



DRAFT TECHNICAL MEMORANDUM #6

Date: February 2, 2016 Project #: 18018.0

To: Mike Kuntz, Jackson County, Jackson County Roads

CC: Allie Coates, Oregon Department of Transportation, Region 3

From: Matthew Bell and Susan Wright, P.E., Kittelison & Associates, Inc.

Project: Jackson County Transportation System Plan (TSP) Update

Subject: Final Technical Memorandum #6: Preferred Alternative

This memorandum presents the preferred transportation system alternatives for addressing the deficiencies identified in *Technical Memorandum #3: Existing Conditions* and *Technical Memorandum #4: Future Conditions*. This memorandum also presents the preferred transportation system alternatives developed as part of several previous planning efforts conducted throughout the County, including the Jackson County Transportation System Plan (TSP), the Rogue Valley Metropolitan Planning Organization (RVMPO) Regional Transportation Plan (RTP), several Interchange Area Management Plans (IAMP) both adopted and in-process, and several state and local corridor plans. These alternatives are intended to serve as the baseline for developing a prioritized list of transportation system improvement projects for the Jackson County TSP update. This memorandum is divided into four sections, consistent with the four modal elements of the TSP update. The sections include:

- **Roadway Element** – This element presents the County’s updated functional classification plan, the updated Roadway Design Standards, and the preferred alternatives for Roadway, Freight, Bridge, Intersection, Interchange, and Safety Improvements.
- **Bicycle and Pedestrian Element** – This element presents the County’s proposed Bicycle Route Designation Map and the preferred alternatives for Bicycle and Pedestrian Improvements in Rural and Urban Areas.
- **Public Transportation Element** – This element presents the preferred alternatives for Public Transportation Improvements.
- **Air, Water, Rail, and Pipeline Element** - This element presents the preferred alternatives Air Water, Rail, and Pipeline Improvements.

The project tables included in each section provide a basic description of the preferred alternatives. They also identify the source of the preferred alternatives (TSP Update, 2003 TSP, RTP, etc.) and if they are already included in the current Statewide Transportation Improvement Plan (2015-2018 STIP),

Metropolitan Transportation Improvement Program (2015-2018 MTIP), or Jackson County Capital Improvement Plan (2015 CIP).

ROADWAY ELEMENT

This section presents the County's updated functional classification plan and roadway design standards as well as the preferred alternatives for Roadway, Freight, Bridge, Intersection, Interchange, and Safety Improvements.

The roadway element of the TSP update will include a detailed description of the County's updated functional classification plan and roadway design standards as presented within this memorandum. It will also include a detailed description of the County's Access Management and Traffic Operations Standards, which will be further evaluated in a subsequent technical memorandum. Finally, it will also include a prioritized list of transportation system improvement projects based on the alternatives presented in this section.

Functional Classification Plan

The proposed functional classification plan is shown in Figure 1. This plan includes several updates to the existing plan that reflect:

- Changes in the urban growth boundaries of the incorporated cities;
- Changes in traffic volumes and travel patterns along County roadways;
- Recommendations in several state, regional, and local planning documents; and,
- Improvements to the existing functional classification plan.

Most of the updates increase the classification of the roadways from local streets to minor or major collectors; however, a few of the updates decrease the classification of the roadways from major to minor collectors or from major to minor arterials. Other updates include changes in the urban versus rural designation of the roadways. These updates impact the design of the roadway, including the types of bike and pedestrian facilities. Figure 1 highlights the changes in the functional classification plan. A more detailed description of these changes is provided in *Technical Memorandum #5: Transportation Alternatives*.

Roadway Design Standards

The County's roadway design standards are summarized in Tables 1 and 2. Typical cross sections are included in Attachments A and B. The cross sections include additional information on right-of-way width, number of travel lanes, bicycle and pedestrian facilities, and other amenities such as landscape strips and on-street parking. These cross sections are intended for planning and designing new roadways, as well as for improving existing roadways where it is physically and economically feasible.

Table 1: Rural County Roadway Standards and Specifications

	Local Road A	Local Road B	Local Road C	Minor Collector	Major Collector	Arterial
Typical ADT (Average Daily Traffic)	0-120	120-600	600-1,500	1,250-5,000	>4,500	>4,500
Design Speed						
Minimum	25	30	30	45	50	50
Recommended	30	35	35	45	50	50
Number of Travel Lanes	2	2	2	2	2	2
Lane Width	10'	10'	11'	11'	11'	11'
Shoulder Width	2'	3'	4'	5'	6'	6'
Shoulder Surface	Gravel	Gravel	AC	AC	AC	AC
Pavement Width ^②	24'	26'	32'	32'	34'	34'
Recommended Minimum Access Spacing ^③	75'	100'	125'	150'	300'	300'
Surface Type	Oil Mat	Oil Mat	AC	AC	AC	AC
Minimum ROW Width	50'	50'	50'	60'	60'	60'
Degree of Curve						
Maximum ^①	30° 30'	21°	21°	8° 30'	7°	7°
Recommended	21°	15°	15°	8° 30'	7°	7°
Maximum Grade	15%	12%	12%	9%	9%	9%
Minimum Vertical Distance	16'	16'	16'	16'	16'	16'
Load Design (Structures)	HL-93	HL-93	HL-93	HL-93	HL-93	HL-93
Applicable Specifications	④	④	④	④	④	④

General Notes:

- Whenever any street or road is created or upgraded within the UGB or ½ mile of any incorporated city, the policy outlined in the Goal and Policy section of this TSP with respect to the Urban Growth Management Agreement will apply (see Chapter 3, Policy 3.2.1-R).
- The urban roadway standard for the corresponding functional classification may be built if the County Engineer determines that the urban standard is more appropriate for the road section.

AC = Asphaltic Concrete Pavement: The asphaltic concrete mixture in the pavement may be either hot-mix or warm-mix and shall conform to Jackson County standards.

HS = X.

Notes:

- ① Design for Recommended Standard unless approved by the County Engineer.
- ② Pavement width depends on design widths for travel lanes and shoulders.
- ③ Lower spacing may be allowed when supported by a traffic study and approved by the County Engineer, or when no other public road access is possible.
- ④ Oregon Department of Transportation "Standard Specifications for Highway Construction" and the "Special Provisions" applicable to the project.

Table 2: Urban County Roadway Standards and Specifications

	Local Street	Industrial Local	Industrial Collector	Minor Collector	Major Collector	Minor Arterial	Major Arterial
Typical ADT (Average Daily Traffic)	0-2,000	0-3,000	2,750-7,000	1,500-4,000	3,500-12,000	5,000-15,000	>12,000
Design Speed							
Minimum	25	25	30	25	45	45	50
Recommended	25	25	35	35	45	45	50
Number of Travel Lanes	2	2	3	2	3	3	5
Lane Width	10'	11'	12'	11'	11'	11'	11'
Turn turn/Median Width	No	No	12'	No	12'	12'	12'
Bike Lanes ⑥	No	No	No	5'	6'	6'	6'
On-Street Parking, Width	Both Sides, 7'	No	No	One Side, 8'	No	No	No
Pavement Width ②	34'	34'	48'	32'	46'	46'	60'
Sidewalk Width	6'	6' Shoulder	6' Shoulder	5-7' ①	5-7' ①	5-7' ①	5-7'
Landscape Strip Width ③	7'	None	None	7'	7'	7'	7'
Right-of-Way Width	60'	74'	74'	62-70'	68-78'	70-80'	92-102'
Recommended Minimum Access Spacing ④	75'	250'	200'	150'	250'	250'	300'
Surface Type	AC	AC	AC	AC	AC	AC	AC
Degree of Curve							
Maximum ①	30° 30'	21°	21°	8° 30'	8° 30'	8° 30'	7°
Recommended	21°	15°	15°	8° 30'	8° 30'	8° 30'	7°
Minimum Stopping Sight Distance	200'	240'	240'	315'	315'	315'	350'
Maximum Grade	15%	12%	12%	9%	9%	9%	9%
Minimum Vertical Distance	16'	16'	16'	16'	16'	16'	16'
Load Design (Structures)	HL-93	HL-93	HL-93	HL-93	HL-93	HL-93	HL-93
Applicable Specifications	⑤	⑤	⑤	⑤	⑤	⑤	⑤

General Notes:

1. Whenever any street or road is created or upgraded within the UGB or ½ mile of any incorporated city, the policy outlined in the Goal and Policy section of this TSP with respect to the Urban Growth Management Agreement will apply (see Chapter 3, Policy 3.2.1-R).

AC = Asphaltic Concrete Pavement: The asphaltic concrete mixture in the pavement may be either hot-mix or warm-mix and shall conform to Jackson County standards.

HS = X.

Notes:

- ① Design for Recommended Standard unless approved by the County Engineer.
- ② Pavement width depends on design widths for travel lanes as well as bike lanes and on-street parking where permitted.
- ③ Landscape strips are allowed in areas where there is an agreement that the adjacent property owner will maintain the landscape.
- ④ Lower spacing may be allowed when supported by a traffic study and approved by the County Engineer, or when no other public road access is possible.
- ⑤ Oregon Department of Transportation “Standard Specifications for Highway Construction” and the “Special Provisions” applicable to the project.
- ⑥ Bike lane width should be measured from the edge of the concrete pan per AASHTO Guide for the Development of Bicycle Facilities.

Roadway Improvements

The preferred alternatives for roadway improvements are summarized in Table 3 and shown in Figure 2. The alternatives developed as part of the TSP update were combined with other alternatives identified in the County’s current TSP, the RVMPO RTP, and several corridor studies. As shown in Table 3, several of the alternatives are currently identified projects in the STIP, the MTIP, or the County’s CIP.

The alternatives for roadway improvement include:

- Upgrading roadways in rural areas to provide two travel lanes and shoulders
- Widening roadways in urban areas to provide three to five travel lanes, bike lanes, and sidewalks
- Constructing new roadways in the rural and urban areas
- Enhancing existing roadways with streetscape projects and/or access management; and
- Developing design plans for new roadways and refinement plans for existing roadways throughout the County.

Table 3 summarizes the roadway improvements proposed to be included in the TSP update.

Table 3: Roadway Improvements

Map ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
R1	E Vilas Road from McLoughlin Drive to Foothill Road	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 2	CIP Priority C
R2	E Vilas Road from OR 62 to McLouglin Drive	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 2	CIP Priority B
R3	Hull Road from S Stage Road to Stewart Avenue	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 2	CIP Priority B
R4	Antelope Road from Kershaw Road to Bigham Brown Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority C
R5	Applegate Road from OR 238 to Carberry Creek Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority C
R6	Beall Lane from Hanley Road to Old Stage Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority C
R7	Bellinger Lane from Hull Road to S Stage Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority C
R8	Bigham Brown Road from Antelope Road to Alta Vista Road	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 1	CIP Priority C
R9	Carpenter Hill Road from Coleman Creek to Voorhies Road	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 1	CIP Priority C
R10	Coleman Creek Road from Houston Road to Carpenter Hill Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority C
R11	Dead Indian Memorial Road from MPO limits to County line	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority D
R12	E Evans Creek Road from Minthorne Road to Queens Branch Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority C

