stop	Basic Set of Sign and Marking Improvements---------
Columbus Ave & Prune St	Stop	Basic Set of Sign and Marking Improvements---------
Riverside Ave & 9th St	Stop	Basic Set of Sign and Marking Improvements---------
Airport Rd & Biddle Rd	Stop	Basic Set of Sign and Marking Improvements---------
Cottage St & 10th St	Stop	Basic Set of Sign and Marking Improvements---------
Crater Lake Ave & Skypark Dr	Stop	Basic Set of Sign and Marking Improvements---------
Aero Wy & Lear Way	Stop	Basic Set of Sign and Marking Improvements---------
Columbus Ave & 4th St	Stop	Basic Set of Sign and Marking Improvements---------
Jackson St & Riverside Ave	Signal	Hot Spot Improvements
Biddle Rd & Mcandrews Rd	Signal	-Basic Set of Signal and Sign Improvements--------
Table Rock Rd & Vilas Rd	Signal	-Basic Set of Signal and Sign Improvements---Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow) ----
Court St & Mcandrews Rd	Signal	-Basic Set of Signal and Sign Improvements---Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow) Enforcement Assisted Lights----
Central Ave & 4th St	Signal	-Basic Set of Signal and Sign Improvements---Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow) Enforcement Assisted Lights----
Riverside Ave & 8th St	Signal	-Basic Set of Signal and Sign Improvements----Enforcement Assisted Lights----
Mcandrews Rd & Riverside Ave	Signal	-Basic Set of Signal and Sign Improvements----Enforcement Assisted Lights----
Columbus Ave & Stewart Ave	Signal	-Basic Set of Signal and Sign Improvements---Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow) ----
Barnett Rd & Riverside Ave	Signal	-Basic Set of Signal and Sign Improvements--------
Crater Lake Ave & Mcandrews Rd	Signal	-Basic Set of Signal and Sign Improvements--------
Central Ave & Jackson St	Signal	-Basic Set of Signal and Sign Improvements----Enforcement Assisted Lights----
Crater Lake Ave & Stevens St	Signal	-Basic Set of Signal and Sign Improvements--------
Barnett Rd & Golf View Dr	Signal	-Basic Set of Signal and Sign Improvements---Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow) ----
Main St & Riverside Ave	Signal	-Basic Set of Signal and Sign Improvements----Enforcement Assisted Lights----
Crater Lake Ave & Delta Waters Rd	Signal	-Basic Set of Signal and Sign Improvements--------
Pine St & MP 1.8	Signal	-Basic Set of Signal and Sign Improvements---Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow) ----
Barnett Rd & Stewart Ave	Signal	-Basic Set of Signal and Sign Improvements--------
Barnett Rd & Murphy Rd	Signal	-Basic Set of Signal and Sign Improvements--------

Biddle Rd & Stevens St	Signal	-Basic Set of Signal and Sign Improvements---Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow) ----
Bartlett St & 4th St	Signal	-----Enforcement Assisted Lights----
Brookhurst St & Crater Lake Ave	Signal	----Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow)-----
Central Ave & 12th St	Signal	----Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow)-----
Central Ave & 8th St	Signal	-----Enforcement Assisted Lights----
Hawthorne St & Jackson St	Signal	------Pedestrian Improvements---
Holly St & 10th St	Signal	-----Enforcement Assisted Lights----
Lozier Ln & Stewart Ave	Signal	----Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow)-----
Morrow Rd & Poplar Dr	Signal	----Change of Permitted and Protected Left-Turn Phase to Protected Only (or Flashing Yellow Arrow)-----
Ohio St & Riverside Ave	Signal	-----Enforcement Assisted Lights----
Riverside Ave & 4th St	Signal	-----Enforcement Assisted Lights----

Attachment E

HSM Network Screening Overview Presentation

Highway Safety Manual
Network Screening Overview



Matt Braughton
Ashleigh Ludwig

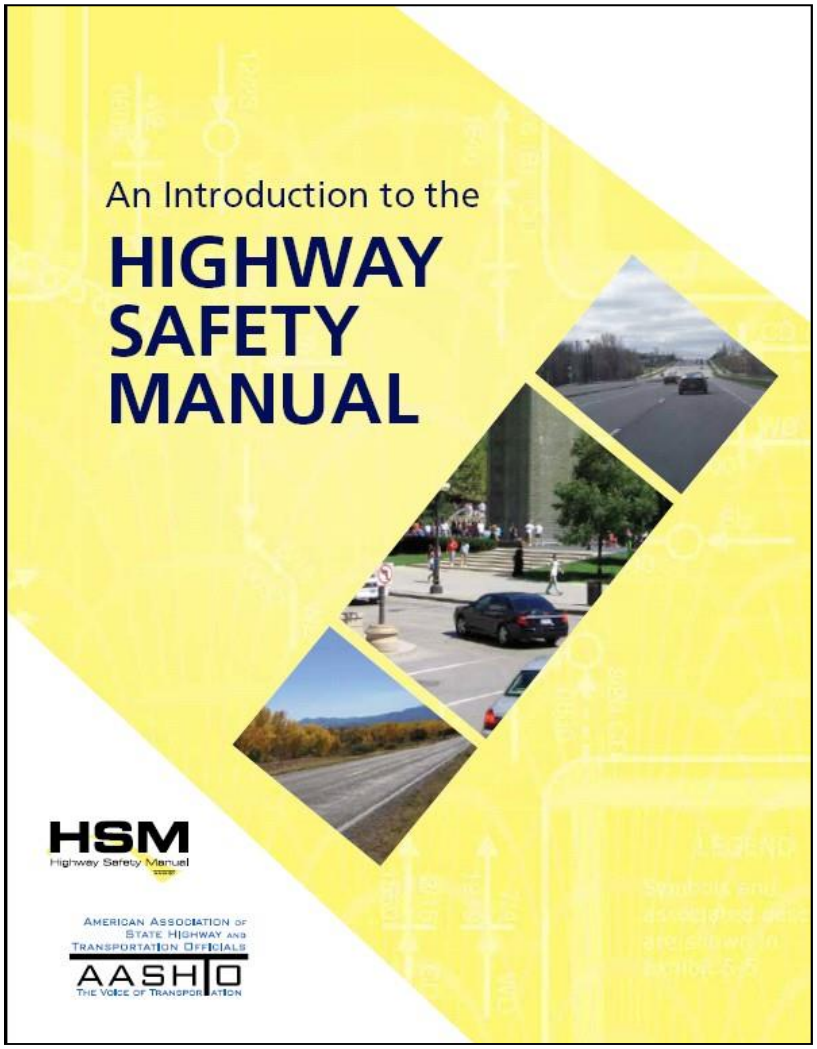
February 10, 2017

Presentation Overview

- HSM Overview
- Part B Roadway Safety Management Process
- HSM Network Screening
  - Process
  - Performance Measures
- Considerations for Establishing Focus of Network Screening
- Example Application
- Questions

HSM Overview

- Quantifying Safety in Project Decisions
- Spending Limited Resources Wisely
- Guiding Improvements for...
  - Networks
  - Corridors
  - Intersections

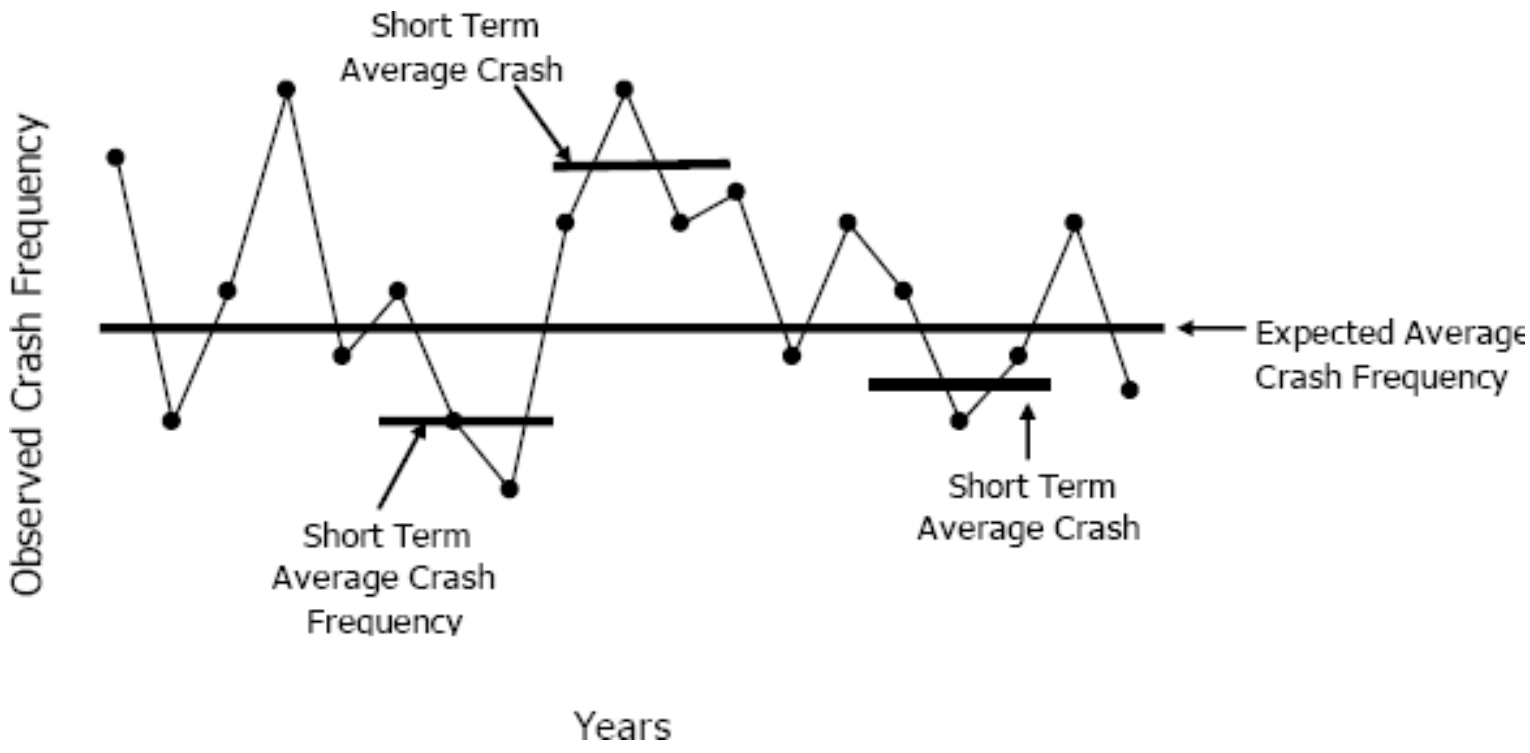


HSM Overview

- Fundamental Messages in the HSM
  - Measure safety by long-term annual average crash frequency
  - Use methods that compensate for randomness in crashes
  - Integrate safety into planning, design, operations and maintenance decision making processes and activities
- Part A – Introductory Material and Fundamentals
- Part B – Roadway Safety Management Process
- Part C – Predictive Method
- Part D – Crash Modification Factors

HSM Overview

- Why measure the long-term expected average crash frequency?
  - Crashes, as rare random events, tend to regress to long-term average
  - Looking at short-term average crash frequencies can be misleading



Part B – Roadway Safety Management Process

- Key Content and Messages
  - Methods for identifying opportunities to improve safety
  - Approaches for diagnosing contributing factors
  - Guidance on identifying countermeasures
  - Information to conduct benefit/cost evaluations
  - Methods for prioritizing projects
  - Methods for evaluating the effectiveness of safety projects

- Today's Focus
  - Chapter 4 Network Screening

Steps of the Roadway Safety Management Process

Network Screening

What sites have potential for improvement?