R13	E Evans Creek Road from Rogue River High School to Minthorne Road	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 2	CIP Priority C
R14	Foothill Road from Coker Butte Road to Corey Road	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 1	CIP Priority A
R15	Foothill Road from Delta Waters to Coker Butte Road	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 1	CIP Priority A
R16	Hanley Road from Beall Lane to Rossanley Drive (OR 238)	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority D
R17	Oak Street from Eagle Mill Road to Nevada Street	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 2	CIP Priority C
R18	Old Stage Road from I-5 to roadway terminus	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority D
R19	OR 238 from Ross Lane North to Bybee Corner	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 1	
R20	S Valley View Road from I-5 to West Valley View Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority D
R21	Table Rock Road from Kirtland Road to Wheeler Road	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority C
R22	Table Rock Road from Wheeler Road to OR 234	Upgrade	Improve to 2-lane rural major collector standard		CIP Priority D
R23	Voorhies Road from Carpenter Hill Road to S Stage Road	Upgrade	Improve to 2-lane rural major collector standard	2003 TSP Tier 1	CIP Priority C
R24	Old Stage Road from Jacksonville city limits Winterbrook Lane	Upgrade	Improve to 2-lane rural major collector with 4-foot shoulders consistent with Old Stage Road Plan		
R25	Old Stage Road from MPO limit to I-5	Upgrade	Improve to 2-lane rural major collector with 4-foot shoulders consistent with Old Stage Road Plan	2003 TSP Tier 1	CIP Priority B
R26	Old Stage Road from Winterbrook Lane to MPO limit	Upgrade	Improve to 2-lane rural major collector with 4-foot shoulders consistent with Old Stage Road Plan	2003 TSP Tier 1	CIP Priority B
R27	Kings Highway from S Stage Road to Medford UGB	Upgrade	Improve to 2-lane rural minor arterial standard	2003 TSP Tier 1	CIP Priority C
R28	N Phoenix Road from Phoenix City limits to Medford City Limits	Upgrade	Improve to 2-lane rural minor arterial standard		CIP Priority C
R29	Butte Falls Road from Butte Falls Highway to City limits	Upgrade	Improve to 2-lane rural minor collector standard		CIP Priority D
R30	Eagle Mill Road from S Valley View Road to Oak Street	Upgrade	Improve to 2-lane rural minor collector standard	2003 TSP Tier 2	CIP Priority C
R31	East Dutton Road from OR 62 to Atlantic Avenue	Upgrade	Improve to 2-lane rural minor collector standard		CIP Priority D
R32	Fern Valley Road from Phoenix City Limits to Payne Road	Upgrade	Improve to 2-lane rural minor collector standard		CIP Priority D
R33	Modoc Road from Table Rock Road to Antioch Road	Upgrade	Improve to 2-lane rural minor collector standard		CIP Priority C
R34	North Applegate Road from OR 238 to County Line	Upgrade	Improve to 2-lane rural minor collector standard		CIP Priority C
R35	Peninger Road from Expo Park to Upton Road	Upgrade	Improve to 2-lane rural minor collector standard		CIP Priority D
R36	Wilson Road from Upton Road to Table Rock Road	Upgrade	Improve to 2-lane rural minor collector standard	2003 TSP Tier 2	CIP Priority B
R38	Stewart Avenue from Hull Rd to Oak Grove Road	Upgrade	Improve to 2-lane rural minor collector standard	2003 TSP Tier 1	CIP Priority B
R39	Stewart Avenue from Oak Grove Road to approximately 100-feet east of Gaylee Avenue	Upgrade	Improve to 2-lane rural minor collector standard	2003 TSP Tier 1	

R40	Dead Indian Memorial Road from OR 66 to MPO limits	Widen	Install passing lanes or slow moving turnout lanes		CIP Priority B
R42	Beall Lane from Front Street (OR 99) to Hanley Road	Widen	Widen to 3-lane urban major collector standard		CIP Priority C
R43	E Main Street from Walker Road to OR 66	Widen	Widen to 3-lane urban major collector standard		CIP Priority D
R44	Sage Road from Rossanley Drive to Ehrman Way	Widen	Widen to 3-lane urban major collector standard	2003 TSP Tier 2	
R45	Rogue River Drive from OR 62 to Walnut	Widen	Widen to 3-lane urban major collector standard		CIP Priority C
R46	Hanley Road from W Pine Street to Beall lane	Widen	Widen to 3-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority C
R47	Beall Lane from Merriman Road to Front Street (OR 99)	Widen	Widen to 3-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority B
R48	Foothill Road from Hillcrest Road to McAndrews WB Ramp	Widen	Widen to 3-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority C
R49	Foothill Road from McAndrews WB Ramp to Delta Waters Road	Widen	Widen to 3-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority C
R50	Kings Highway from Medford UGB to Stewart Avenue	Widen	Widen to 3-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority C
R51	N Phoenix Road from Medford City limits to Barnett Road	Widen	Widen to 3-lane urban minor arterial standard		CIP Priority E
R54	Table Rock Road from Bear Creek Greenway to Pine Street-Biddle Road	Widen	Widen to 3-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority A
R55	W Pine Street from Glenn Way to Vincent Avenue	Widen	Widen to 3-lane urban minor atrial standard	2003 TSP Tier 1	CIP Priority E
R56	W Pine Street from Haskell Street to Glenn Way	Widen	Widen to 3-lane urban minor atrial standard	2003 TSP Tier 1	
R58	W Pine Street from Vincent Avenue to Hanley Road	Widen	Widen to 3-lane urban minor atrial standard		CIP Priority E
R59	Lozier Lane from Stewart Avenue to W Main Street	Widen	Widen to 3-lane urban minor collector standard	2003 TSP Tier 1	CIP Priority A
R60	Peninger Road from Pine St to Expo Park	Widen	Widen to 3-lane urban minor collector standard	2003 TSP Tier 2	CIP Priority C
R61	Table Rock Road from Elmhurst Street to Mosquito Lane	Widen	Widen to 5-lane urban major arterial standard	2003 TSP Tier 1	CIP Priority C
R62	Table Rock Road from Mosquito Lane to Antelope Road	Widen	Widen to 5-lane urban major arterial standard	2003 TSP Tier 1	CIP Priority B
R64	E Vilas Road from Medco Haul Road to Crater Lake Avenue	Widen	Widen to 5-lane urban minor arterial standard	2003 TSP Tier 1	
R65	Table Rock Road from Gregory Road to Elmhurst Street	Widen	Widen to 5-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority C
R66	Table Rock Road from Wilson Road to Gregory Road	Widen	Widen to 5-lane urban minor arterial standard	2003 TSP Tier 1	CIP Priority C
R67	E Evan Creek Road from Rogue River City limits to Rogue River High School	Widen	Widen to 3-lane urban major collector standard	2003 TSP Tier 2	CIP Priority C
R68 ¹	Jacksonville Arterial Connector from North of City of Jacksonville to Pair-a-Dice Ranch Road	Refinement Plan	Refinement plan & draft EIS for rural arterial, state land use goals exception	2003 TSP Tier 2	
R69	Foothill Road from Corey Road to Atlantic Avenue	New Roadway	New 2-lane rural major collector	2003 TSP Tier 1	CIP Priority A
R70	E Stage Road from E Stage Road Terminus to N Phoenix Road	New Roadway	New 2-lane rural minor arterial over I-5	2003 TSP Tier 1	

R71	Lakeview Drive from Lakeview terminus to Merry Lane	New Roadway	New 2-lane rural minor collector with shoulders	2003 TSP Tier 1	R71
R72	West Dutton Road from Terminus to Agate Road	New Roadway	New 2-lane urban industrial collector	2003 TSP Tier 2	CIP Priority C
R73	Crater Lake Avenue from Corey Road to Gramercy Drive	New Roadway	New 2-lane urban minor collector	2003 TSP Tier 2	
R75	Atlantic Avenue from Cole Drive to East Dutton Road	New Roadway	New 3-lane urban major collector		CIP Priority B
R76	Airport Way from Table Rock Road to Federal Way	New Roadway	New 3-lane urban minor collector		
R77	Wilson Way from Wison Way terminus to Avenue G	New Roadway	New 3-lane urban minor collector		
R78	Wilson Way from Avenue G to Falcon Street	New Roadway	New 3-lane urban minor collector		
R79 ¹	OR 62 Bypass from I-5 to Poplar Drive	New Roadway	Unit 1 interchange & roadway improvement	2003 TSP Tier 1	
R80 ¹	OR 62 Bypass from Biddle to Delta Waters	New Roadway	Unit 2: new 4-lane expressway	2003 TSP Tier 2	
R81 ¹	OR 62 Bypass from Delta Waters to Vilas	New Roadway	Unit 3: new 4-lane expressway	2003 TSP Tier 2	
R84 ¹	OR 99 from Oak to First (Phoenix)	Access Management	Channelize through traffic to outside lane	2003 TSP Tier 1	
R85 ¹	OR 99 from OR 99 through Phoenix	Access Management	Restrict left-turn movements	2003 TSP Tier 1	

1. Not show in Roadway Improvements map. Confirm location with Jackson County Roads.

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Table 4 summarizes the roadway improvements that will be removed from the County's TSP as part of the TSP update. A majority of the improvements shown in Table 4 have been completed with the exception of one (shown in grey), which is no longer needed to support the long-term needs of the transportation system.

Table 4: Roadway Improvements to be removed from the TSP

Map ID	Location	Project Type	Project Description	Source	Status
X1	Ross Lane North from McAndrews to Rossanley Drive	Widen	Widen to 3-lane urban major collector standard with bike lanes and sidewalks	2003 TSP Tier 1	Completed
X2	Freeman Road from Pine to Oak	Widen	Widen to 3-lane urban minor collector with bike lanes and sidewalks	2003 TSP Tier 2	Completed
X3	Antelope Road from Table Rock Road to 7 th Street	Widen	Widen to 5-lane urban major arterial standard with bike lanes and sidewalks	2003 TSP Tier 2	Completed
X4	Avenue H from Wilson Way to OR 62	New Roadway	New 2-lane urban minor collector with bike lanes and sidewalks	2003 TSP Tier 2	Completed
X5	Wilson Way from Avenue G to Avenue H	New Roadway	New 2-lane urban minor collector with bike lanes and sidewalks	2003 TSP Tier 2	Completed
X6	Avenue G from Pacific Avenue to Kirtland Road	New Roadway	New 3-lane urban industrial collector with shoulders	2003 TSP Tier 2	Completed
X7	Leigh Way from Agate Road to Antelope Road	New Roadway	New 3-lane urban industrial collector with shoulders	2003 TSP Tier 1	

Freight Route Designations

The County’s designated freight routes are shown in Figure 3 along with ODOT’s Motor Carrier Transportation Division (MCTD) freight routes and the routes identified in the RVMPO Freight Study as routes that accommodate actual use and anticipated need by the Freight Advisory Council. These routes were selected by the project team based on their relative use by the freight community to access various land uses within the County and their ability to augment and support the ODOT freight network. The designation of these routes will ensure that the County plans for and provides alternative routes that minimize out-of-direction travel and regulatory restrictions for efficient freight movement. The designation will not impact the physical or operational characteristics of the roadway; however, the County’s Roadway Design Standards will need to be updated following adoption of the TSP to include new standards for facilities with the freight route designation to ensure that the roadways are built to support freight traffic.

Freight Improvements

The preferred alternatives for freight improvements are summarized in Table 5 and shown in Figure 4. The alternatives developed as part of the TSP update were combined with other alternatives identified in the County’s current TSP and the RVMPO Freight Study. As shown in Table 5, none of the alternatives are currently included in the STIP, the MTIP, or the County’s CIP.

The alternatives for freight improvements include:

- Developing refinement plans for existing roadways throughout the County
- Intersection improvements at specific locations (The RVMPO Freight Study does not provided project descriptions for all locations; however, many are identified in the proposed intersection improvements section)
- Segment improvements along specific roadways (The RVMPO Freight Study does not provided project descriptions for all roadways; however, many are identified in the proposed roadway improvements section)

Table 5 summarizes the freight improvements proposed to be included in the TSP update.