Diagnosis

What pattern do crashes follow?

Select Countermeasures

What factors contribute to crashes?

Economic Appraisal

What countermeasures are cost-effective?

Prioritize Projects

What projects meet program objectives?

Safety Effectiveness Evaluation

How effective were countermeasures?

Chapter 4 Network Screening

- Presents five basic steps to screen a network
- Provides 13 different performance measures with which to screen a network
- Critical task . . selecting performance measures
  - Data availability
  - Performance thresholds
  - Reliability/Stability of Results

Five Steps of Network Screening

- Review the transportation network to identify and rank sites based on the potential for reducing average crash frequency

1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

Thirteen Performance Measures

- Describes 13 performance measures to screen a street network
- Can use as few or as many performance measures as meets your needs
- Data needs vary across the performance measures
- Type of results vary based on the performance measures used

1. Network Screening – Establish Focus

- Review the transportation network to identify and rank sites based on the potential for reducing average crash frequency

1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

What is the reason for screening the network?

- Identify sites with potential to reduce average crash frequency or severity
- Identify sites with specific crash types or severity to address with system-wide policy (e.g., pedestrian crashes for specific pedestrian improvements)

2. Network Screening – Identify Network

- Review the transportation network to identify and rank sites based on the potential for reducing average crash frequency

1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

What elements of the roadway network are being screened?

- Intersections
- Roadway segments
- Facilities
- Ramps
- Ramp terminal intersections
- At-grade rail crossings

2. Network Screening – Establish Reference

- Review the transportation network to identify and rank sites based on the potential for reducing average crash frequency

1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

What characteristics define the reference population?

- Intersections
  - Signalized/stop control
  - # of approaches
  - Functional classification
  - Urban/rural
- Roadway segments
  - # of lanes per direction
  - Access density
  - Traffic volume ranges
  - Median type/width
  - Operating/posted speed

3. Network Screening – Select Measures

- Review the transportation network to identify and rank sites based on the potential for reducing average crash frequency

1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

What measure(s) will be used to evaluate the potential to reduce crash frequency or severity?

3. Data Needs and Stability of Performance Measures

Statistical Bias/Data Requirement Continuum*	City of Bend Implementation Category	Network Screening Performance Measure
	Short-term – Data is available	**Crash Frequency**
		Equivalent Property Damage Only Crash Frequency
		Relative Severity Index
		Crash Type Performance Threshold
		Excess Proportion of Specific Crash Types
	Medium-term – Requires volume data	Critical Rate
		Method of Moments
	Long-term – Requires calibrated safety performance functions and detailed geometric information	Excess Predicted Crashes Using SPFs
		Level of Service of Safety
		Expected Crash Frequency with EB Adjustment
		EPDO Crash Frequency with EB Adjustment
		Excess Expected Crash Frequency with EB Adjustment

3. Performance Thresholds

- Common Performance Measures
  - Crash Frequency
  - Crash Rate
  - Equivalent Property Damage Only (EPDO) Average Crash Frequency
- Account for Regression to the Mean
  - Expected Average Crash Frequency with EB Adjustments
  - EPDO Average Crash Frequency with EB Adjustments
  - Excess Expected Average Crash Frequency with EB Adjustments
- Performance Thresholds
  - Relative Severity Index (RSI)
  - Critical Crash Rate
  - Excess Predicted Average Crash Frequency using Method of Moments
  - Excess Proportion of Crashes by Type or Severity
  - Level of Service of Safety (LOSS)
  - Probability of Specific Crash Types Exceeding Threshold Proportion

4. Network Screening – Screening Methods

- Review the transportation network to identify and rank sites based on the potential for reducing average crash frequency

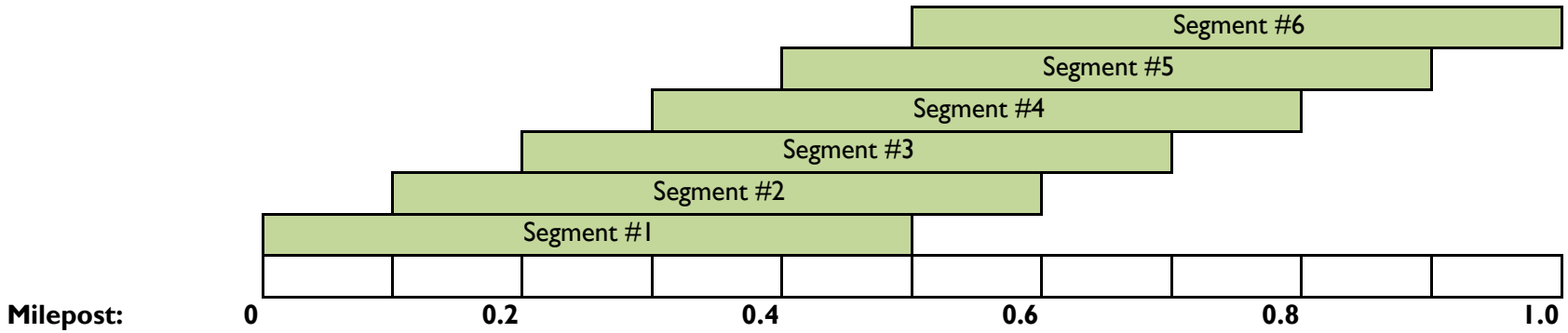
1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

How will the selected performance measures be applied to the sites under consideration?

- Nodes
  - *Simple Ranking Method*
- Segments
  - *Sliding Window Method*
- Facilities
  - *Combination of node and segment screening methods*

Network Screening: Sliding Window

- Screen segments using the Sliding Window approach
  - A window of a specified length is incrementally moved along roadway segments from beginning to end.
    - Example – sliding window of 0.5 miles with 0.1 mile increment



5. Network Screening – Screen & Evaluate Results

- Review the transportation network to identify and rank sites based on the potential for reducing average crash frequency

1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

- **Apply your selected screening method**
- **Calculate your selected performance measures**
- **Rank the sites in your identified network!**

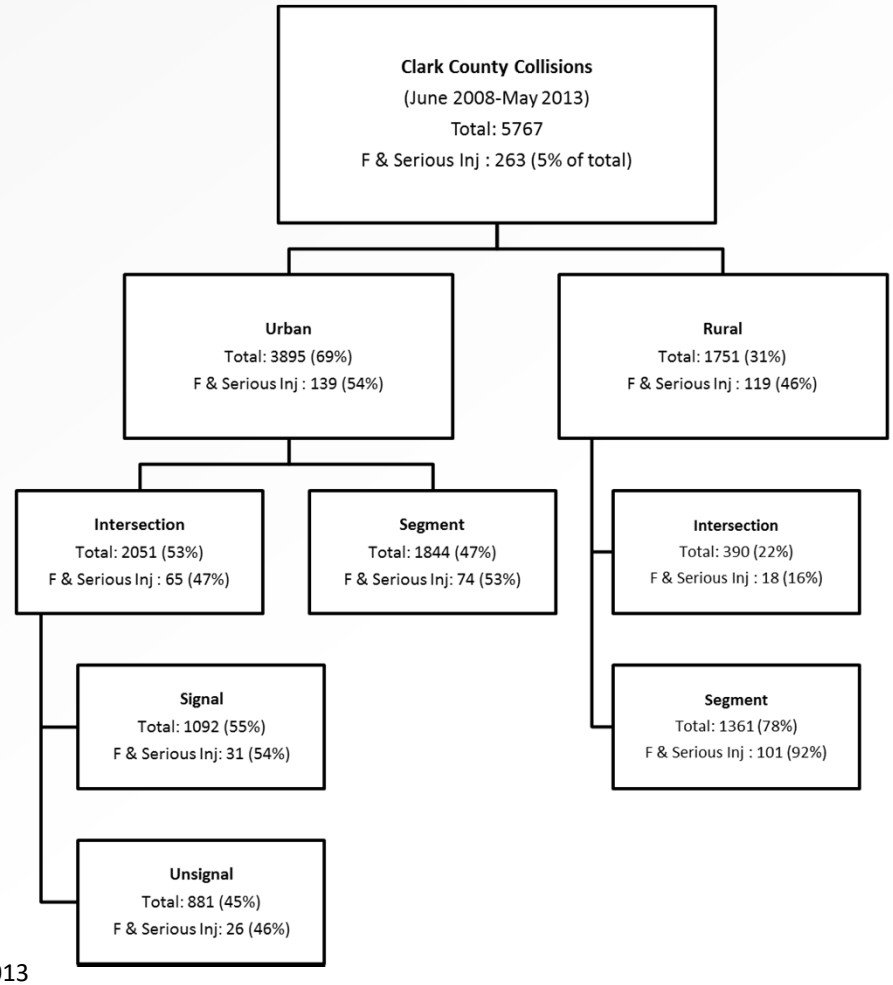
Example Project Development: Clark County Safety Program

1) Due-Diligence → 2) Network Screening → 3) Project Development → 4) Project Ranking

1. Establish Focus
2. Identify Network & Establish Reference Population
3. Select Performance Measures
4. Select Screening Methods
5. Screen and Evaluate Results

Reference Populations for Crash Pattern Analysis

- Crash patterns analyzed within simplified reference populations
  - Functional classification simplified as urban and rural



Classification Definitions:
Fatal & Serious Injuries: Dead at Scene, Dead on Arrival, Died in Hospital, Serious Injury
Urban: Urban Major Collector, Urban Other Principal Arterial, Urban Minor Arterial, Urban Local Access
Rural: Rural Major Collector, Rural Other Principal Arterial, Rural Minor Collector, Rural Local Access
Signal: Signals and RR Signal
Unsignalized: All others excluding Unknown

Data Source: Crash data from Clark County covering the date range June 2008 - May 2013

Select Performance Measures

- Framework Plan recommended two performance measures based on available data.
  - Performance Measure #1: Critical Crash Rate
    - Rank Locations by Crash Rate
  - Performance Measures #2: Probability of Specific Crash Type Exceeding Threshold Proportion
    - Rank Locations by the Probability the Site Exceeds the Threshold (each risk factor is analyzed separately)

Example Project Development: Clark County Safety Program

- Project Development Process
  - Priority Study Site Selection
  - Field Reviews
  - Crash Prediction
  - Countermeasure Toolbox
  - Site Summaries and Draft Prospectus Sheets

Priority Location Selection

- Network screening results led to an initial list of locations.

ID#	Intersection Name	Traffic Control	Critical Crash Rate	Crash Rate	Crash-Critical Crash Rate Ratio	Angle Proportion Excess	Angle Probability	Opposite Direction Proportion Excess	Opposite Direction Probability	Total Fatal and Injury A Crashes	Equivalent PDO Score	Annual Equivalent PDO Score	Total Score
382	NE 25TH AV & NE 88TH ST	Signal	0.20	0.46	2.38	0.21	0.95	0.26	0.98	3	368	73.6	5
413	NE 87TH AV & NE 119TH ST	Signal	0.18	0.34	1.87	-0.11	0.11	0.07	0.66	2	250	50	5
351	NE 63RD ST & NE 72ND AV	Signal	0.19	0.33	1.71	-0.07	0.22	0.22	0.93	2	233	46.6	5
416	NE 152ND AV & NE 119TH ST	Signal	0.20	0.87	4.35	0.05	0.69	0.43	1.00	1	210	42	5
125	NE 67TH ST & NE 102ND AV	Two Way Stop	0.32	0.34	1.08	0.08	0.51	-0.14	0.04	1	207	41.4	5

- 25 intersections and 5 corridors were identified with the County's input for field reviews.

Field Reviews

- KAI conducted field visits at the 25 selected intersections and 5 corridors
- Field Reviews included:
  - Reviewing crash trends to identify potential problems at the site
  - Observing traffic operations to identify any behavioral patterns
  - Photographing each approach and any potential issues identified
  - Measuring sight distances, where applicable
  - Driving approaches or corridors to evaluate from the users perspective

Crash Prediction

Crash severity level	Predicted average crash frequency, $N_{predicted\ int}$ (crashes/year)
	(Total) from Worksheet 2K
Total	0.6
Fatal and injury (FI)	0.2
Property damage only (PDO)	0.4

- Applications include:
  - Ranking sites within reference populations
  - Alternatives analysis
  - Benefit/cost calculations

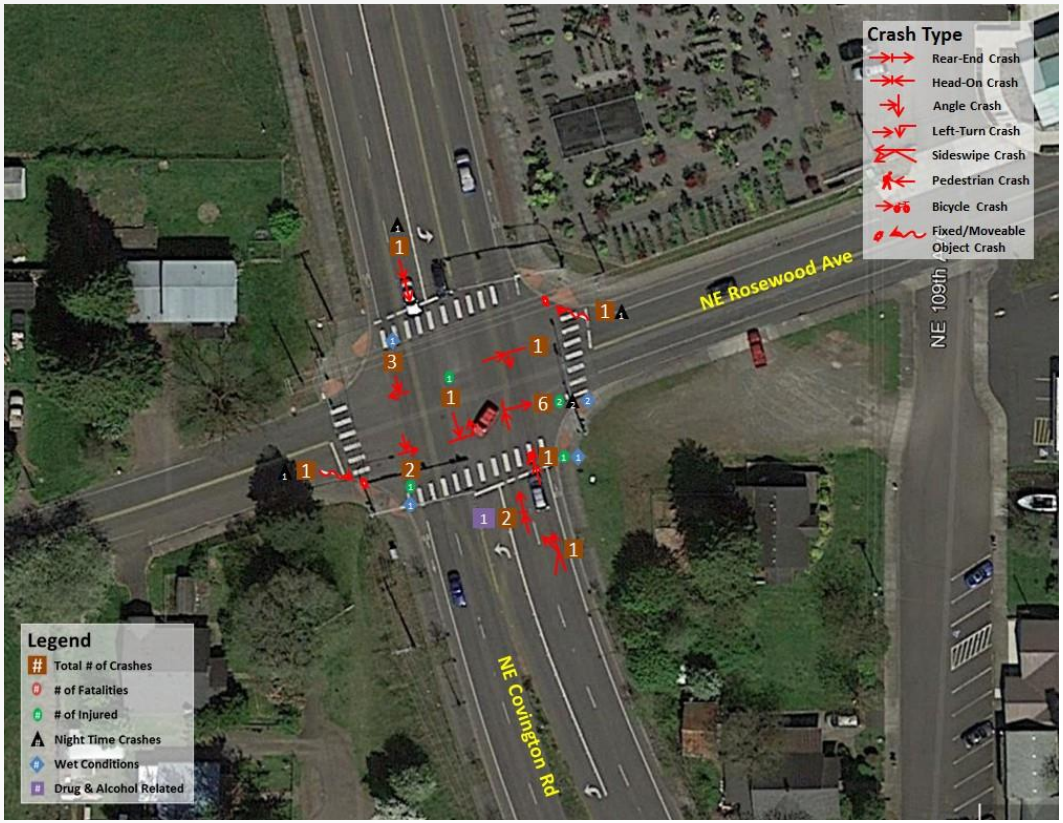
Countermeasure Toolbox

- Toolbox helps identify countermeasure options to address crash issues at study locations
- Specify area type, traffic control, and/or crash type.
- Includes estimate of crash reduction (when available).

Countermeasure	Countermeasure Category	CMF	Standard Error of CMF	Site Type
Implement Automated Speed Enforcement Cameras	Advanced Technology and ITS	0.840	0.07	Roadway
Increase Pavement Friction	Roadway	0.760	0.03	Roadway
Increase Pavement Friction by Installing High Friction Surface Treatment - Intersection or Segment Application	Roadway	0.430	0.32-0.8	Roadway
Increase Pavement Friction by Installing High Friction Surface Treatment - Intersection or Segment Application	Roadway	0.430	0.32-0.8	Roadway
Increase Pavement Friction by Installing High Friction Surface Treatment - Intersection or Segment Application	Roadway	0.430	0.43-0.83	Roadway

Urban Collector Intersection Site Summary:

NE Rosewood Avenue & NE Covington Road



Identified Crash Trends:

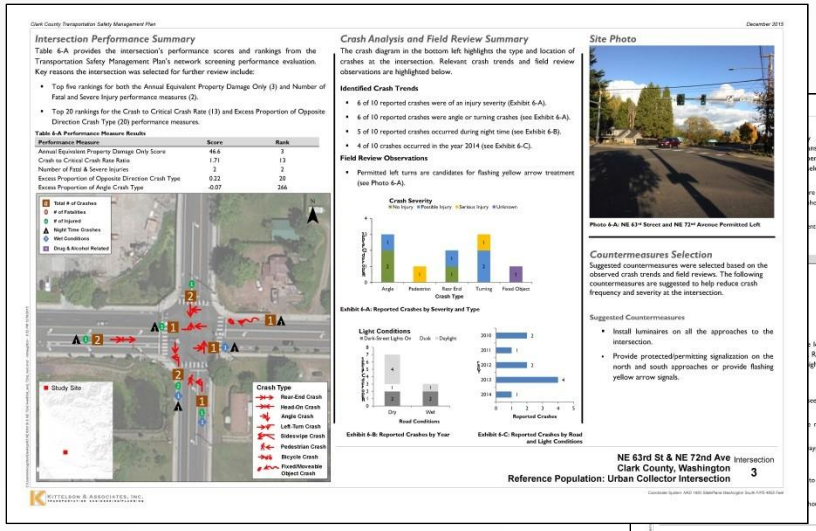
- 13 of 20 crashes were angle or turning movement crashes
- 2 of 20 crashes were fixed object involving a right turn onto Covington and the median

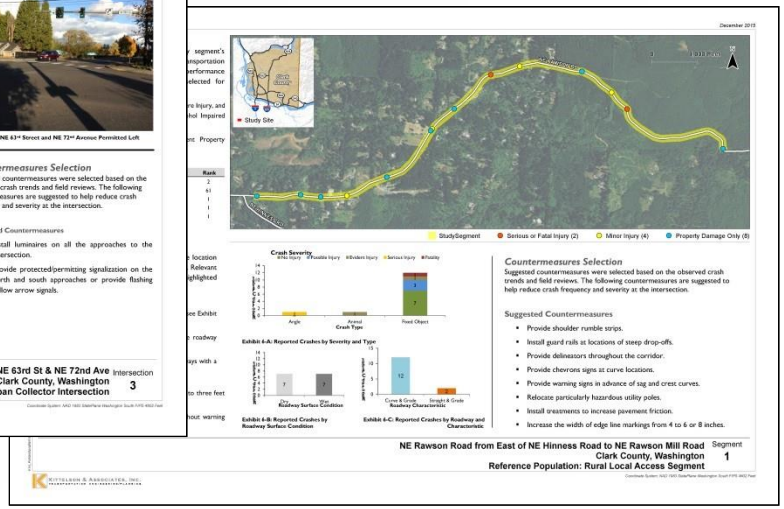
Suggested Countermeasures:

- Install luminaires on the median on NE 109th Avenue
- Add protected left turn phase for northbound and southbound approaches

Prospectus Sheets

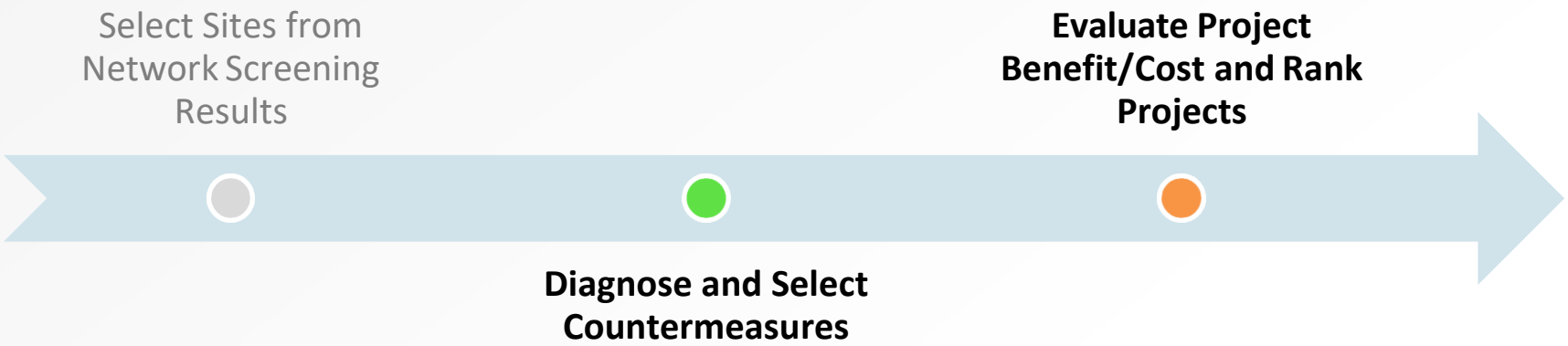
- Document:
  - Context for why the site was selected
  - Crash trends and field observations
  - Potential countermeasures





Project Development

- Develop Projects (combining countermeasures from the toolbox)
- Conduct Benefit/Cost Analysis and Rank Projects



Safety Management Framework Recap

1) Due-Diligence

- Review data available
- Evaluate potential tools/methods

2) Network Screening

- Establish data-driven program priority areas
- Identify measurable goals
- Establish threshold for comparison
- Identify sites for study within each priority area

3) Project Development

- Diagnose
- Identify Contributing Factors
- **Identify Potential Countermeasures**

4) Project Ranking

- Calculate project costs
- Estimate benefits over design
- **Rank by benefit-cost ratio**

Questions?