Table 5: Freight Route Projects

Map ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
F4	Table Rock Road/Vilas Road	Intersection Improvement	No project description is provided in the RVMPO Freight Study - See Intersection Improvements (I3)	RVMPO Freight Study	
F5	Table Rock Road/Hamrick Road	Intersection Improvement	No project description is provided in the RVMPO Freight Study	RVMPO Freight Study	
F6	E Vilas road from Haul Road to Crater Lake Avenue	Segment Improvement	No project description is provided in the RVMPO Freight Study – See Roadway Improvements (R64)	RVMPO Freight Study	

F7	OR 62/Delta Waters Road	Intersection Improvement	No project description is provided in the RVMPO Freight Study	RVMPO Freight Study	
F8	Table Rock Road from Wilson Road to Antelope Road	Segment Improvement	No project description is provided in the RVMPO Freight Study – See Roadway Improvements (R61, R62, R65, and R66)	RVMPO Freight Study	
F9 ¹	Phoenix Road from Houston Road to industrial site	Segment Improvement	No project description is provided in the RVMPO Freight Study	RVMPO Freight Study	
F10	Airway Drive E Vilas Road	Intersection Improvement	Install a traffic signal when warranted	RVMPO Freight Study	
F11	Kirtland Road from High Banks Road to Blackwell Road	Segment Improvements	Widen shoulders consistent with ODOT standards – See Roadway Improvements (S62)	RVMPO Freight Study	
F12 ¹	North Runway Drive Extension	Segment Improvement	No project description is provided in the RVMPO Freight Study	RVMPO Freight Study	
F13	Table Rock/Airport Road	Intersection Improvement	No project description is provided in the RVMPO Freight Study	RVMPO Freight Study	
F14	OR 238 from Jacksonville to west of Jacksonville	Segment Improvement	No project description is provided in the RVMPO Freight Study	RVMPO Freight Study	
F15	Table Rock Road from Bear Creek Greenway to Pine Street-Biddle Road	Segment Improvement	No project description is provided in the RVMPO Freight Study – See Roadway Improvements (R54)	RVMPO Freight Study	

1. Not show on Freight Improvements map. Confirm location with Jackson County Roads.

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Bridge and Culvert Improvements

The preferred alternatives for Bridge and Culvert improvements are summarized in Table 6 and shown in Figure 5. The alternatives developed as part of the TSP update were combined with other alternatives identified in the County’s current TSP. As shown in Table 6, several of the alternatives are identified in the current STIP, the MTIP, or County CIP.

The alternatives for bridge and culvert improvements include:

- Replacing existing bridge structures
- Widening existing bridge structures
- Constructing new bridge structures
- Replacing existing culverts

Table 6 summarizes the bridge and culvert improvements proposed to be included in the TSP update.

Table 6: Bridge & Culverts Projects

Map ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
B1 ¹	Gulch Creek Bridge on Applegate Road	Bridge	Replace structure	2003 TSP Tier 1	
B10	Sams Creek Bridge on Sams Creek Road (Bridge #701)	Bridge	Replace structure	2003 TSP Tier 2	
B11	Snider Creek Bridge at Wheeler Road (Bridge #360)	Bridge	Replace Glue Lam Bridge		CIP Priority A

B12	Sams Creek Bridge on Ramsey Road (Bridge #651)	Bridge	Replace Timber Bridge		CIP Priority A
B13	Trails Creek Bridge at Elder Mill Road (Bridge #640)	Bridge	Replace Glue Lam Bridge		CIP Priority A
B14	NF Big Butte Creek Bridge at Fredenburg Road (Bridge #265)	Bridge	Replace Timber Bridge HBP		CIP Priority B
B15	Galls Creek Bridge at Lampman Road (Bridge #807)	Bridge	Replace Pony Truss HBP		CIP Priority B
B16 ¹	Dodge Bridge (#703)	Bridge	Replace Box Culvert for Capacity		CIP Priority C
B17	Trail Creek Bridge at Swingle Road (Bridge #545)	Bridge	Replace Glue Lam Bridge		CIP Priority C
B18	WF Trail Creek Bridge at WF Trail Creek Road (Bridge #642)	Bridge	Replace Glue Lam Bridge		CIP Priority C
B19	Little Applegate River Bridge at Yale Creek Road (Bridge #501)	Bridge	Replace Glue Lam Bridge		CIP Priority C
B20	Yale Creek Bridge at Yale Creek Road (Bridge #502)	Bridge	Replace Glue Lam Bridge		CIP Priority C
B21	Neil Creek Bridge at Dead Indian Memorial Road (Bridge #36B)	Bridge	Replace Concrete Slab Bridge HBP		CIP Priority C
B22	Jackson Creek Bridge at Hanley Road (Bridge #114)	Bridge	Replace triple RCBC for fish passage		CIP Priority C
B23	Jackson Creek Bridge at Ross Lane (Bridge #130)	Bridge	Replace triple RCBC for fish passage		CIP Priority C
B24	Kane Creek Bridge at Old Stage Road (Bridge #120)	Bridge	Replace CIP Slab Bridge HBP		CIP Priority C
B25	Bear Creek Bridge at Fern Valley Road (#010)	Bridge	Improve Bridge		
B26	Hog Creek Bridge at Mountain View Drive (#180)	Bridge	Improve Bridge		
B27	Big Butte Creek Bridge at Cobleigh Road (#655)	Bridge	Improve Bridge		
B28	Ashland Creek Bridge at OR 99 (MP 19.0)	Bridge	Improve Bridge		
B29	Bear Creek Bridge and Table Rock Road Bridge at I-5 (MP 0)	Bridge	Improve Bridge		
B30	Birdseye Creek Bridge at OR 99 (MP10.8)	Bridge	Improve Bridge		
B31	E Main Street Bridge at I-5 (MP 0)	Bridge	Improve Bridge		
B32	Evans Creek Bridge at I-5 (MP 49.0)	Bridge	Improve Bridge		
B33	Fern Valley Road Bridge at I-5 (MP24.4)	Bridge	Improve Bridge		
B34	Little Butte Creek Bridge at Eagle Point – Main Street (MP0.33)	Bridge	Improve Bridge		
B35	Miller Gulch Bridge at OR 99 (MP12.2)	Bridge	Improve Bridge		
B36	Right Fork Roots Creek Bridge at	Bridge	Improve Bridge		
B37	Savage Creek Bridge at OR 99 (MP 6.05)	Bridge	Improve Bridge		
B38	Tolo Road Bridge at I-5 (MP 0)	Bridge	Improve Bridge		
B39	Trail Creek Bridge at OR 62 (MP 22.3)	Bridge	Improve Bridge		
B40 ¹	Sardine Creek Road at Sardine Creek	Culvert	Replace 72" culvert w/bridge for rust and fish passage		CIP Priority B

B41 ¹	E Evans Creek Road at Ramsey Creek	Culvert	Replace 96" culvert w/bridge for rust and fish passage		CIP Priority C
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1. Not show on Bridge and Culvert Improvements map. Confirm location with Jackson County Roads.
Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Intersection Improvements

The preferred alternatives for intersection improvements are summarized in Table 7 and shown in Figure 6. The alternatives developed as part of the TSP update were combined with other alternatives identified in the County’s current TSP, the RVMPO RTP, and several corridor studies. As shown in Table 7, several of the alternatives are currently included in the STIP, the MTIP, or the County’s CIP.

The alternatives for intersection improvements include:

- Monitor the intersection to determine if the projected deficiencies are realized or if planned improvements mitigate the issue.
- Add a separate left- and/or right turn lane (*Dual left or right-turn lanes also frequently require two receiving lanes*).
- Optimize the signal timing/phasing
- Install a traffic signal when warranted
- Reconfigure the intersection to improve operations, such as s a roundabout

Table 7 summarizes the intersection improvements proposed to be included in the TSP update.

Table 7: Intersection Projects

Map ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
I1	Hamrick Road/E Pine Street-Biddle Road	Monitor/ Turn Lane	Monitor traffic operations at the intersection following the completion of the Gebhard extension and potential heavy vehicle restrictions along Hamrick Road. If issues persist, install a second left-turn lane at the eastbound approach and optimize the signal timing/phasing		
I2	Table Rock Road/Biddle Road	Reconfigure	Widen the south leg of Table Rock Road to a five-lane cross section and optimize the signal timing/phasing		
I3	Table Rock Road/Vilas Road	Monitor/ Turn Lane	Monitor traffic operations at the intersection following construction of the OR 62 Bypass. If issues persist, install a second separate left-turn lane and a separate right-turn lane at the westbound approach and optimize the signal timing/phasing		
I4	Table Rock Road/Gregory Road	Traffic signal/ Roundabout	Install a traffic signal or roundabout when warranted		CIP Priority B
I5	Kershaw Road/OR 140	Monitor/ Restrict Movements	Monitor traffic operations at the intersection following construction of the Foothill Road extension to OR 140. If Issues persist, restrict left and through movements from Kershaw Road		

16	OR 62/OR 140-Leigh Way	Monitor/ Reconfigure	Monitor traffic operations at the intersection following completion of STIP Project #17471. If issues persist widen OR 62 to 7 lanes from south of OR 140 to Antelope Road	2003 TSP Tier 1	
17	OR 62/OR 234-Del Isle Way	Turn Lane	Restripe the north leg of the intersection to allow two-stage left-turn movements from OR 234 to OR 62.		
18	OR 62/Vilas Road	Monitor	Monitor traffic operations at the intersection following construction of the OR 62 Bypass to determine if the turning movements are as high as projected		
19	Foothill Road/McAndrew Road WB Ramp	Traffic signal/ Roundabout	Widen Foothill Road to provide a center two-way left-turn lane and install a traffic signal or roundabout when warranted		STIP project number #19231
110	Foothill Road/McAndrew Road EB Ramp	Traffic signal/ Roundabout	Widen Foothill Road to provide a center two-way left-turn lane and install a traffic signal or roundabout when warranted		STIP project number #19231
111	Foothill Road/Lone Pine Road	Turn Lane	Install a separate left-turn lane at the northbound approach		CIP Priority E
112	Bursell Road/Beall Lane	Traffic signal/ Roundabout	Install a traffic signal or roundabout when warranted	2003 TSP Tier 1	CIP Priority B
114	Beall Lane at Hanley Road	Traffic signal/ Roundabout	Install a traffic signal or roundabout when warranted		CIP Priority C
115	S Stage Road at Orchard Home Road	Turn Lane	Install a separate left-turn lane at the southbound approach		CIP Priority C
117	Interstate 5/Central Point SB off-ramp	Turn Lane	Extend & channelize southbound off-ramp	2003 TSP Tier 1	
118	Foothill Road/East Vilas Road	Turn Lane	Install a separate left-turn lane at the northbound approach		CIP Priority A
119	S Stage Road at Voorhies Road	Turn Lane	Install a separate left-turn lane at the northbound approach		CIP Priority B
122	Bursell Road/Hopkins Lane	Traffic signal/ Roundabout	Install a traffic signal or roundabout when warranted	2003 TSP Tier 2	
124	OR 140/Foothill Road-Atlantic Avenue	Traffic signal/ Roundabout	Install a traffic signal or roundabout when warranted		CIP Priority A
125	Foothill Road/Coker Butte Road	Turn Lane	Install a separate left-turn lane at the northbound approach and right turn taper at the southbound approach		CIP Priority A

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Table 8 summarizes the intersection improvements that will be removed from the County's TSP as part of the TSP update. A majority of the improvements shown in Table 8 have been completed, with the exception of one (shown in grey), which is no longer needed to support the long-term needs of the transportation system.

Table 8: Intersection Improvements to be removed from the TSP

Map ID	Location		Project Description	Source	Status
X8	Antelope Road/Agate Road	Traffic signal	New traffic signal	2003 TSP Tier 1	Completed
X9	Coker Butte Road/Crater Lake Ave	Traffic signal	New traffic signals and realignment	2003 TSP Tier 1	Alternative Completed
X10	Coker Butte Road/Highway 62	Traffic signal	New traffic signals and realignment	2003 TSP Tier 1	Completed
X11	Elliot (Webfoot)/Crater Lake Ave	Traffic signal	New traffic signals	2003 TSP Tier 1	Alternative Completed

X12	Elliot (Webfoot)/Highway 62	Traffic signal	New traffic signals	2003 TSP Tier 1	Completed
X13	Fern Valley Road/N Phoenix Rd	Traffic signal	New traffic signal	2003 TSP Tier 1	Completed
X14	Highway 140/Kershaw Road	Beacon	Install flashing beacon at intersection	2003 TSP Tier 1	Completed
X15	Highway 238/Bybee Corner	Reconfigure	Improve intersection alignment	2003 TSP Tier 1	Completed
X16	Highway 99/Fern Valley Rd/Cheryl Ln	Reconfigure	Realign intersection and upgrade signal	2003 TSP Tier 1	
X17	Interstate 5/South Medford Interchange	Reconfigure	Relocate & construct new interchange	2003 TSP Tier 1	Completed
X18	Interstate 5/Fern Valley Rd Interchange	Reconfigure	Widen and possibly realign interchange	2003 TSP Tier 1	Completed

Corridor Improvements

ODOT has developed three corridor plans since the adoption of the current Jackson County TSP, including the OR 99 Corridor Plan, the OR 140 Corridor Plan, and the I-5 Rogue Valley Corridor Plan. The following provides a summary of each plan, including the transportation system improvements projects identified in each plan.