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    - jbessman@kittelson.com
    - 541.312.8300

Attachment F

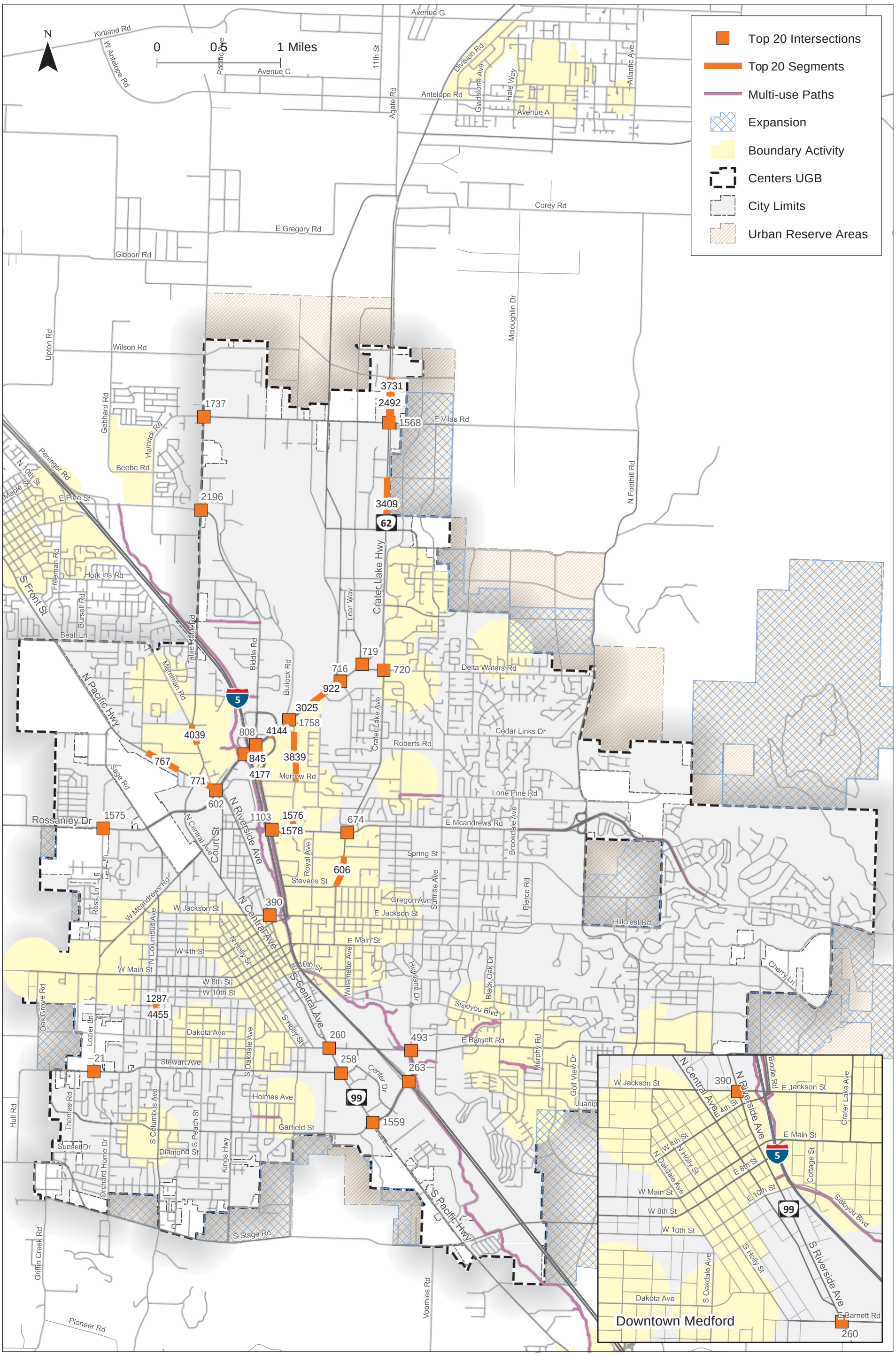
Crash Type Prioritization Documentation

Intersection Crashes			
Crash Type	**Percent of All Crashes**	**Percent of All Fatal and Severe Crashes**	**Ratio of Percent Fatal/Severe to Percent Total**
Overturned	0%	4%	825%
Pedestrian	2%	14%	694%
Fixed object	7%	16%	238%
From opposite direction – Head-On	1%	1%	198%
Bicyclist	3%	5%	188%
From opposite direction – one left turn, one straight	9%	17%	186%
Entering at angle – all others	23%	24%	105%
Parked motor vehicle	3%	2%	60%
From same direction – all others	2%	1%	58%
From same direction – one turn, one straight	5%	2%	40%
From same direction – one stopped	33%	10%	31%
From same direction – both going straight	8%	2%	26%
Animal	0%	0%	0%
Entering at angle – one vehicle stopped	1%	0%	0%
From opposite direction – all others	1%	0%	0%
From opposite direction – one stopped	1%	0%	0%
Other object	0%	0%	0%

Non-Intersection Crashes			
Crash Type	**Percent of All Crashes**	**Percent of All Fatal and Severe Crashes**	**Ratio of Percent Fatal/Severe to Percent Total**
Pedestrian	1%	6%	824%
From opposite direction – Head-On	2%	10%	618%
Overturned	1%	3%	275%
Bicyclist	2%	6%	275%
Fixed object	14%	19%	135%
From opposite direction – one left turn, one straight	5%	6%	132%
Entering at angle – all others	14%	16%	113%
From same direction – one stopped	34%	23%	66%
From same direction – both going straight	14%	6%	47%
Animal	1%	0%	0%
Entering at angle – one vehicle stopped	1%	0%	0%
From opposite direction – all others	1%	0%	0%
From opposite direction – one stopped	1%	0%	0%
From same direction – all others	1%	0%	0%
From same direction – one turn, one straight	5%	0%	0%
Other object	0%	0%	0%
Parked motor vehicle	3%	0%	0%

Attachment G

Top Twenty Locations by Reference Population



Top 20 Locations - Intersections and Segments
Equivalent Property Damage Only (EPDO) Average Crash Frequency
Medford, Oregon

Figure
G1

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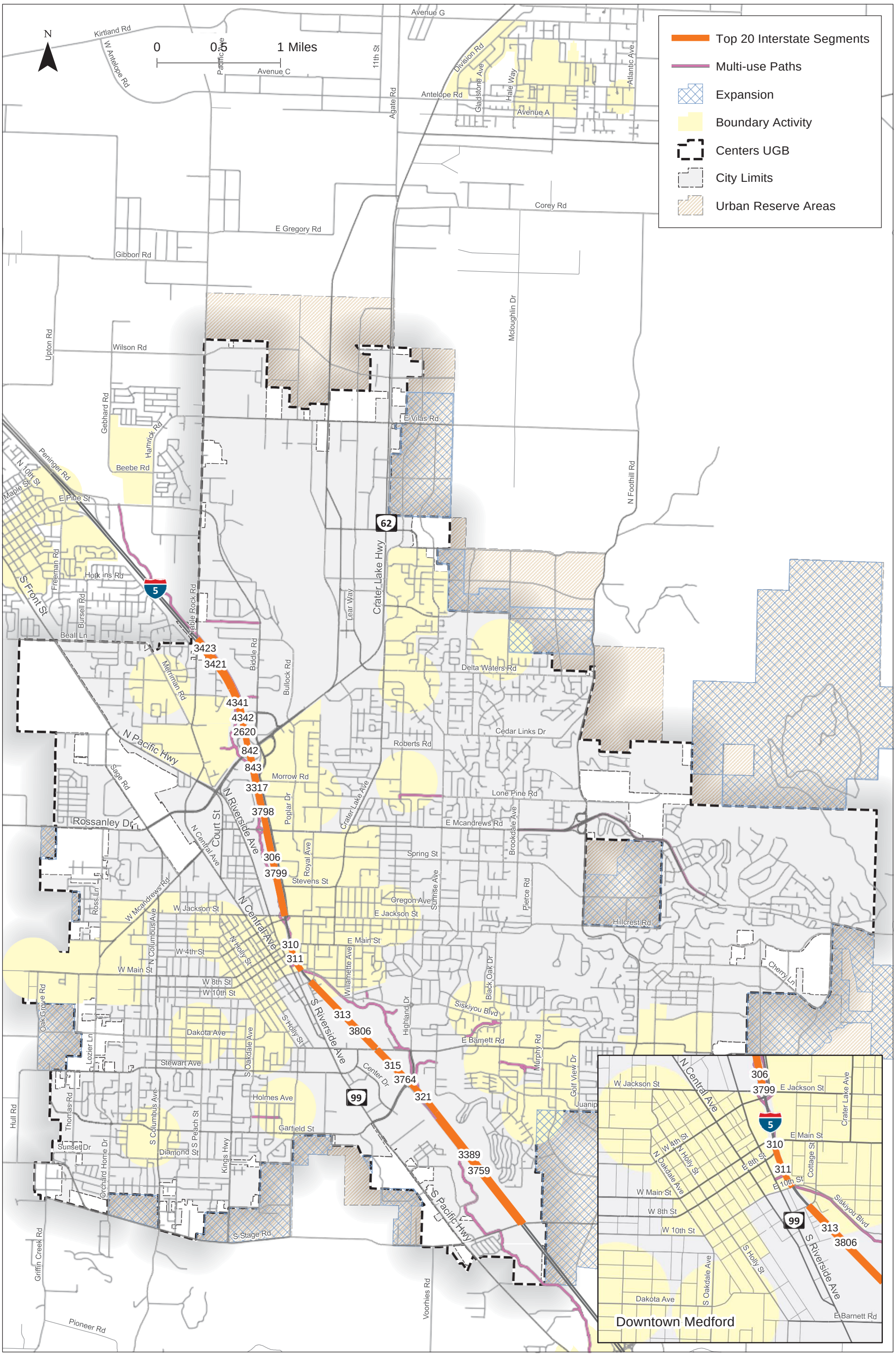
KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	EPDO Score	Intersection/Non-Interstate Segment
1	1758	Crater Lake & Bullock	771	Intersection
2	808	Crater Lake & Exit 30 NB	741	Intersection
3	719	Crater Lake & Delta Waters	651	Intersection
4	602	Pacific & Crater Lake	633	Intersection
5	263	Garfield and I-5 On/Off-Ramps	556	Intersection
6	1737	Vilas & Table Rock	486	Intersection
7	1103	McAndrews & Biddle	485	Intersection
8	260	Riverside & Barnett	463	Intersection
9	2196	Table Rock & Biddle	421	Intersection
10	716	Crater Lake & Whittle	413	Intersection
11	390	Riverside & Jackson	402	Intersection
12	1568	Crater Lake & Vilas	390	Intersection
13	493	Barnett & Highland	387	Intersection
14	1559	Garfield & Rogue Valley	376	Intersection
15	661	Crater Lake & Exit 30 SB	329	Intersection
16	21	Lozier & Stewart	317	Intersection
17	674	McAndrews & Crater Lake	317	Intersection
18	720	Delta Waters & Crater Lake	300	Intersection
19	258	Riverside and Stewart	287	Intersection
20	1575	Rossanley & Ross	276	Intersection
1	1576	Poplar Dr	280	Non-Interstate Segment
2	4144	Crater Lake Hwy	271	Non-Interstate Segment
3	845	Exit 30 NB On-Ramp	254	Non-Interstate Segment
4	4137	Crater Lake Hwy	234	Non-Interstate Segment
5	2492	Crater Lake Hwy	212	Non-Interstate Segment
6	767	N Pacific Hwy	176	Non-Interstate Segment
7	3839	Poplar Dr	169	Non-Interstate Segment
8	922	Crater Lake Hwy	166	Non-Interstate Segment
9	606	Crater Lake Av	164	Non-Interstate Segment
10	4039	Table Rock Rd	153	Non-Interstate Segment
11	4143	Crater Lake Hwy	133	Non-Interstate Segment
12	923	Crater Lake Hwy	132	Non-Interstate Segment
13	3731	Crater Lake Av	132	Non-Interstate Segment
14	771	N Pacific Hwy	131	Non-Interstate Segment
15	3409	Crater Lake Hwy	122	Non-Interstate Segment
16	1578	E McAndrews Rd	119	Non-Interstate Segment
17	3025	Crater Lake Hwy	113	Non-Interstate Segment
18	4177	Biddle Rd	113	Non-Interstate Segment
19	4455	S Columbus Av	112	Non-Interstate Segment
20	1287	S Columbus Av	111	Non-Interstate Segment



Top 20 Locations - Interstate Segments
Equivalent Property Damage Only (EPDO) Average Crash Frequency
Medford, Oregon

Figure
G2

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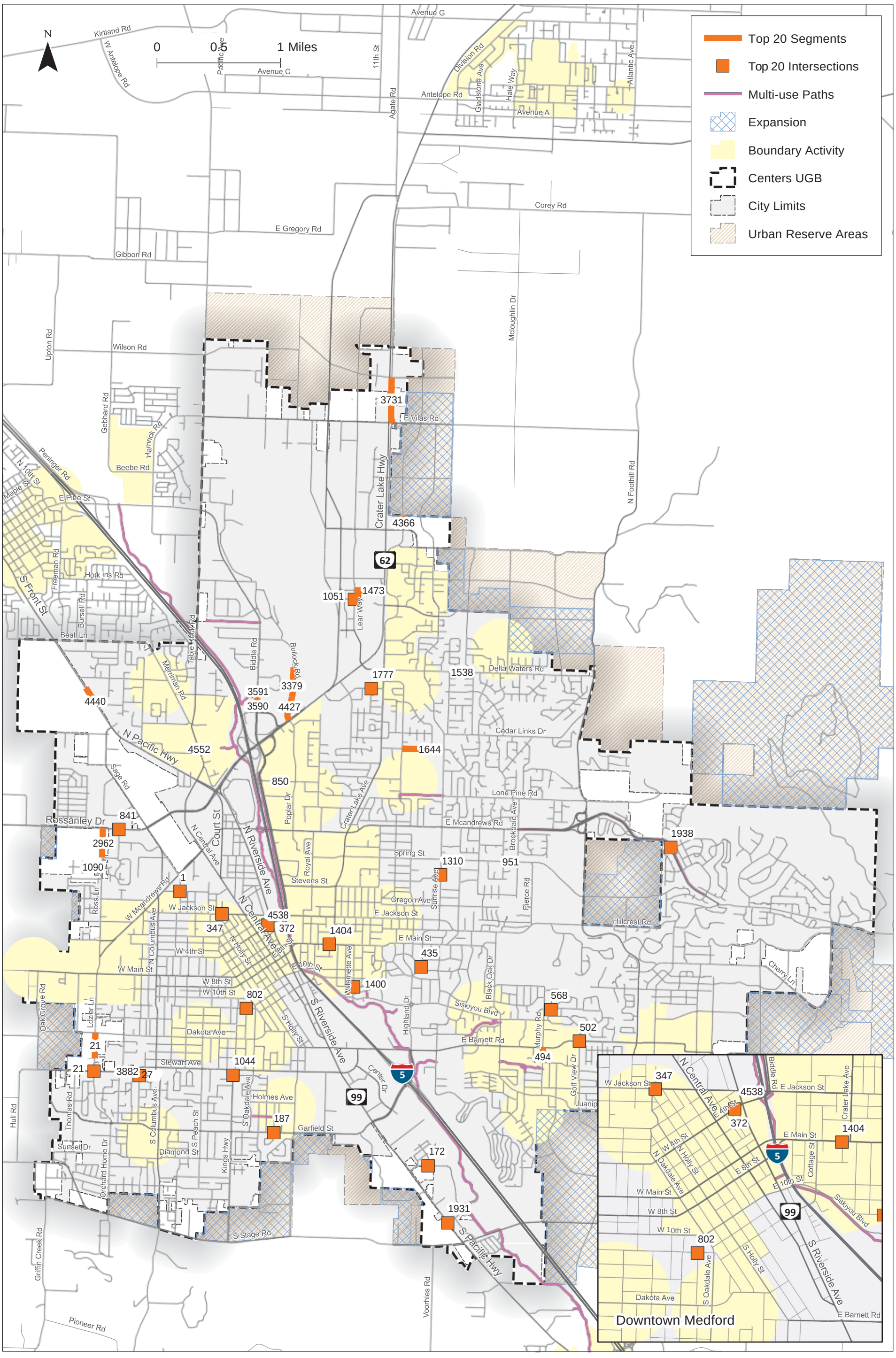
KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	EPDO Score	Intersection/Non-Interstate Segment
1	843	Interstate 5	256	Interstate Segment
2	3389	Interstate 5	150	Interstate Segment
3	315	Interstate 5	144	Interstate Segment
4	3799	Interstate 5	143	Interstate Segment
5	3806	Interstate 5	143	Interstate Segment
6	313	Interstate 5	45	Interstate Segment
7	306	Interstate 5	44	Interstate Segment
8	3764	Interstate 5	33	Interstate Segment
9	4342	Interstate 5	33	Interstate Segment
10	4341	Interstate 5	32	Interstate Segment
11	842	Interstate 5	23	Interstate Segment
12	311	Interstate 5	22	Interstate Segment
13	3423	Interstate 5	22	Interstate Segment
14	3759	Interstate 5	22	Interstate Segment
15	3798	Interstate 5	20	Interstate Segment
16	3317	Interstate 5	15	Interstate Segment
17	321	Interstate 5	11	Interstate Segment
18	310	Interstate 5	10	Interstate Segment
19	2620	Interstate 5	10	Interstate Segment
20	3421	Interstate 5	10	Interstate Segment



Top 20 Locations - Intersections and Segments
Excess Proportion of Specific Crash Type (Left-Turn) Network Screening
Medford, Oregon

Figure
G3

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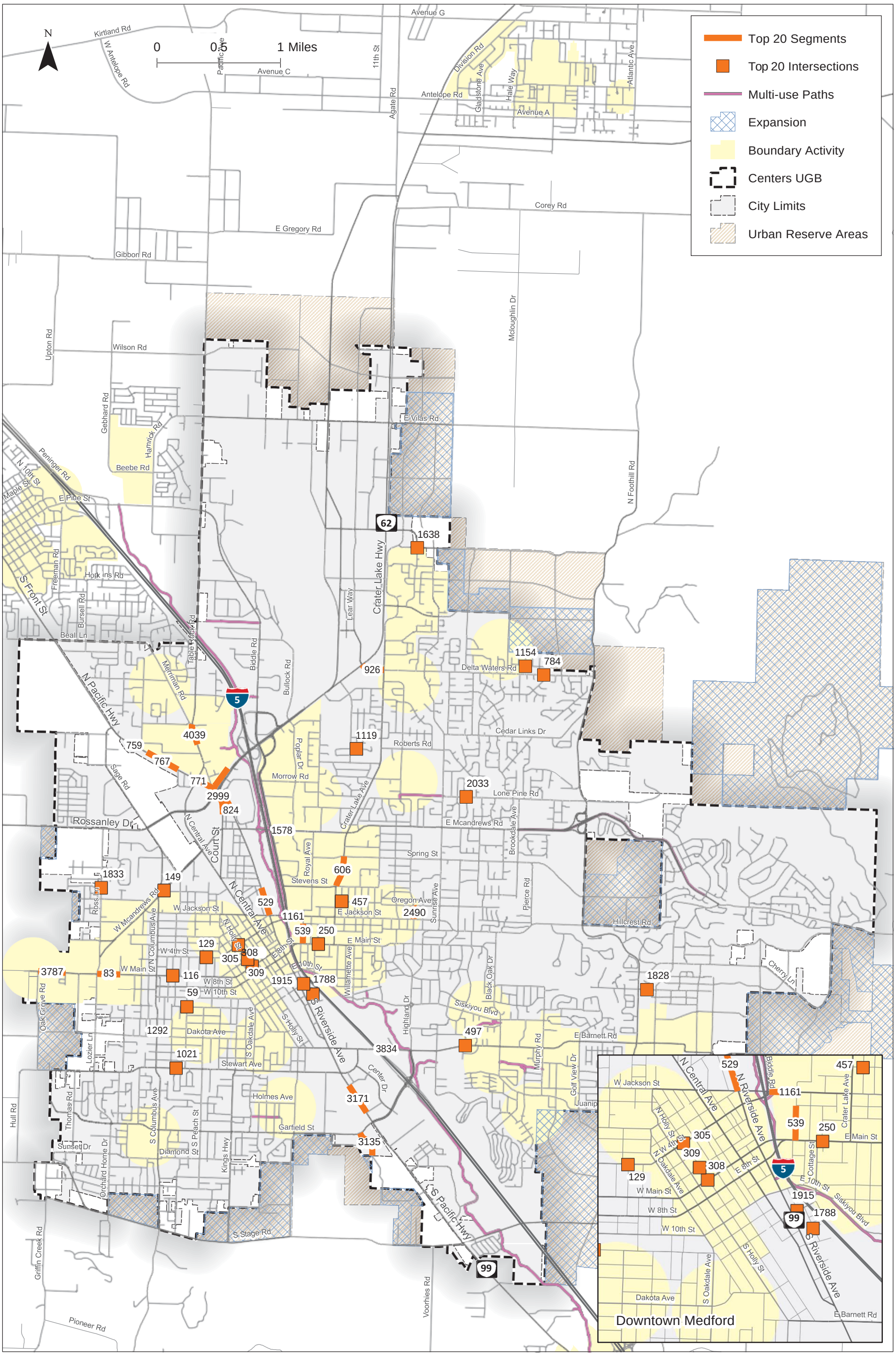
KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	Crash Type	Overall Crash Type Proportion	Segment/Intersection Crash Type Proportion	Intersection/Non-Interstate Segment
1	21	Lozier Ln	Left Turn	1%	100%	Non-Interstate Segment
2	494	Murphy Rd	Left Turn	1%	100%	Non-Interstate Segment
3	850	Morrow Rd	Left Turn	1%	100%	Non-Interstate Segment
4	951	Spring St	Left Turn	1%	100%	Non-Interstate Segment
5	1077	Rogue Valley Hwy (Rte. 99)	Left Turn	1%	100%	Non-Interstate Segment
6	1473	Cardinal Av	Left Turn	1%	100%	Non-Interstate Segment
7	1538	Delta Waters Rd	Left Turn	1%	100%	Non-Interstate Segment
8	1644	Roberts Rd	Left Turn	1%	100%	Non-Interstate Segment
9	3379	Bullock Rd	Left Turn	1%	100%	Non-Interstate Segment
10	3591	Biddle Rd	Left Turn	1%	100%	Non-Interstate Segment
11	4366	Crater Lake Av	Left Turn	1%	100%	Non-Interstate Segment
12	4427	Bullock Rd	Left Turn	1%	100%	Non-Interstate Segment
13	4440	Rogue Valley Hwy (Rte. 99)	Left Turn	1%	100%	Non-Interstate Segment
14	4538	E Jackson St	Left Turn	1%	100%	Non-Interstate Segment
15	4552	Table Rock Rd	Left Turn	1%	100%	Non-Interstate Segment
16	1090	Stearns Wy	Left Turn	1%	50%	Non-Interstate Segment
17	3590	Biddle Rd	Left Turn	1%	50%	Non-Interstate Segment
18	3731	Crater Lake Av	Left Turn	1%	50%	Non-Interstate Segment
19	3882	Stewart Av	Left Turn	1%	50%	Non-Interstate Segment
20	2962	Ross Ln N	Left Turn	1%	33%	Non-Interstate Segment
1	172	Lowry & Highgate	Left-Turn	22%	100%	Intersection
2	347	Jackson & Welch	Left-Turn	22%	100%	Intersection
3	372	4th & Apple	Left-Turn	22%	100%	Intersection
4	435	Barneburg & Woodlawn	Left-Turn	22%	100%	Intersection
5	568	Seckel & El Dorado	Left-Turn	22%	100%	Intersection
6	802	11th & Park	Left-Turn	22%	100%	Intersection
7	841	Rossanley & Stowe	Left-Turn	22%	100%	Intersection
8	1044	Oakdale & Kings	Left-Turn	22%	100%	Intersection
9	1051	Lear & Aviation	Left-Turn	22%	100%	Intersection
10	1310	Ridge & Sunrise	Left-Turn	22%	100%	Intersection
11	1400	11th & Willamette	Left-Turn	22%	100%	Intersection
12	1404	Myrtle & Main	Left-Turn	22%	100%	Intersection
13	1777	Skypark & Paloma	Left-Turn	22%	100%	Intersection
14	1931	Rogue Valley & Park	Left-Turn	22%	100%	Intersection
15	1938	Vista Pointe & McAndrews	Left-Turn	22%	100%	Intersection
16	502	Barnett & Golf View	Left-Turn	22%	78%	Intersection
17	1	Clark & Summit	Left-Turn	22%	50%	Intersection
18	21	Lozier & Stewart	Left-Turn	22%	50%	Intersection
19	27	Dixie & Hancock	Left-Turn	22%	50%	Intersection
20	187	Ivy & Garfield	Left-Turn	22%	50%	Intersection