OR 99 Corridor Plan

The OR 99 Corridor Plan was adopted by ODOT in June 2015. The plan focuses on the section of OR 99 that extends from Garfield Street in South Medford, through the communities of Phoenix and Talent, to S Valley View Road at the north end of Ashland. This multimodal plan examines how the highway operates both now and over the next 20 years. It identifies strategies to preserve and improve highway safety and capacity consistent with a District Highway classification and local policies. It also incorporates improvements for all travel modes. Table 9A summarizes the transportation system improvement projects identified in the Plan.

Table 9A: OR 99 Corridor Plan Improvement Projects

ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
Corridor Improvements					
C1	OR 99 from Garfield Street to Charlotte Ann Road		Construct sidewalks along the west side of OR 99	OR 99 Corridor Plan (1)	
C2	OR 99 from Charlotte Ann Road to Coleman Creek Road		Modify striping of existing 5-lane roadway cross section to add bike lanes	OR 99 Corridor Plan (2)	
C3	OR 99 from Charlotte Ann Road to Coleman Creek Road		Construct continuous sidewalks on both sides of OR 99	OR 99 Corridor Plan (3)	
C4	OR 99 from Charlotte Ann Road to Coleman Creek Road		Install median islands at multiple locations where pedestrian crossings occur	OR 99 Corridor Plan (4)	
C5	OR 99/Northridge Terrace Intersection		Improve turning radius on southeast corner	OR 99 Corridor Plan (5)	
C6	OR 99/Coleman Creek Culvert		Modify striping of existing roadway to add bike lanes and sidewalks while maintaining four through travel lanes (Interim)	OR 99 Corridor Plan (6)	
C7	OR 99/Coleman Creek Culvert		Replace culvert and widen roadway to add bike lanes and sidewalks	OR 99 Corridor Plan (7)	
C8	OR 99 from Bolz Lane to South		Provide sidewalk travel width of 6 feet around	OR 99 Corridor	

	End of Couplet		utility poles	Plan (8)	
C9	OR 99 within Downtown Phoenix		Add gateway treatments at north and south ends of Couplet to emphasize upcoming downtown area	OR 99 Corridor Plan (9)	
C10	OR 99 within Downtown Phoenix		Modify striping to add bike lanes	OR 99 Corridor Plan (10)	
C11	OR 99 within Downtown Phoenix		Enhance crossing opportunities with pedestrian-activated devices, curb extensions, and additional crosswalk striping	OR 99 Corridor Plan (11)	
C12	OR 99 from south of couplet to City Limits		Add curbs and sidewalks and restripe roadway to provide a center turn lane, two through travel lanes (one in each direction), and bike lanes	OR 99 Corridor Plan (12)	
C13	OR 99 from Phoenix City Limits to Talent City Limits		Restripe roadway to include a center turn lane, two through travel lanes roadway to include a center turn lane, two through travel lanes (one in each direction), and shoulders	OR 99 Corridor Plan (13)	
C14	OR 99 from Colver Road/Suncrest Road to Rapp Road		Upgrade or fill in missing sidewalks	OR 99 Corridor Plan (14)	
C15	OR 99 from Wagner Creek Greenway Trail		Consider future midblock crossing with pedestrian-activated device	OR 99 Corridor Plan (15)	
C16	OR 99 from Rapp Road to Creel Road (Talent City Limits)		Add curbs and sidewalks and restripe existing roadway to provide a center turn lane, two through travel lanes (one in each direction), and bike lanes (STIP Key Number 17478)	OR 99 Corridor Plan (16)	
C17	OR 99 from Creel Road to Bear Creek Greenway connection		Construct a multi-use path along the east side of the highway	OR 99 Corridor Plan (17)	
C18	OR 99 from Creel Road (Talent City Limits) to S Valley View Road		Restripe roadway to include a center turn lane, two through travel lanes	OR 99 Corridor Plan (18)	
C19	OR 99/S Valley View Road Intersection		Widen S Valley View Road to provide dual westbound left-turn lanes at OR 99	OR 99 Corridor Plan (19)	
Other System Improvements					
C20	Bear Creek Greenway		Enhance connections to OR 99 throughout corridor with wayfinding signage and other amenities	OR 99 Corridor Plan (20)	
C21	Bear Creek Greenway		Improve connections to OR 99/Bear Creek Drive at 4th Street and Oak Street to provide parallel and convenient bicycle and pedestrian facilities	OR 99 Corridor Plan (21)	
Transportation System Management Strategies					
C22	OR 99 Corridor		Develop a traffic operations emergency plan	OR 99 Corridor Plan (TSM1)	
C23	OR 99 Corridor		Conduct speed zone studies to reassess posted speeds when lane restriping, lane conversion, or pedestrian crossing projects are implemented	OR 99 Corridor Plan (TSM2)	
C24	OR 99/South Stage Road Intersection		Modify traffic signal timing to add clearance intervals and protected left-turn phases in the east-west direction	OR 99 Corridor Plan (TSM3)	
C25	OR 99 from Northridge Terrace to Coleman Creek Road		Evaluate potential access modifications to address high crash frequency	OR 99 Corridor Plan (TSM4)	
C26	OR 99/W Valley View Road Intersection		Modify traffic signal timing to add clearance intervals and protected left-turn phases in the east-west direction	OR 99 Corridor Plan (TSM5)	

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

OR 140 Corridor Plan

The OR 140 Corridor Plan was adopted by ODOT in March 2013. The plan focuses on the section of OR 140 that extends from I-5 Exit 35 (Seven Oaks Interchange), east through unincorporated White City, to Brownsboro-Eagle Point Road. This multimodal plan examines how the highway operates both now and over the next 20 years. It identifies strategies to preserve and improve highway safety and capacity consistent with a Statewide Highway classification and Freight Route1 designation and local policies and incorporates improvements for all travel modes. Table 9B summarizes the transportation system improvement projects identified in the Plan.

Table 9B: OR 140 Corridor Plan Improvement Projects

ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
West of White City UUC Boundary					
C27	OR 140 (Blackwell Road) Segment		Widen to provide a 3-lane rural section (with setbacks for 5 lanes) and modify curves for higher design speed	OR 140 Corridor Plan (1)	
C28	OR 140 north/east of I-5		Add a truck weigh station	OR 140 Corridor Plan (2)	
C29	OR 140/Blackwell Road/Kirtland Road Intersection		Install a traffic signal	OR 140 Corridor Plan (3)	
C30	OR 140 (Kirtland Road) Segment		Install additional roadway delineation such as textured striping or rumble strips	OR 140 Corridor Plan (4)	
C31	OR 140 (Kirtland Road)/High Banks Road Intersection		Add left-turn lanes on OR 140	OR 140 Corridor Plan (5)	
White City (within UUC Boundary)					
C32	OR 140 (Kirtland Road)/W Antelope Road Intersection		Add a westbound left turn lane on OR 140	OR 140 Corridor Plan (6)	
C33	OR 140 (Avenue G) Segment		Widen to provide a 3-lane urban section	OR 140 Corridor Plan (7)	
C34	OR 140/Avenue G/Agate Road Intersection		Add channelized eastbound rightturn lane on Avenue G and southbound merge lane on Agate Road	OR 140 Corridor Plan (8)	
C35	OR 140/Avenue G/Agate Road Intersection		Install traffic signal	OR 140 Corridor Plan (9)	
C36	OR 140 (Agate Road) Segment		Widen to provide a 3-lane urban section	OR 140 Corridor Plan (10)	
C37	OR 140/Agate Road/Leigh Way Intersection		Add channelized westbound right-turn lane on Leigh Way and northbound merge lane on Agate Road	OR 140 Corridor Plan (11)	
C38	OR 62/OR 140-Leigh Way		Add eastbound right-turn lane and second westbound left-turn lane	OR 140 Corridor Plan (12)	
C39	OR 62/OR 140-Leigh Way		Widen OR 62 to a 7-lane section from south of OR 140 to north of Antelope Road	OR 140 Corridor Plan (13)	
C40	OR 140/Lakeview Drive Intersection		Add left-turn lanes on OR 140	OR 140 Corridor Plan (14)	
East of White City UUC Boundary					
C41	OR 140 east of OR 62		Add a westbound truck weigh station	OR 140 Corridor Plan (15)	
C42	OR 140/Riley Road/E Antelope Road Intersection		Add left-turn and right-turn deceleration lanes on OR 140	OR 140 Corridor Plan (16)	
C43	OR 140/Meridian Road Intersection		Add left-turn lanes on OR 140	OR 140 Corridor Plan (17)	

C44	OR 140/Brownsboro-Meridian Road Intersection		Add left-turn lanes on OR 140	OR 140 Corridor Plan (18)	
C45	OR 140/Brownsboro-Eagle Point Road Intersection		Add an eastbound left turn lane on OR 140	OR 140 Corridor Plan (19)	
Other					
C46	OR 140		Install additional roadway delineation such as rumble strips or textured striping	OR 140 Corridor Plan (20)	

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

I-5 Rogue Valley Corridor Plan

The I-5 Rogue Valley Corridor Plan was adopted by ODOT in March 2012. The plan focuses on the 25 mile section of I-5 that extends from Interchange 11 south of Ashland to Interchange 35 north of Central Point. The plan assesses existing and future transportation conditions and identifies strategies and improvements to enhance transportation safety and capacity within the corridor. Table 9C summarizes the transportation system improvement projects identified in the Plan.

Table 9C: I-5 Rogue Valley Corridor Plan Improvement Projects

ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
Corridor Concepts—Safety Enhancement Measures					
C47	Port of Entry - Auxiliary Lane Option		Add an auxiliary lane between the on-ramp of the northbound weigh station (Port of Entry) facility and the northbound off-ramp at Interchange 19.	I-5 Rogue Valley Corridor Plan (1)	
C48	Southbound Weigh Station		Add an auxiliary lane between the southbound on-ramp at Interchange 19 and the southbound off-ramp at the weigh station.	I-5 Rogue Valley Corridor Plan (3)	
C49	Temporary Overnight Truck Facilities		Coordinate efforts to temporarily divert trucks to the Jackson County Fairgrounds, distribution centers, industrial parks, and other public and private properties during inclement weather.	I-5 Rogue Valley Corridor Plan (4)	
C50	Medford Viaduct Shoulder		Add a 12-foot right side shoulder by reconstructing and widening the existing viaduct structure.	I-5 Rogue Valley Corridor Plan (6)	
C51	Incident Response System		Deploy incident response system to patrol I-5 during peak crash periods and expand the existing Traffic Operations Center (TOC).	I-5 Rogue Valley Corridor Plan (7)	
Corridor Concepts — Transportation System Management Measures					
C52	Designated Alternate Truck Route		Upgrade OR 58/US 97 as an alternative route during inclement weather conditions and alert truck drivers via variable message signs (VMS) of conditions in the Siskiyou Pass and advise taking alternative route.	I-5 Rogue Valley Corridor Plan (8)	
C53	OR 99 Corridor Coordinated Traffic Signal System		Implement a more comprehensive coordinated and adaptive traffic signal system on targeted segments in urbanized areas of OR 99 between Interchanges 11 and 35.	I-5 Rogue Valley Corridor Plan (9)	
C54	Ramp Metering		Install ramp meters to restrict the total flow of traffic entering the freeway, temporarily storing it on the ramps and thus regulating traffic flow along the mainline.	I-5 Rogue Valley Corridor Plan (10)	
Corridor Concepts — Capacity Enhancement Measures					