Top 20 Locations - Intersections and Segments
Excess Proportion of Specific Crash Type (Bicycle) Network Screening
Medford, Oregon

Figure
G4

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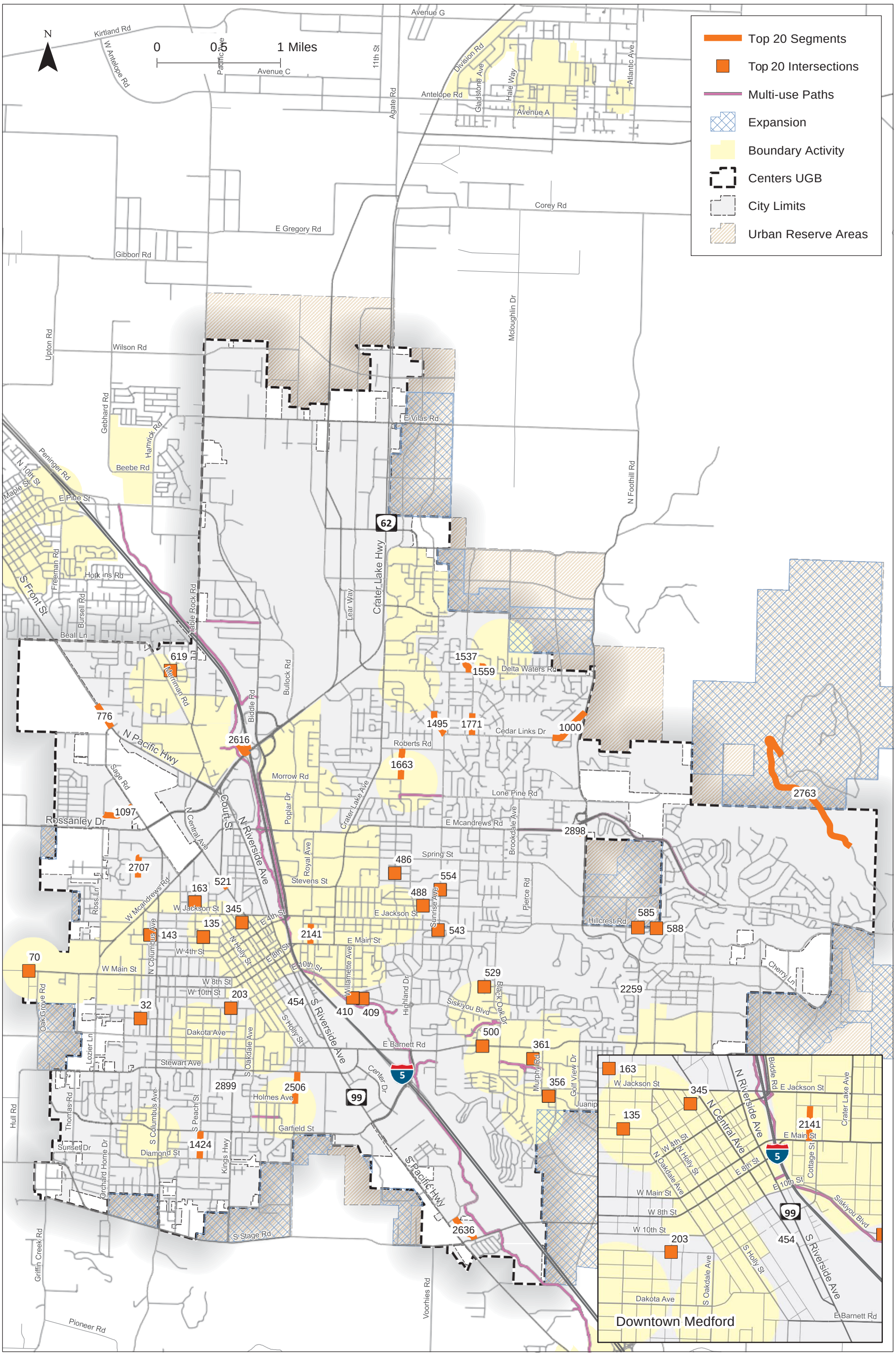
KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	Crash Type	Overall Crash Type Proportion	Segment/Intersection Crash Type Proportion	Intersection/Non-Interstate Segment
1	539	Hawthorne St	Bike	1%	100%	Non-Interstate Segment
2	759	N Pacific Hwy	Bike	1%	100%	Non-Interstate Segment
3	1292	S Columbus Av	Bike	1%	100%	Non-Interstate Segment
4	2490	N Berkeley Wy	Bike	1%	100%	Non-Interstate Segment
5	3131	Crews Rd	Bike	1%	100%	Non-Interstate Segment
6	3135	Anton Dr	Bike	1%	100%	Non-Interstate Segment
7	3171	S Pacific Hwy	Bike	1%	100%	Non-Interstate Segment
8	1161	E Jackson St	Bike	1%	50%	Non-Interstate Segment
9	3834	E Barnett Rd	Bike	1%	50%	Non-Interstate Segment
10	2999	Court St	Bike	1%	25%	Non-Interstate Segment
11	771	N Pacific Hwy	Bike	1%	20%	Non-Interstate Segment
12	824	N Riverside Av	Bike	1%	20%	Non-Interstate Segment
13	1578	E McAndrews Rd	Bike	1%	20%	Non-Interstate Segment
14	3787	W Main St	Bike	1%	20%	Non-Interstate Segment
15	529	N Riverside Av	Bike	1%	17%	Non-Interstate Segment
16	83	W Main St	Bike	1%	14%	Non-Interstate Segment
17	926	Delta Waters Rd	Bike	1%	11%	Non-Interstate Segment
18	4039	Table Rock Rd	Bike	1%	11%	Non-Interstate Segment
19	606	Crater Lake Av	Bike	1%	9%	Non-Interstate Segment
20	767	N Pacific Hwy	Bike	1%	7%	Non-Interstate Segment
1	305	Grape & 4th	Bike	6%	100%	Intersection
2	457	Saling & Mary	Bike	6%	100%	Intersection
3	784	Delta Waters & Leonard	Bike	6%	100%	Intersection
4	1021	Douglas & Stewart	Bike	6%	100%	Intersection
5	1119	Polar & Alcan	Bike	6%	100%	Intersection
6	1154	Timothy & Paul	Bike	6%	100%	Intersection
7	1638	Arrowhead & Coker Butte	Bike	6%	100%	Intersection
8	1788	Franquette & Eads	Bike	6%	100%	Intersection
9	1828	Calle Vista & Fieldbrook	Bike	6%	100%	Intersection
10	1915	12th & Bear Creek	Bike	6%	100%	Intersection
11	2033	Lone Pine & Montara	Bike	6%	100%	Intersection
12	149	McAndrews & Clark	Bike	6%	67%	Intersection
13	59	Hamilton & 11th	Bike	6%	50%	Intersection
14	116	Summit & Main	Bike	6%	50%	Intersection
15	129	Peach & 4th	Bike	6%	50%	Intersection
16	309	6th & Grape	Bike	6%	50%	Intersection
17	497	Barnett & Crestbrook	Bike	6%	50%	Intersection
18	1833	Ross & Stonefield	Bike	6%	50%	Intersection
19	250	Corning & Main	Bike	6%	33%	Intersection
20	308	Main & Grape	Bike	6%	33%	Intersection



Top 20 Locations - Intersections and Segments
Excess Proportion of Specific Crash Type (Fixed-Object) Network Screening
Medford, Oregon