C55	Auxiliary Travel Lanes		Add a northbound auxiliary lane from Exit 27 to 33 and southbound auxiliary lanes from Exit 27 to 30.	I-5 Rogue Valley Corridor Plan (12)	
C56	Auxiliary Travel Lanes		Add a northbound auxiliary lane from Exit 21 to 27 and from Exit 33 to 35 and a southbound auxiliary lane from Exit 13 to 27.	I-5 Rogue Valley Corridor Plan (12)	
C57	Enhanced Local Arterial/Collector Connections		Improve local street connections between Central Point and North Medford (Interchange 30 to 35) to provide viable local alternative routes.	I-5 Rogue Valley Corridor Plan (13)	
C58	Enhanced Local Arterial/Collector Connections		Improve local street connections between Medford and Phoenix (Interchange 30 to 24) to provide viable local alternative routes.	I-5 Rogue Valley Corridor Plan (14)	
C59	Enhanced Local Arterial/Collector Connections		Improve local street connections between Phoenix and Ashland (Interchange 24 to 11) to provide viable local alternative routes.	I-5 Rogue Valley Corridor Plan (15)	
C60	Expanded Medford Viaduct		Expand or replace the existing viaduct structure to accommodate three lanes and minimum shoulders in both directions.	I-5 Rogue Valley Corridor Plan (16)	
C61	Expanded Medford Viaduct		Expand or replace the existing viaduct structure to accommodate three lanes and standard shoulders in both directions.	I-5 Rogue Valley Corridor Plan (17)	
C62	Expanded Medford Viaduct		Expand or replace the existing viaduct structure to accommodate three lanes and standard shoulders in both directions stacked vertically.	I-5 Rogue Valley Corridor Plan (18)	
Corridor Concepts — Least Cost Planning Solutions					
C63	Variable Speed Limits		Install variable speed limits (VSL)—digital signage that displays posted speed limits that change based on road, traffic, and weather conditions.	I-5 Rogue Valley Corridor Plan (21)	
Corridor Concepts — Transportation Demand Management Measures					
C64	Intermodal Freight Hub		Establish an intermodal freight hub at Interchange 35.	I-5 Rogue Valley Corridor Plan (22)	
C65	Bus Service Improvements		Reduce headways, expand coverage and hours of service, and add new routes to destinations not currently served.	I-5 Rogue Valley Corridor Plan (23)	
C66	Commuter Rail		Add commuter rail on the CORP between Central Point and Ashland.	I-5 Rogue Valley Corridor Plan (24)	
C67	Bus Rapid Transit		Add a dedicated bus lane and implement signal prioritization on non-rural portions of OR 99 from Ashland to Central Point. These improvements would allow the bus to operate separately, without interference from other modes.	I-5 Rogue Valley Corridor Plan (25)	

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Interchange Improvements

ODOT has completed four Interchange Area Management Plans (IAMPs) within Jackson County and has two in the plan development process. The following identifies the IAMPs and any identified projects on County facilities:

- **I-5 Exit 19 (North Ashland) IAMP (November 2011)** – This IAMP includes several local street network modifications and access changes along S. Valley View Road

- **I-5 Exit 21 (Valley View) IAMP – Preferred Alternative (February 2015)** – This IAMP does not include any projects on County facilities or any projects in addition to the interchange improvements currently under construction.
- **I-5 Exit 24 (Fern Valley) IAMP (February 2011)** – This IAMP identifies improvements to bring W. Valley View Road up to standards from the I-5 southbound ramp to Suncrest Drive.
- **I-5 Exit 33 (Central Point) IAMP (June 2015)** – This IAMP primarily identifies improvements to East Pine Street and its’ intersections, including the I-5 ramp terminals, to improve operations on E. Pine Street and the ramp terminals in the interchange area. The County has jurisdiction east of the interchange from the northbound ramps east; however, the IAMP identifies ODOT and Central Point as the implementing agencies of the IAMP.
- **I-5 Exit 35 (Seven Oaks) IAMP (September 2013)** – This IAMP identifies improvements by ODOT to the northbound and southbound ramp terminals and improvements at the Blackwell Road/Kirtland Road intersection. County implementation includes requiring development of a local street network in the vicinity of the interchange by development.
- **I-5 Exit 40 & 43 (Gold Hill) IAMP – Alternative Analysis (September 2015)** – Preferred alternatives have not yet been identified for this IAMP. However, this IAMP is anticipated to include improvements to on- and off- ramps and several intersections at each interchange to improve operations and improve turning radii. Most improvements are anticipated to be on ODOT facilities and implemented by ODOT; however there are several multi-modal improvements identified on or parallel to County facilities to improve access and circulation for pedestrians and bicycles.

Table 9 includes the projects from the IAMPs on County facilities that are proposed to be included in the TSP update. Additional information on land use, system, travel demand, and access management strategies is included in each IAMP.

Table 10: IAMP Projects

ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
IA1	S. Valley View Road	Interchange	Install a non-traversable median barrier from I-5 southbound ramp terminal to approximately 750 feet south along S. Valley View Road.	I-5 Exit 19 IAMP	
IA2	Lowe Road	Interchange	Close Lowe Road approach to S. Valley View Road and extend Low Road southward to connect with S. Valley View Road opposite Eagle Mill Road.	I-5 Exit 19 IAMP	
IA3	New Road	Interchange	Construct a new road extending northward from Eagle Mill Road near S. Valley View Road that can serve adjacent parcels and access businesses along the east side of S. Valley View Road.	I-5 Exit 19 IAMP	
IA4	Orchard Lane Extension	Interchange	Extend Orchard Lane north of E. Ashland Lane to E. Butler Lane and close existing E. Ashland Lane approach to S. Valley View Road.	I-5 Exit 19 IAMP	

IA5	W. Valley View Road	Interchange	Improve W. Valley View Road from the I-5 southbound ramp to the northbound ramp to 12 foot travel lanes (one lane in each direction) with 5 foot shoulders. Improve to 11 foot travel lanes and 5 foot shoulders from the northbound ramp to Suncrest Road	DRAFT I-5 Exit 21 (Valley View) IAMP	
IA6	I-5 Southbound Ramp Terminal/East Pine Street TSM	Interchange	Signal Timing Modifications: Maintain traffic signal timing to safely manage queues on the SB off-ramp (Ongoing)	I-5 Exit 33 (Central Point) IAMP	
IA7	I-5 Northbound Ramp Terminal/East Pine Street TSM	Interchange	Signal Timing Modifications: Maintain traffic signal timing to safely manage queues on the NB off-ramp (Ongoing)	I-5 Exit 33 (Central Point) IAMP	
IA8	10th Street/Freeman Road/ East Pine Street TSM	Interchange	Signal Timing Modifications and Queue Storage: Maintain signal progression, change signal phasing, extend westbound left-turn lane striping on East Pine Street to provide more queue storage, consider access restrictions to improve safety (Ongoing)	I-5 Exit 33 (Central Point) IAMP	
IA9	Peninger Road/East Pine Street TSM	Interchange	Signal Timing Modifications: Maintain signal progression to avoid queuing conflict that affects I-5 NB Ramp Terminal, and change signal phasing (Ongoing)	I-5 Exit 33 (Central Point) IAMP	
IA10	East Pine Street TSM	Interchange	Signal Timing Modifications: Maintain signal progression, particularly in the eastbound direction, to avoid queuing that affects I-5 NB ramp terminal (Ongoing)	I-5 Exit 33 (Central Point) IAMP	
IA11	South Sidewalk between Ramp Terminals	Interchange	Add a sidewalk on the south side of East Pine Street between the northbound and southbound ramp terminals (High to Medium Priority)	I-5 Exit 33 (Central Point) IAMP	
IA12	Bike Lane Improvements	Interchange	Restripe eastbound travel lanes between 9th Street and the I-5 southbound ramp to improve bike lane transitions (High Priority)	I-5 Exit 33 (Central Point) IAMP	
IA13	I-5 Southbound On-Ramp	Interchange	Dual Westbound Left-Turn Lanes: Add a second westbound left-turn lane on East Pine Street onto the I-5 southbound on-ramp and a second southbound receiving lane on the I-5 southbound on-ramp (High to Medium Priority)	I-5 Exit 33 (Central Point) IAMP	
IA14	I-5 Northbound Ramp Terminal	Interchange	Dual Right Turn Lanes: Widen the I-5 northbound off-ramp to add a second right-turn lane at the northbound approach to East Pine Street (Medium to Low Priority)	I-5 Exit 33 (Central Point) IAMP	
IA15	Peninger Road/East Pine Street Intersection Improvements	Interchange	Implement Central Point TSP Tier 2 Project #236 as revised – Widen East Pine Street to accommodate a third westbound through travel lane, maintain bike lanes, and add sidewalks where necessary (Medium to Low Priority)	I-5 Exit 33 (Central Point) IAMP	
IA16	Hamrick Road/East Pine Street Intersection Improvements	Interchange	Implement Central Point TSP Tier 1 Project #216 – Widen west and north approaches to add a dual eastbound left-turn lane and second northbound receiving lane (Medium to Low Priority)	I-5 Exit 33 (Central Point) IAMP	
IA17	Proposed City Shared Use Path Project	Interchange	Construct a shared use path on the north side of East Pine Street from 9th Street to the Bear Creek Greenway (Priority established by City)	I-5 Exit 33 (Central Point) IAMP	
IA18	Blackwell Road/OR 99	Interchange	Provide access for all modes of travel between Access Road and KOA campground by widening shoulders or constructing a multi-use path	DRAFT I-5 Exit 40 and 43 (Gold Hill) IAMP	
IA19	Profetta Lane to Old Stage Road – I-5 Multimodal Crossing	Interchange	Provide alternate multi-modal crossing of I-5 with multi-use path connection and provide multi-use path along Old Stage Road	DRAFT I-5 Exit 40 and 43 (Gold Hill) IAMP	

TSM=Transportation System Management

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Safety Improvements

The preferred alternatives for safety improvements are summarized in Table 10. The safety alternatives developed as part of the TSP update were combined with other safety alternatives identified in other planning documents. As shown in Table 10, few of the alternatives are currently identified in the STIP, MTIP, or County CIP. It should be noted that many of the roadway, pedestrian and bicycle improvement projects identified in other sections of this memorandum will improve safety along County roads.

The alternatives for safety improvements include:

- Specific intersection and segment improvements

Table 11 summarizes the safety improvements that will be considered as part of the TSP update. In addition to these projects, the TSP will include a toolkit that identifies systematic safety enhancements that can be implemented to improve safety on the County’s rural roads.

Table 11: Safety Projects

ID	Location		Project Description	Source	STIP/MTIP/CIP
S1	Hamrick Road/E Pine Street-Biddle Road	Intersection Improvement	Replace the 5-section head at the westbound approach with a 4-section head consistent with the other protected-permitted signal heads along the corridor		
S2	Table Rock Road/Vilas Road	Intersection Improvement	Manage access points close to the intersection on the north, east, and west legs of the intersection using techniques such as raised medians, closing or combining access points, and narrowing curb cuts		
S3	Kershaw Road/OR 140	Intersection Improvement	Install an intersection collision avoidance system. These systems warn motorists along the main line to watch for entering traffic on the minor street when flashing		
S4	OR 62/Vilas Road	Intersection Improvement	No additional safety improvements have been identified – See Intersection Improvements (I8)		
S5	Foothill Road/Coker Butte Road	Intersection Improvement	No additional safety improvements have been identified – See Intersection Improvements (I25)		CIP Priority A
S6	Hanley Road (OR 238)/W Main Street	Intersection Improvement	Reconfigure the intersection as a three-way stop. Install a traffic signal when warrants are met.1	Road Safety Audit	
S7	Foothill Road from Coker Butte Road to Corey Road	Segment Improvement	Widen Foothill Road to provide separate left-turn lanes at intersections, wider travel lanes, and wider shoulder along this segment		
S8	Hanley Road from Rossanley Road to Jacksonville City Limits	Segment Improvement	Provide drivers with more warning and feedback on approach to the curves. Treatments include guardrails, shoulder rumble strips, and chevrons and other curve warning signage		
S9	OR 62/Crater lake Avenue	Intersection Improvement	Relocate Crater Lake Avenue away from OR 62	ODOT SPIS	
S10	OR 99/Rogue Valley Road	Intersection Improvement	Convert Elm Street to right in right out on both sides of highway, install median barrier, no work at Table Rock Road at this time.	ODOT SPIS	STIP # 14433 & 14434

S11	OR 99/Rogue Valley Road	Intersection Improvement	Extend RED clearance	ODOT SPIS	
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1. Reconfiguring the intersection as a three way stop and/or installing a traffic signal will require the approval of the State Traffic Engineer.
 Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

BICYCLE AND PEDESTRIAN ELEMENT

The pedestrian and bicycle plan includes a countywide Roadway Bicycle Designation map as well project lists that identify projects to address the needs of bicycles and pedestrians in the rural areas and urban areas.