Figure
G5

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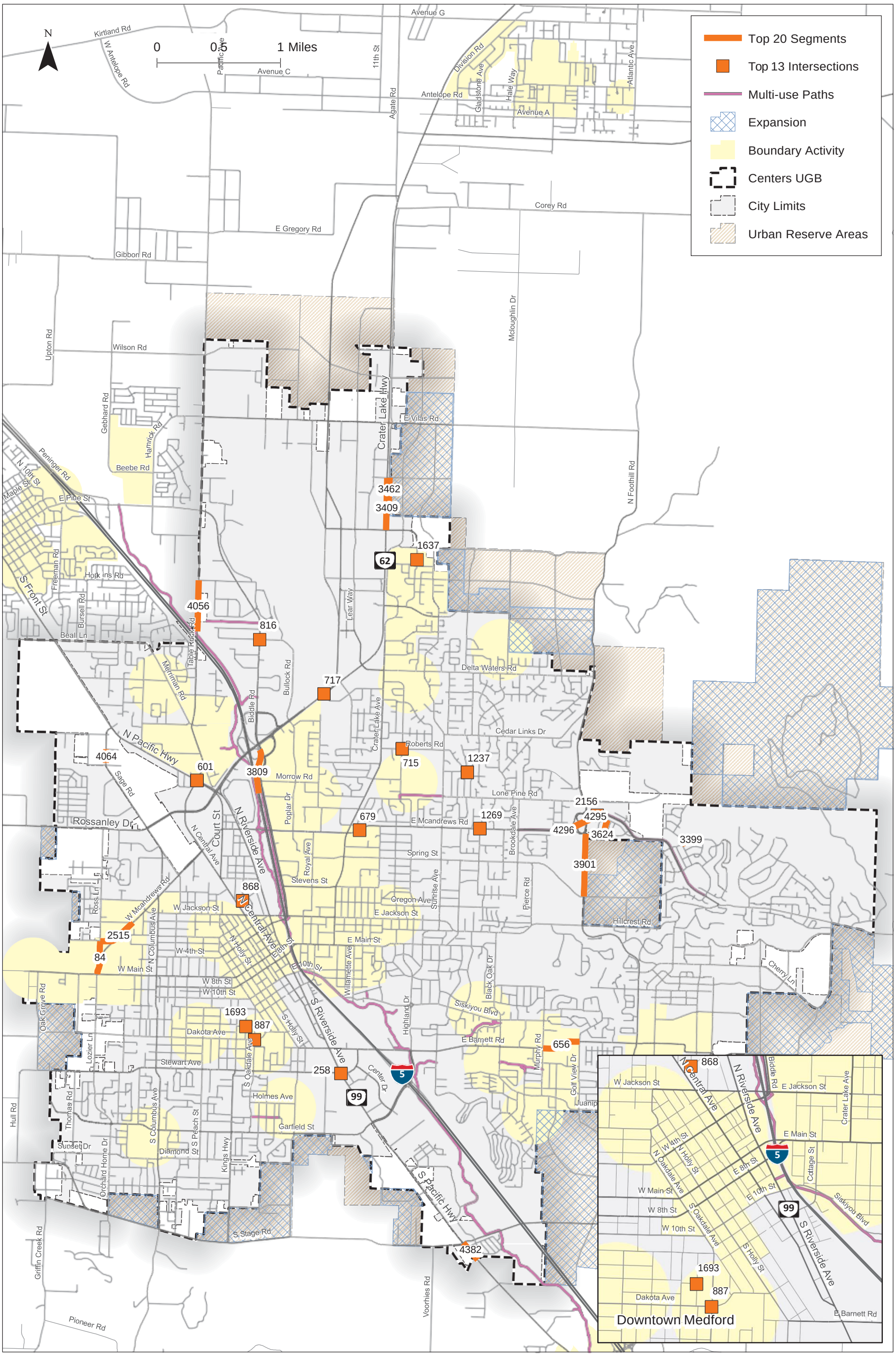
KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	Crash Type	Overall Crash Type Proportion	Segment/Intersection Crash Type Proportion	Intersection/Non-Interstate Segment
1	2898	N Foothill On Ramp	Fixed Object	3%	100%	Non-Interstate Segment
2	2616	Exit 30 SB On-Ramp	Fixed Object	3%	100%	Non-Interstate Segment
3	776	Rogue Valley Hwy (Rte. 99)	Fixed Object	3%	100%	Non-Interstate Segment
4	1097	Brian Wy	Fixed Object	3%	100%	Non-Interstate Segment
5	521	N Central Av	Fixed Object	3%	100%	Non-Interstate Segment
6	1000	Cedar Links Dr	Fixed Object	3%	100%	Non-Interstate Segment
7	454	E 13th St	Fixed Object	3%	100%	Non-Interstate Segment
8	1424	S Peach St	Fixed Object	3%	100%	Non-Interstate Segment
9	1495	Springbrook Rd	Fixed Object	3%	100%	Non-Interstate Segment
10	1537	Cheltenham Wy	Fixed Object	3%	100%	Non-Interstate Segment
11	1559	Sheraton Ct	Fixed Object	3%	100%	Non-Interstate Segment
12	1663	N Keene Way Dr	Fixed Object	3%	100%	Non-Interstate Segment
13	1771	Hawaiian Av	Fixed Object	3%	100%	Non-Interstate Segment
14	2141	Genessee St	Fixed Object	3%	100%	Non-Interstate Segment
15	2259	Calle Vista Dr	Fixed Object	3%	100%	Non-Interstate Segment
16	2506	S Holly St	Fixed Object	3%	100%	Non-Interstate Segment
17	2636	Samike Dr	Fixed Object	3%	100%	Non-Interstate Segment
18	2707	Bens Ln	Fixed Object	3%	100%	Non-Interstate Segment
19	2763	Roxy Ann Rd	Fixed Object	3%	100%	Non-Interstate Segment
20	2899	Summer Glen Dr	Fixed Object	3%	100%	Non-Interstate Segment
1	32	Prune & Jeanette	Fixed-Object	16%	100%	Intersection
2	70	Renault & Main	Fixed-Object	16%	100%	Intersection
3	135	Peach & 2nd	Fixed-Object	16%	100%	Intersection
4	143	2nd & Kenwood	Fixed-Object	16%	100%	Intersection
5	163	Oak & Mary	Fixed-Object	16%	100%	Intersection
6	203	Laurel & 11th	Fixed-Object	16%	100%	Intersection
7	345	Front & 2nd	Fixed-Object	16%	100%	Intersection
8	356	Morrison & Juanipero	Fixed-Object	16%	100%	Intersection
9	361	Creekside & State	Fixed-Object	16%	100%	Intersection
10	409	Siskiyou & Eureka	Fixed-Object	16%	100%	Intersection
11	410	Siskiyou & Willamette	Fixed-Object	16%	100%	Intersection
12	486	Keene Way & Hillcourt	Fixed-Object	16%	100%	Intersection
13	488	Oregon & Barneburg	Fixed-Object	16%	100%	Intersection
14	500	Barnett & Kevin	Fixed-Object	16%	100%	Intersection
15	529	Country Club & White Oak	Fixed-Object	16%	100%	Intersection
16	543	Hillcrest & Sunrise	Fixed-Object	16%	100%	Intersection
17	554	Sunrise & Harrison	Fixed-Object	16%	100%	Intersection
18	585	Purdue & Hillcrest	Fixed-Object	16%	100%	Intersection
19	588	Bel Air & Hillcrest	Fixed-Object	16%	100%	Intersection
20	619	Morningside & Clearview	Fixed-Object	16%	100%	Intersection



Top 20 Locations - Intersections and Segments
Excess Proportion of Specific Crash Type (Head-On) Network Screening
Medford, Oregon

Figure
G6

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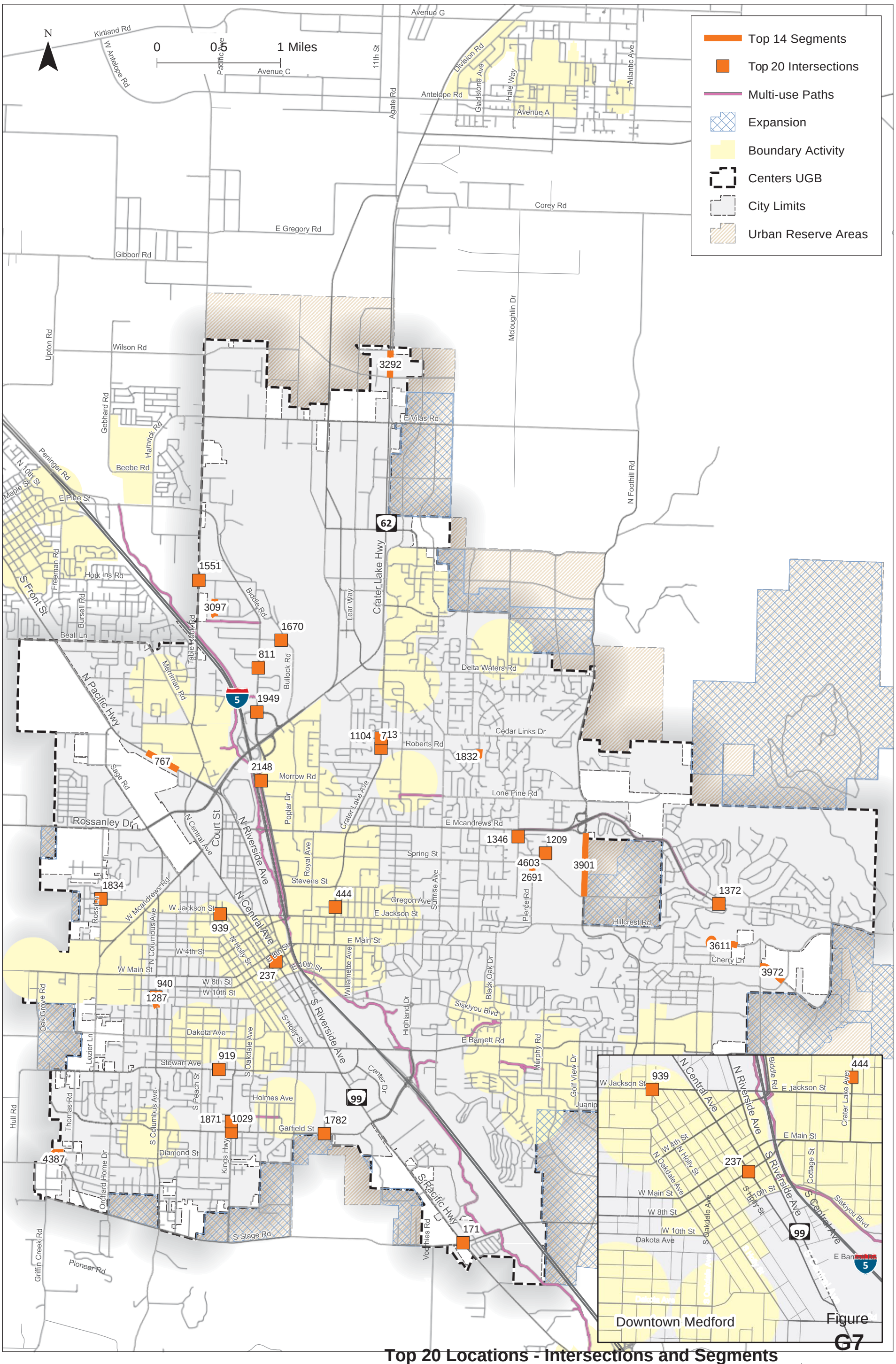
Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	Crash Type	Overall Crash Type Proportion	Segment/Intersection Crash Type Proportion	Intersection/Non-Interstate Segment
1	3399	Vista Pointe Dr	Head-On	1%	100%	Non-Interstate Segment
2	3462	Crater Lake Av	Head-On	1%	100%	Non-Interstate Segment
3	3624	E La Strada Cir	Head-On	1%	100%	Non-Interstate Segment
4	3904	N Foothill Rd	Head-On	1%	100%	Non-Interstate Segment
5	3905	N Foothill Rd	Head-On	1%	100%	Non-Interstate Segment
6	4064	Sage Rd	Head-On	1%	100%	Non-Interstate Segment
7	4294	E McAndrews Rd	Head-On	1%	100%	Non-Interstate Segment
8	4302	N Foothill Rd	Head-On	1%	100%	Non-Interstate Segment
9	4303	N Foothill Rd	Head-On	1%	100%	Non-Interstate Segment
10	4293	E McAndrews Rd	Head-On	1%	50%	Non-Interstate Segment
11	4295	E McAndrews Rd	Head-On	1%	50%	Non-Interstate Segment
12	4296	E McAndrews Rd	Head-On	1%	50%	Non-Interstate Segment
13	4382	Rogue Valley Hwy (Rte. 99)	Head-On	1%	50%	Non-Interstate Segment
14	2515	W McAndrews Rd	Head-On	1%	25%	Non-Interstate Segment
15	3809	Exit 30 NB Off Ramp	Head-On	1%	25%	Non-Interstate Segment
16	3409	Crater Lake Hwy	Head-On	1%	20%	Non-Interstate Segment
17	84	Ross Ln N	Head-On	1%	17%	Non-Interstate Segment
18	3901	N Foothill Rd	Head-On	1%	17%	Non-Interstate Segment
19	4056	Table Rock Rd	Head-On	1%	17%	Non-Interstate Segment
20	656	E Barnett Rd	Head-On	1%	13%	Non-Interstate Segment
1	868	Maple & Niantic	Head-On	1%	100%	Intersection
2	1237	Lawnview & Roberts	Head-On	1%	100%	Intersection
3	1269	McAndrews & Modoc	Head-On	1%	100%	Intersection
4	1637	Arrowhead & Robin	Head-On	1%	100%	Intersection
5	1693	13th & Park	Head-On	1%	100%	Intersection
6	2156	McAndrews & Camina	Head-On	1%	33%	Intersection
7	679	McAndrews & Oleander	Head-On	1%	17%	Intersection
8	887	Monroe & Oakdale	Head-On	1%	14%	Intersection
9	715	Roberts & Keene Way	Head-On	1%	10%	Intersection
10	816	Biddle & Lawnsdale	Head-On	1%	8%	Intersection
11	717	Crater Lake & Skypark	Head-On	1%	5%	Intersection
12	258	Riverside & Stewart	Head-On	1%	3%	Intersection
13	601	Pacific & Table Rock	Head-On	1%	2%	Intersection