Bicycle Route Designations

The Bicycle Route Designation map is shown in Figure 7. This map illustrates the bicycle route designations for all County and ODOT facilities. The designations help define the type of bicycle treatments planned for each roadway. The designations are described below.

- **Non-Designated Routes** - Non-Designated Routes are roads without bicycle facilities that are not signed or designated bicycle routes; however, bicycles may still use these routes.
- **Shared Roadway** - Shared Roadways are roads without bicycle lanes or shoulders that are designated bicycle routes. This designation may influence how the County signs, maintains, or makes other decisions with regard to these facilities. Shared Roadways are most commonly acceptable along roadways where the average daily traffic (ADT) is less than 400 vehicles per day in rural areas and 3,000 vehicles per day in urban areas or where vehicular travel speeds and volumes allow cyclists to comfortably and conveniently “share the road” with motorists. In rural areas, “Share the Road” or “Bikes in Road” signs can be used to remind drivers to watch for bicyclists on roadways without on-street bicycle lanes. In urban areas, shared-lane pavement markings, or sharrows, can be used. Sharrows remind motorists of the presence of bicycles and indicate to cyclists where to safely ride within the roadway.
- **Bikeway** - Bikeways include both shoulder bikeways in rural areas and bike lanes in urban areas. Jackson County’s current roadway standards require 4-foot shoulders along rural local streets (Local Street C), 5-foot shoulders along rural minor collectors, and 6-foot shoulders along rural major collectors and arterials. Shoulder bikeway designated routes should provide space for cyclists to travel outside of the vehicle travel lane where warranted. This could include continuous shoulder bikeways on both sides of the roadway ranging from 3-foot to 6-foot wide, depending upon the rural character of the area, but could also include uphill climbing lanes only, intermittent shoulders in low visibility areas, or bike pull-out areas. Shoulder bikeway designated routes typically have higher speeds and traffic volumes than routes where a shared roadway designation would be appropriate in both directions for the entire length of the roadway.

- **Enhanced Bikeway** - Enhanced bikeways include a variety of different facility types and treatments and are intended to provide more separation and protection for cyclists from vehicles than a standard shoulder bikeway or bike lane. In rural areas, treatments include additional shoulder width or a parallel shared-use path. In urban areas, enhanced bikeway treatments include buffered bike lanes, cycle tracks or protected bikeways, or parallel shared-use path.
 - **Buffered bike lanes** are on-street lanes that include a physical separation (“buffer”) between the bike lane and the vehicle traffic lane and/or the vehicle parking lane. Buffered bike lanes can be particularly helpful on streets with high vehicle speeds, high vehicle volumes, or relatively frequent parking turnover.
 - **Cycle tracks** (or protected bikeways) are exclusive bikeways separated from vehicle travel lanes, parking lanes and sidewalks. Cycle tracks can be one- or two-way and can be at the street level, sidewalk level, or somewhere in between. If at the street level, cycle tracks can be separated from the vehicle travel lane by raised medians, on-street parking, or bollards. If at the sidewalk level, a curb or median separates them from the vehicle travel lane, while different pavement color/texture separates the cycle track from the sidewalk. By separating cyclists from motor vehicles, cycle tracks can offer a higher level of security than bike lanes and are attractive to a wider spectrum of the public.
 - **Shared-use paths** are separated from the roadway by an open space or barrier. Shared-use paths are typically used by pedestrians and bicyclists as two-way facilities. Such paths can also be constructed on alignments separate from roadways to create more direct routes between destinations and also serve as elements of a recreational trail system.

Projects to complete the bicycle network and meet the needs of bicyclists and pedestrians in rural and urban areas are described below.

Bicycle and Pedestrian Improvements in Rural Areas

Pedestrian needs within the rural areas are primarily addressed through the addition of shoulders that serve pedestrians and bicyclists or through shared-use paths. Rural areas where concentrations of pedestrian activity warrant the use of shared-use paths include Prospect, Foots Creek, Ruch, and Wimer. The preferred alternatives for bicycle and pedestrian improvements in the rural areas are summarized in Table 11 and shown in Figure 8. The alternatives developed as part of the TSP update were combined with other alternatives identified in the County’s current TSP, the RVMPO RTP, and several corridor studies. As shown in Table 11, several of the alternatives currently identified projects in the STIP, the MTIP, or the County CIP.

The alternatives for bicycle and pedestrian improvements in the *rural* areas include:

- Installing shared roadway pavement markings and signs along both sides of the roadway
- Installing shoulders along both sides of the roadways consistent with Jackson County and ODOT standards
- Installing shared-use paths

Table 12 summarizes the bicycle and pedestrian improvements in the *rural* areas that are proposed to be included in the TSP update. The alternatives shown in grey are shoulder bikeway projects included in existing plans but that are identified in the draft bicycle designation map as shared roadways. These projects should be discussed for modification, removal, or designating as low priority.

Table 12: Bicycle and Pedestrian Projects in Rural Areas

Map ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
S1	Old Stage Road from Jacksonville city limits Winterbrook Lane	Shoulders	Install 4-foot shoulders consistent with the Old Stage Road Corridor Plan - See Roadway Improvement Projects		
S2	Old Stage Road from MPO limit to I-5	Shoulders	Install 4-foot shoulders consistent with the Old Stage Road Corridor Plan - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority B
S3	Old Stage Road from Winterbrook Lane to MPO limit	Shoulders	Install 4-foot shoulders consistent with the Old Stage Road Corridor Plan - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority B
S4	Coleman Creek Road from Pioneer Road to Houston Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards	2003 TSP Tier 1	CIP Priority C
S5	Gregory Road from Table Rock Road to Agate Street	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards	2003 TSP Tier 2	
S6	Old Stage Road from I-5 to roadway terminus	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects		CIP Priority D
S7	Pioneer Road from Coleman Creek Road to Dark Hollow Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards	2003 TSP Tier 2	CIP Priority D
S8	Pioneer Road from Colver Road to Coleman Creek Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards	2003 TSP Tier 2	CIP Priority C
S9	Pioneer Road from Dark Hollow Road to Griffin Creek Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards	2003 TSP Tier 2	CIP Priority C
S10	Scenic Avenue from Old Stage Road to Grant Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards	2003 TSP Tier 2	
S11	West Valley View Road from Suncrest to S Valley View Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards		CIP Priority D
S12	Butte Falls Road from Butte Falls Highway to City limits	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects		CIP Priority D
S13	Eagle Mill Road from S Valley View Road to Oak Street	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority C
S14	East Dutton Road from OR 62 to Atlantic Avenue	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects		CIP Priority D
S15	Fern Valley Road from Phoenix City Limits to Payne Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects		CIP Priority D

S16	Modoc Road from Table Rock Road to Antioch Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects		CIP Priority C
S17	North Applegate Road from OR 238 to County Line	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects		CIP Priority C
S18	Peninger Road from Expo Park to Upton Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects		CIP Priority D
S19	Stewart Avenue from Hull Rd to Oak Grove Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority B
S20	Stewart Avenue from Oak Grove Road to approximately 100-feet east of Gaylee Avenue	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	
S21	Wilson Road from Upton Road to Table Rock Road	Shoulders	Install 5-foot shoulders consistent with rural minor collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority B
S22	Agate Road from Linn Road to OR 234	Shoulders	Install 6-foot shoulders consistent with rural major collector standards	2003 TSP Tier 2	
S23	Arnold Lane from S Stage Road to Bellinger	Shoulders	Install 6-foot shoulders consistent with rural major collector standards	2003 TSP Tier 2	
S24	Gibbon Road from Upton Road to Table Rock Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards	2003 TSP Tier 1	CIP Priority C
S25	Griffin Creek Road from S Stage Road to Pioneer Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards		CIP Priority B
S26	Houston Road from Phoenix city limits to Griffin Creek Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards		
S27	Taylor Road from Old Stage Road to Grant Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards	2003 TSP Tier 1	
S28	Upton Road from Peninger Road to Scenic Road	Shoulders	Install enhanced bike and pedestrian facilities	2003 TSP Tier 1	
S29	W Main Street from Renault Avenue to Hanley Road	Shoulders	Install enhanced bike and pedestrian facilities		
S30	Antelope Road from Kershaw Road to Bigham Brown Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority C
S31	Applegate Road from OR 238 to Carberry Creek Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority C
S32	Beall Lane from Hanley Road to Old Stage Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority C
S33	Bellinger Lane from Hull Road to S Stage Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority C
S34	Bigham Brown Road from Antelope Road to Alta Vista Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
S35	Carpenter Hill Road from Coleman Creek Road to Voorhies Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
S36	Coleman Creek Road from Houston Road to Carpenter Hill Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority C
S37	Dead Indian Memorial Road from MPO limits to County line	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority D

S38	E Evans Creek Road from Minthorne Road to Queens Branch Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority C
S39	E Evans Creek Road from Rogue River High School to Minthorne Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority C
S40	E Vilas Road from McLoughlin Drive to Foothill Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority C
S41	E Vilas Road from OR 62 to McLouglin Drive	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority B
S42	Foothill Road from Coker Butte Road to Corey Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority A
S43	Foothill Road from Delta Waters to Coker Butte Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority A
S44	Hanley Road from Beall Lane to Rossanley Drive (OR 238)	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority D
S45	Hull Road from S Stage Road to Stewart Avenue	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority B
S46	Oak Street from Eagle Mill Road to Nevada Street	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority C
S48	OR 238 from Ross Lane North to Bybee Corner	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	
S49	S Valley View Road from I-5 to West Valley View Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority D
S50	Table Rock Road from Kirtland Road to Wheeler Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority C
S51	Table Rock Road from Wheeler Road to OR 234	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects		CIP Priority D
S52	Voorhies Road from Carpenter Hill Road to S Stage Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
S53	Payne Road from Fern Valley Road to Suncrest Road	Shoulders	Install 6-foot shoulders consistent with rural minor arterial standards		CIP Priority D
S54	S Stage Road from OR 99 to Jacksonville	Shoulders	Install 6-foot shoulders consistent with rural minor arterial standards		
S55	Kings Highway from S Stage Road to Medford UGB	Shoulders	Install 6-foot shoulders consistent with rural minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
S56	N Phoenix Road from Phoenix City limits to Medford City Limits	Shoulders	Install 6-foot shoulders consistent with rural minor arterial standards - See Roadway Improvement Projects		CIP Priority C
S57	Camp Baker Rd from Coleman Creek Road to Colver Road	Shoulders	Install 4-foot shoulders consistent with rural local C standards	2003 TSP Tier 1	
S58	Coleman Creek Rd from MPO limits to Pioneer Road	Shoulders	Install 4-foot shoulders consistent with rural local C standards	2003 TSP Tier 1	
S59	Carpenter Hill Road from Voorhies Road to Pioneer Road	Shoulders	Install 4-foot shoulders consistent with rural local C standards	2003 TSP Tier 2	

S60	Hillcrest Road from Medford city limits to MPO limits	Shoulders	Install 4-foot shoulders consistent with rural local C standards	2003 TSP Tier 2	
S61	Tolo Road from Scenic Avenue to Blackwell Road	Shoulders	Install 4-foot shoulders consistent with rural local C standards	2003 TSP Tier 2	
S62	Kirtland Road from High Banks Road to Blackwell Road	Shoulders	Widen shoulders consistent with ODOT standards	2003 TSP Tier 1	
S63	Blackwell Road from Kirtland Road to Seven Oaks Interchange	Shoulders	Widen shoulders consistent with ODOT standards	2003 TSP Tier 1	
S64	OR 234 from Antioch Road to 4th Avenue (Gold Hill)	Shoulders	Widen shoulders consistent with ODOT standards	2003 TSP Tier 2	
S65	OR 238 from Upper Applegate Road to Thompson Creek Road	Shoulders	Widen shoulders consistent with ODOT standards	2003 TSP Tier 2	
S66	OR 62 from Maple Drive to Elk Creek Road	Shoulders	Widen shoulders consistent with ODOT standards	2003 TSP Tier 2	
S67	OR 99 from Josephine County to Gold Hill	Shoulders	Widen shoulders consistent with ODOT standards	2003 TSP Tier 2	
S68	Meadows Road from East Evans Creek Road to OR 234	Shared Use	Install shared-use signs along both sides of the roadway		CIP Priority D
S69	Suncrust Road from Payne Road to West Valley View Road	Shared Use	Install shared-use signs along both sides of the roadway		
S70	East Valley View Road from S Valley View to Butler Creek Road	Shared Use	Install shared-use signs along both sides of the roadway		
S71	Butler Creek Road from E Valley View Road to Eagle Mill Road	Shared Use	Install shared-use signs along both sides of the roadway		
S72	Dark Hollow Road from Pioneer Road (north) to Pioneer Road (south)	Shared Use	Install shared-use signs along both sides of the roadway		
S73	E Evans Creek Road from Queens Branch Road to Meadows Road	Shared Use	Install shared-use signs along both sides of the roadway		
S74	Griffin Creek Road Pioneer Road to MPO limits	Shared Use	Install shared-use signs along both sides of the roadway	2003 TSP Tier 2	
S75 ¹	Bear Creek Greenway	Shared-use Path	Complete County portions of the Bear Creek Greenway	2003 TSP Tier 1	
S76 ¹	East West Pathway from Division Road to north of 29th Avenue	Shared-use Path	New multi-use pathway	2003 TSP Tier 2	
S77 ¹	McLoughlin Road from South terminus to north UGB Medford	Shared-use Path	New multi-use pathway	2003 TSP Tier 2	
S78	N River Road from Rogue River city limits to Twin Bridges Road	Shoulders	Install 6-foot shoulders consistent with rural major collector standards		
S79	Corey Road from OR 62 to N Foothill Road	Shared Use	Install shared-use signs along both sides of the roadway		
S80 ¹	Mill Creek Road from Butte Falls-Prospect Road to 1 st Street	Shared-use Path	New shared-use path		
S81 ¹	Rogue River Highway (OR 99) from approximately ¼ mile west of Footh Creek Road to ¼ mile east of Footh Creek Road	Shared-use Path	New shared-use path		
S82 ¹	Fooths Creek Road from approximately ¼ mile south of Rogue River Highway (OR 99) to Rogue River Highway (OR 99)	Shared-use Path	New shared-use path		
S83 ¹	Upper Applegate Road from approximately ½ mile south of Medford Provolt Highway (OR 238) to Medford Provolt Highway (OR 238)	Shared-use Path	New shared-use path		

S84 ¹	E Evans Creek Road from approximately ¼ mile west of Covered Bridge Road to ¼ mile east of Covered Bridge Road	Shared-use Path	New shared-use path		
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1. Not show on Pedestrian and Bicycle Improvements map. Confirm location with Jackson County Roads.
Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Bicycle and Pedestrian Improvements in Urban Areas

Pedestrian needs within urban areas are primarily addressed through sidewalks or multi-use paths. The preferred alternatives for bicycle and pedestrian improvements in the urban areas are summarized in Table 12 and shown in Figure 8. The alternatives developed as part of the TSP update were combined with other alternatives identified in the County’s current TSP, the RVMPO RTP, and several corridor studies. As shown in Table 12, several of the alternatives are included in the STIP, the MTIP, or the County CIP.

The alternatives for bicycle and pedestrian improvements in the *urban* areas include:

- Installing shared roadway pavement markings and signs along both sides of the roadway
- Installing bike lanes and sidewalks along both sides of the roadways consistent with Jackson County and ODOT standards
- Installing buffered bike lanes, cycle tracks, or multi-use paths

Table 13 summarizes the bicycle and pedestrian improvements in the *urban* areas that are proposed to be included in the TSP update.

Table 13: Bicycle and Pedestrian Projects in Urban Areas

Map ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
U1	Crater Lake Avenue from Delta Waters Rd to Vilas Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with ODOT standards	2003 TSP Tier 2	
U2	OR 66 from I-5 to Crowson Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with ODOT standards	2003 TSP Tier 2	
U3 ¹	OR 99 from OR 62 to Beall Lane+K6	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with ODOT standards	2003 TSP Tier 2	
U4	OR 99 from Medford SCL to Ashland NCL	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with ODOT standards	2003 TSP Tier 2	
U6	Table Rock Road from Elmhurst Street to Mosquito Lane	Bike Lanes and Sidewalks	Install enhanced bike and pedestrian facilities - See Roadway Improvement Projects	2003 TSP Tier 1	
U7	Table Rock Road from Mosquito Lane to Antelope Road	Bike Lanes and Sidewalks	Install enhanced bike and pedestrian facilities - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority B
U8	Beall Lane from Front Street (OR 99) to Hanley Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standards - See Roadway Improvement Projects		CIP Priority C
U9	E Main Street from Walker Road to OR 66	Bike Lanes and Sidewalks	Install enhanced bike and pedestrian facilities - See Roadway Improvement Projects		CIP Priority D

U10	Rogue River Drive from OR 62 to Walnut	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standards - See Roadway Improvement Projects		CIP Priority C
U11	Sage Road from Rossanley Drive to Ehrman Way	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standards - See Roadway Improvement Projects	2003 TSP Tier 2	
U13	Fern Valley Road from N Phoenix Road to Phoenix City Limits	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standards		
U14	Houston Road from Colver Road to Phoenix city limits	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standards		
U15	Beall Lane from Merriman Road to Front Street (OR 99)	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority B
U16	E Vilas Road from Medco Haul Road to Crater Lake Avenue	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	
U17	Foothill Road from Hillcrest Road to McAndrews WB Ramp	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
U18	Foothill Road from McAndrews WB Ramp to Delta Waters Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
U19	Hanley Road from W Pine Street to Beall lane	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
U20	Kings Highway from Medford UGB to Stewart Avenue	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
U21	Lozier Lane from Stewart Avenue to W Main Street	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority A
U22	N Phoenix Road from Medford City limits to Barnett Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects		CIP Priority E
U23	Peninger Road from Pine St to Expo Park	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 2	CIP Priority C
U26	Table Rock Road from Bear Creek Greenway to Pine Street-Biddle Road	Bike Lanes and Sidewalks	Install enhanced bike and pedestrian facilities - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority A
U27	Table Rock Road from Gregory Road to Elmhurst Street	Bike Lanes and Sidewalks	Install enhanced bike and pedestrian facilities - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
U28	Table Rock Road from Wilson Road to Gregory Road	Bike Lanes and Sidewalks	Install enhanced bike and pedestrian facilities - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority C
U29	E Pine Street from Table Rock Road to 500' east	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards		
U30	W Pine Street from Glenn Way to Vincent Avenue	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	CIP Priority E
U31	W Pine Street from Haskell Street to Glenn Way	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects	2003 TSP Tier 1	
U33	W Pine Street from Vincent Avenue to Hanley Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards - See Roadway Improvement Projects		CIP Priority E
U34	Crater Lake Avenue from Vilas Road to Corey Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor collector standards	2003 TSP Tier 2	

U35	Hillcrest Road from Cherry Lane to Medford city limits	Bike Lanes and Sidewalks	Install sidewalks consistent with urban local standards	2003 TSP Tier 2	
U36	E Evans Creek Road from Rogue River City limits to Rogue River High School	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standards		
U37	Royal Avenue from Brownsborro Highway to Eagle Point City limits	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standard		

1. Not show on Pedestrian and Bicycle Improvements map. Confirm location with Jackson County Roads.

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

Table 14 summarizes the bicycle and pedestrian improvements that will be removed from the County’s TSP as part of the TSP update. All of the improvements shown in Table 14 have been completed.

Table 14: Bicycle and Pedestrian Projects to be removed from the TSP

Map ID	Location	Project Type	Project Description	Source	Status
X19	Antelope Road from Table Rock Road to 7 th Street	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major arterial standards	2003 TSP Tier 2	Completed
X20	E Pine Street from I-5 NB ramps to Table Rock Road	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards	2003 TSP Tier 1	Completed
X21	Freeman Road from Pine to Oak	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban minor arterial standards	2003 TSP Tier 2	Completed
X22	Ross Lane North from McAndrews to Rossanley Drive	Bike Lanes and Sidewalks	Install bike lanes and sidewalks consistent with urban major collector standards	2003 TSP Tier 1	Completed

Shared-Use Paths and Trails

Bear Creek Greenway Management Plan

The Bear Creek Greenway is an 18-mile paved multi-use path that links the cities of Ashland, Talent, Phoenix, Medford and Central Point; it is continuous from the Ashland Dog Park to Pine Street in Central Point. The Bear Creek Greenway Management Plan was prepared by the RVMCOG in collaboration with the Bear Creek Valley Foundation, Jackson County, RVMPO, ODOT, and the Cities of Ashland, Talent, Phoenix, Medford, and Central Point. The plan includes recommendations for the following operations:

- Public safety, emergency services, Litter and vandalism control - This category includes recommendations for patrolling the Greenway, minimizing vandalism, and controlling the amount of litter.
- Surface management – This category includes recommendations for keeping the trail in good repair and free of surface hazards. It also includes shoulder and root damage repair, patching, resurfacing, and addressing drainage problems to extend the life of the asphalt.
- Vegetation management – This category includes recommendations for all the activities required to keep the trail open and free of vegetation hazards such as tree limbs,

overgrowth, or hazard trees. It also covers maintenance of vegetation that could cause a safety problem, such as overgrown blackberry patches that obstruct line of sight or provide hiding places for potential assailants.

- Natural resources protection - This category includes recommendations for protecting natural resources while conducting maintenance activities, as well as a discussion of ways to intentionally enhancing natural resources.

The plan categorizes operations into essential or potential activities, recommends frequency, identifies preferred equipment and training needed, and approximates cost (in 2005\$). The plan also identifies capital improvements – including interpretive signs, information kiosks, off-street parking at trailheads, restrooms, drinking fountains, and benches – for the Greenway, and documents public feedback received regarding these improvements. However, these are identified only as potential improvements, with no cost estimates for the improvements or assignment of responsibility for the improvements.

Additional improvements for the Bear Creek Greenway are included in the OR 99 Corridor Plan as described above.

PUBLIC TRANSPORTATION ELEMENT

Public transportation service within Jackson County is provided by the Rogue Valley Transportation District (RVTD) as well as several other local and regional service providers. The existing and potential future RVTD transit routes and stops, including park-and-rides, are shown in Figure 9.

Rogue Valley Transportation District

The RVTD has adopted three plans since the completion of the previous TSP, including the RVTD Ten-Year Long Range Plan, the Five Year Strategic Business and Operations Plan, and most recently, the United We Ride Plan. The following provides a brief description of each plan and the preferred alternatives identified for service within Jackson County.

RVTD Ten-Year Long Range Plan (2007-2017)

The RVTD Ten-Year Long Range Plan establishes the goals and policies of the RVTD, provides an understanding of the demand for public transportation, and presents a tiered list of potential service expansions. Table 15 provides a summary of the service expansions identified in Figure 5.1 of the Plan.

Table 15: RVMPO Tiered Service Expansion Prioritized List

Tier	Region	Major Destination
Tier One. Extended Hours and Minor Service Expansion	Southeast Medford	Barnett Road x N Phoenix Road/RVMC
	Expand service hours 4:00 a.m. to 10:00 p.m.	All Routes except low productivity routes
	West White City	Table Rock Road x Antelope Road
	Saturday Service	Base service from 8 a.m. to 6 p.m.