Top 20 Locations - Intersections and Segments
Excess Proportion of Specific Crash Type (Overturning) Network Screening
Medford, Oregon

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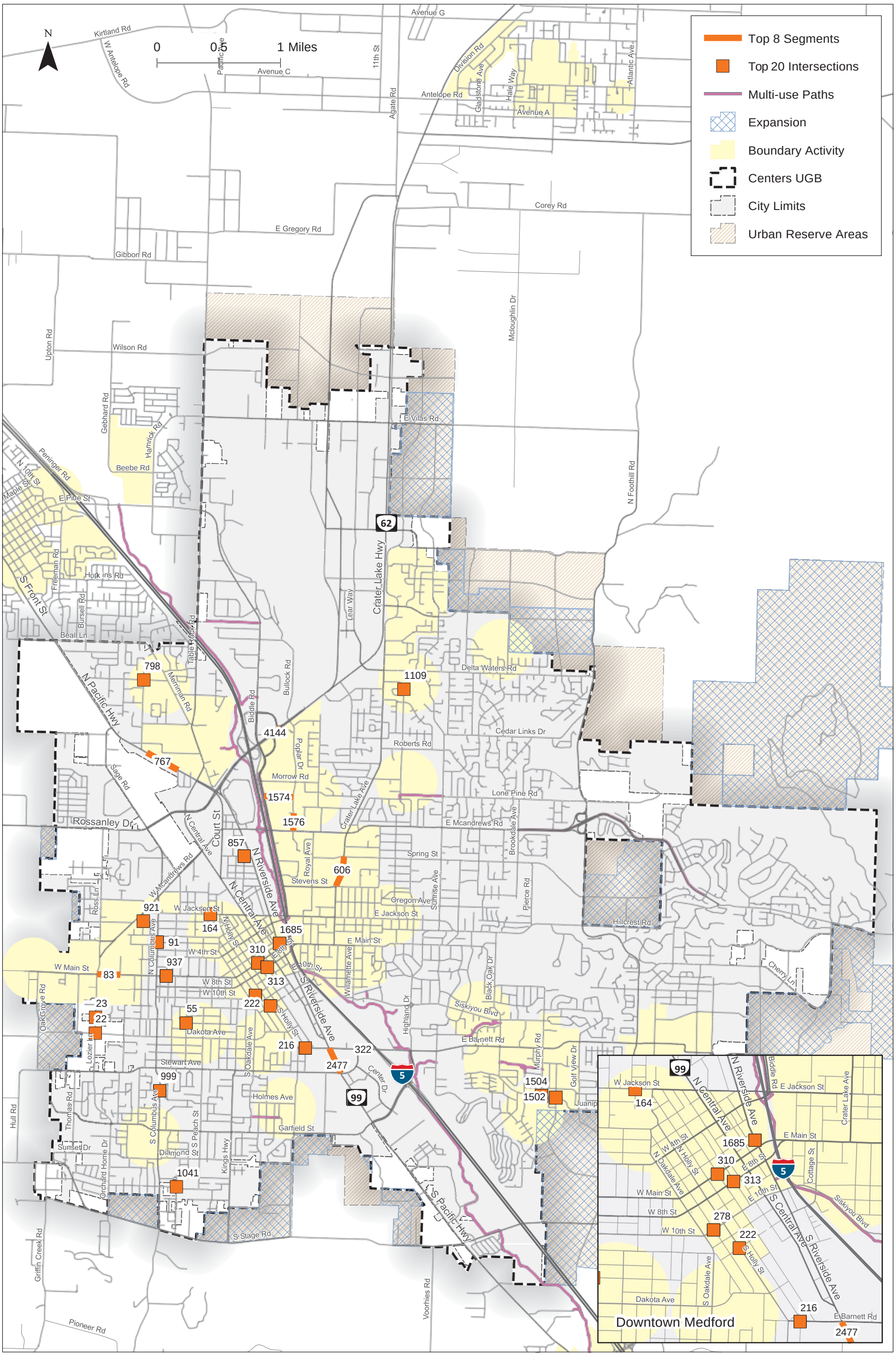
Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	Crash Type	Overall Crash Type Proportion	Segment/Intersection Crash Type Proportion	Intersection/Non-Interstate Segment
1	1832	Brookside Dr	Overturn	1%	100%	Non-Interstate Segment
2	1833	Stonebrook Dr	Overturn	1%	100%	Non-Interstate Segment
3	3292	Crater Lake Hwy	Overturn	1%	100%	Non-Interstate Segment
4	3611	Aerial Heights Dr	Overturn	1%	100%	Non-Interstate Segment
5	3745	Sunset Dr	Overturn	1%	100%	Non-Interstate Segment
6	3097	Avion Dr	Overturn	1%	50%	Non-Interstate Segment
7	3972	Cherry Ln	Overturn	1%	50%	Non-Interstate Segment
8	4387	Sunset Dr	Overturn	1%	50%	Non-Interstate Segment
9	4456	S Columbus Av	Overturn	1%	50%	Non-Interstate Segment
10	1287	S Columbus Av	Overturn	1%	33%	Non-Interstate Segment
11	3901	N Foothill Rd	Overturn	1%	33%	Non-Interstate Segment
12	4603	Spring St	Overturn	1%	17%	Non-Interstate Segment
13	2691	Pierce Rd	Overturn	1%	13%	Non-Interstate Segment
14	767	N Pacific Hwy	Overturn	1%	7%	Non-Interstate Segment
1	1209	Meadowcreek & Castlewood	Overturn	1%	100%	Intersection
2	1372	McAndrews & Hillcrest	Overturn	1%	100%	Intersection
3	1346	Brookdale & Pineview	Overturn	1%	50%	Intersection
4	1782	Myers & Garfield	Overturn	1%	50%	Intersection
5	1871	Marshall & Kings	Overturn	1%	50%	Intersection
6	1029	Garfield & Kings	Overturn	1%	25%	Intersection
7	939	Holly & Jackson	Overturn	1%	20%	Intersection
8	919	Newtown & Stewart	Overturn	1%	17%	Intersection
9	1834	Ross & Maple Park	Overturn	1%	17%	Intersection
10	1104	Crater Lake & Grandview	Overturn	1%	14%	Intersection
11	1670	Lawnsdale & Bullock	Overturn	1%	14%	Intersection
12	811	Biddle & Chevy	Overturn	1%	13%	Intersection
13	171	South & Stage	Overturn	1%	11%	Intersection
14	444	Bennett & Crater Lake	Overturn	1%	10%	Intersection
15	1949	Hilton & Biddle	Overturn	1%	10%	Intersection
16	1551	Airport & Table Rock	Overturn	1%	9%	Intersection
17	940	Columbus & 10th	Overturn	1%	8%	Intersection
18	2148	Biddle & Morrow	Overturn	1%	8%	Intersection
19	713	Crater Lake & Roberts	Overturn	1%	6%	Intersection
20	237	8th & Central	Overturn	1%	5%	Intersection



Top 20 Locations - Intersections and Segments
Excess Proportion of Specific Crash Type (Pedestrian) Network Screening
Medford, Oregon

Figure
G8

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KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 StatePlane Oregon South FIPS 3602 Feet

Rank	Facility ID	Facility Location	Crash Type	Overall Crash Type Proportion	Segment/Intersection Crash Type Proportion	Intersection/Non-Interstate Segment
1	322	E Barnett Rd	Pedestrian	1%	100%	Non-Interstate Segment
2	1574	Progress Dr	Pedestrian	1%	50%	Non-Interstate Segment
3	83	W Main St	Pedestrian	1%	14%	Non-Interstate Segment
4	606	Crater Lake Av	Pedestrian	1%	9%	Non-Interstate Segment
5	767	N Pacific Hwy	Pedestrian	1%	7%	Non-Interstate Segment
6	2477	S Riverside Av	Pedestrian	1%	6%	Non-Interstate Segment
7	1576	Poplar Dr	Pedestrian	1%	4%	Non-Interstate Segment
8	4144	Crater Lake Hwy	Pedestrian	1%	3%	Non-Interstate Segment
1	23	Lozier & Prune	Pedestrian	5%	100%	Intersection
2	164	Woodstock & Jackson	Pedestrian	5%	100%	Intersection
3	222	Holly & 12th	Pedestrian	5%	100%	Intersection
4	857	Manzanita & Niantic	Pedestrian	5%	100%	Intersection
5	937	Myers & Main	Pedestrian	5%	100%	Intersection
6	1041	Archer & Happy Valley	Pedestrian	5%	100%	Intersection
7	1109	Keene Way & Bradbury	Pedestrian	5%	100%	Intersection
8	1502	Olympic & Juanipero	Pedestrian	5%	100%	Intersection
9	1685	Middleford & Riverside	Pedestrian	5%	100%	Intersection
10	1504	Juanipero & Murphy	Pedestrian	5%	67%	Intersection
11	91	Columbus & Palm	Pedestrian	5%	50%	Intersection
12	216	Barnett & Grape	Pedestrian	5%	50%	Intersection
13	313	8th & 8th	Pedestrian	5%	50%	Intersection
14	921	Humphrey & Western	Pedestrian	5%	50%	Intersection
15	999	Arlington & Columbus	Pedestrian	5%	50%	Intersection
16	798	Howard & Mace	Pedestrian	5%	40%	Intersection
17	22	Lozier & Sunset	Pedestrian	5%	33%	Intersection
18	55	Hamilton & 13th	Pedestrian	5%	33%	Intersection
19	278	10th & Ivy	Pedestrian	5%	33%	Intersection
20	310	Main & Fir	Pedestrian	5%	33%	Intersection