Tier Two. Tier One, Additional Routes, Express Routes, Peak Service	West and southwest Central Point	Twin Creeks TOD
	East Medford	McAndrews Road x Foothill Road
	Ashland, Talent, Phoenix Circulators	West of Hwy 99 in Talent and Phoenix/East of Hwy 99 in Ashland
	4 Hour Peak Service Southwest Medford/Jacksonville	All Routes except low productivity routes Stewart Avenue x Lozier Road
	Express Routes (15-minute) to Ashland and White City	Front Street to Ashland Plaza and Front Street to Cascade Shopping Center
	Northwest Medford	Sage Road x Rossanley Drive (North Gate Centre)
Tier Three. Tier Two, Additional Routes/ Grid System	Foothills Road	Corridor from Barnett Road to Coker Butte Road
	Table Rock Road	Corridor from Midway Road to Antelope Road
	Hwy 99	Corridor from Table Rock Road to Scenic Avenue
	Delta Waters TOD	Region not yet defined
	South Ashland	Region not yet defined

Additional information related to each service expansion, including multiple potential funding scenarios is provided in the Ten-Year Long Range Plan.

RVTD Five-Year Strategic Business and Operations Plan (2008-2015)

The RVTD Five-Year Strategic Business and Operations Plan focuses on implementation of the Tier One service expansions identified in the Ten-Year Long Range Plan. The plan includes additional information on each of the potential service expansions.

- South Medford – The Southeast Medford route will be similar to the Route 4 that was in service through 2006. Additions are Golf View and Juanipero Way. Operating hours are from 6:00 a.m. to 6:30 p.m. Monday through Friday with 30-minute frequencies (service twice each hour).
- Expand Service Hours to 4:00 a.m. to 10:00 p.m. – System-wide operating hours will be from 4:00 a.m. to 10:00 p.m. Monday through Friday with varied frequencies for each route. It is necessary to have each route operate at close to full hours to allow for transfers.
- White City Loop – The White City Loop is proposed for implementation after the service hours are expanded from 4:00 a.m. to 10:00 p.m. with more limited frequencies from 7:00 p.m. to 10:00 p.m. Route 60, which currently serves the White City area to the east, would be duplicative and thus will be shortened.
- Saturday Service – Saturday service will receive limited service compared to Monday through Friday. All routes will stay the same with the exception of White City. On Saturdays the White City Loop will not be in service and Route 60 will service the normal route and the loop. All routes will receive 1-hour frequencies between 7:00 a.m. to 8:00 p.m. Route 10 and Route 60 will operate from 7:00 a.m. to 10:00 p.m. providing a basic trunk route system for late hour travel.

Additional information related to each service expansion, including potential funding opportunities is provided in the Five-Year Strategic Business and Operations Plan.

RVTD United We Ride Plan 2013-2018

The United We Ride Plan is RVTD’s most recent planning document that focuses on improving mobility of three target populations: individuals with disabilities, older adults, and persons of low income. The plan documents the changing and evolving mobility needs within the County and the resources available to the target populations, documents new unmet transportation needs while validating those identified previously, and identifies priority needs toward which funding that may be available can be target. The plan also includes four potentially actionable projects:

- Specialized Shuttles Serving Several Populations – A multifaceted shuttle service serving different destinations during different dayparts.
- Rural Mileage Reimbursement Program – A volunteer based program that allowa riders to secure his or her own volunteer driver and then provides mileage reimbursement to the rider who in turn pays their driver.
- Rideshare for Defined Populations and to Special Events – A rideshare tool targeted toward participants of special events to help them find one another.
- Destination-Focused Public Transit Information – A

Additional information on each project, including potential partnerships and project development is provided in the United We Ride Plan.

Coordination with TSP Update

In addition to and in service of the projects identified in the RVMPO’s adopted plans, several projects are identified under the roadway element and the bicycle and pedestrian element that will improve access to the public transportation network. These projects include bringing the roadways up to standard and installing shoulders in the rural areas and bike lanes and sidewalks in the urban areas. Table 16 summarizes several additional projects for implementation along County and ODOT facilities within unincorporated areas of Jackson County that are currently served by transit as well as those that will be served by transit following potential service expansions described above.

Table 16: Transit Improvement Projects

ID	Location	Project Type	Project Description	Source	STIP/MTIP/CIP
T1	W Main Street from Renault Avenue to Hanley Road	Transit	Improve stop amenities and install bus pull-outs and pedestrian crossings as applicable		
T2	Antelope Avenue from OR 62 to Atlantic Avenue	Transit	Improve stop amenities and install bus pull-outs and pedestrian crossings as applicable		
T3	Atlantic Avenue from Antelope Avenue to Avenue G	Transit	Improve stop amenities and install bus pull-outs and pedestrian crossings as applicable		

T4	Avenue G from Atlantic Avenue to OR 62	Transit	Improve stop amenities and install bus pull-outs and pedestrian crossings as applicable		
T5	OR 99 from Tolman Creek Road to Steward Avenue	Transit	Improve stop amenities and install bus pull-outs and pedestrian crossings as applicable		
T6	OR 238 from W Main Street to Jacksonville City Center	Transit	Improve stop amenities and install bus pull-outs and pedestrian crossings as applicable		
T7	OR 62 from Coker Butte Road to Avenue H	Transit	Improve stop amenities and install bus pull-outs and pedestrian crossings as applicable		
T8	Antelope Road from Table Rock Road to OR 62	Transit	Install transit stops, bus pull-outs and pedestrian crossings as applicable		
T9	Table Rock Road from Antelope Road to Avenue G	Transit	Install transit stops, bus pull-outs and pedestrian crossings as applicable		
T10	Avenue G from Table Rock Road to Pacific Avenue	Transit	Install transit stops, bus pull-outs and pedestrian crossings as applicable		
T11	Pacific Avenue from Avenue G to Antelope Road	Transit	Install transit stops, bus pull-outs and pedestrian crossings as applicable		
T12	Leigh Way from OR 62 to Agate Avenue	Transit	Install transit stops, bus pull-outs and pedestrian crossings as applicable		
T13	Agate Avenue from Leigh Way to Antelope Road	Transit	Install transit stops, bus pull-outs and pedestrian crossings as applicable		
T14	Countywide	Transit	Install pedestrian crossings adjacent to transit stops		
T15	Countywide	Transit	Install park and ride facilities adjacent to major transit hubs		

Note: Projects located along ODOT facilities will need to meet the requirements of the ODOT Highway Design Manual.

AIR, WATER, RAIL, AND PIPELINE ELEMENTS

The following describes identified needs and planned improvements related to the air, water, rail, and pipeline modes. Projects with a relationship to the Jackson County TSP are identified.

Air System

Jackson County is served by 23 air transportation facilities, including seven heliports and 16 airports. Only four of the facilities, all airports, are open to the public: Medford-Rogue Valley International Airport; Ashland Municipal Airport-Sumner Parker Field; Pinehurst State Airport; and Prospect State Airport. Table 3 in Technical Memorandum #3 lists all the airports in Jackson County and describes their major facilities.

The four public airports are included in the statewide air transportation study, the Oregon Aviation Plan, prepared by the Aeronautics Division of ODOT (Reference 1). The Plan assigns all statewide public use airports to the following five categories:

- **Category 1: Commercial Service Airports** – Scheduled commercial service. E.g. Medford-Rogue Valley International Airport.
- **Category 2: Business or High Activity General Aviation Airports** – 30,000 or more annual operations (i.e., take-offs and landings), of which a minimum of 500 are business-related (turbine) aircraft. Business-use heliports are also included in this category.

- **Category 3 – Regional General Aviation Airports** – Generally less than 30,000 operations and geographically significant location with multiple communities in the service area. The nearest Category 1 or 2 airport is more than 90 minutes average travel time by road. E.g. Ashland Municipal Airport-Sumner Parker Field.
- **Category 4: Community General Aviation Airports** – 2,500 or more annual operations, or more than ten based aircraft.
- **Category 5: Low Activity General Aviation Airports** – Less than 2,500 annual operations and no more than ten based aircraft. E.g. Prospect State and Pinehurst State Airports.

The information provided below is based on the Oregon Aviation Plan, AirNav Airport Information Website, individual airport websites where available, and the Rogue Valley International – Medford Airport Master Plan. The Oregon Aviation Plan identifies system deficiencies for each airport in terms of FAA requirements and other applicable standards. However it does not give details about specific deficiencies at each airport.

Rogue Valley International – Medford Airport

The Rogue Valley International-Medford Airport is a Category 1 airport with two active runways on the airfield. The primary Runway 14-32, which handles most commercial aircraft, is 8,800 feet long and 150 feet wide. The secondary Runway 9-27 is limited to small aircraft weighting less than 12,500 pounds. This runway is 3,136 feet long by 100 feet wide. It is the largest airport in the county and provides passenger, mail, and freight transportation.

In the year 2013, the airport served over 631,000 passengers and aircraft operations totaled over 40,000. Scheduled passenger service is provided by Alaska, Delta, Allegiant, and United Airlines. Allegiant Air's service is biweekly while the other three airlines serve the airport daily. Non-stop service is provided to Denver, Las Vegas, Salt Lake City, San Francisco, Portland, Los Angeles, and Seattle. There are approximately 56 arriving and departing flights daily. On average, 40% of the operations are transient general aviation, 32% air taxi, 14% commercial, 13% local general aviation, and less than 1% military. The airport master plan used enplanement-per-capita as its preferred measure when forecasting future passenger enplanements since this measure reflects population growth in the area and an increasing propensity to fly. A 2.4-percent average annual growth rate which is equal to the projected growth rate of the Terminal Area Forecast (TAF) for the airport through 2030 was used to forecast future demand.

The terminal at Rogue Valley International-Medford Airport provides 31,550 square feet of interior space. Services and amenities in the terminal include ticketing counters, car rental (five rental car agencies), baggage claims, a restaurant, gift shop, and restrooms. Several companies provide services to general aviation aircraft, air cargo operators, and persons wishing to charter aircraft.

Air freight and air mail services are provided at the airport by all-cargo carriers and scheduled airlines. Two all-cargo airlines, Ameriflight and Empire Airlines, contract with all-cargo companies—FedEx, United

Parcel Service, and Airborne—to provide services using a combination of small turboprop planes and jets to transport air freight. In 2014, 5.75 million pounds of freight passed through the airport. Airmail is handled by scheduled airlines only, which carried 706,339 tons of mail in 1998. The master plan forecasts 5.6 percent annual growth for airfreight and 3.5 percent annual growth for airmail.

According to the Rogue Valley International-Medford Airport Master Plan, the following major development issues and improvement considerations at the airport are (projects with a relationship to the Jackson County TSP are highlighted in **bold text**):

- Continual maintenance of Runway 14/32 and Taxiway A;
- Acquisition of RPZ land north of the Airport;
- Expansion of transient aircraft parking areas;
- Improvements to the east side aircraft parking apron and aviation use area;
- **Improved vehicular access to the east side of the Airport;**
- Programming of areas for future general aviation development in consideration of existing structures;
- Programming of areas for future air cargo development in consideration of the projected increase in air cargo activity at the Airport;
- Areas programmed for future non-aviation related development;
- Instrument approach capabilities of both existing and future runways;
- Off-airport land use compatibility and zoning;
- Programming for security improvements;
- Programming for development on the west side of the Airport in the vicinity of closed Runway 9/27; and
- Programming for a future parallel runway to Runway 14/32.

The Rogue Valley International-Medford Airport Master Plan identifies 31 projects in its short, intermediate, and long-term capital improvement program from 2001-2020, with a total cost of \$121.9 million.

No County plans or projects have been identified for the air system within Jackson County; however, several projects are identified under the roadway element and the bicycle and pedestrian element that will improve access to the Rogue Valley International Airport.

Ashland Muni-Sumner Parker Field

Ashland Muni-Sumner Parker Field is also known as Ashland Municipal Airport and is a Category 3 airport. The airport is located two miles east of Ashland and serves 71 aircraft operations per day on average, with 77% of the operations transient general aviation, 17% local general aviation, 6% air taxi,

and less than 1% military. Of the 62 aircraft based on the field, 49 are single-engine airplanes, 4 are multi-engine airplanes, 4 are ultralights, and 5 are helicopters.

The Oregon Aviation Plan identifies following deficiencies at the airport:

- Runway Length
- Taxiway Lighting
- Approach Type

Pinehurst State Airport

The Oregon Aviation Plan identifies the Pinehurst State Airport as a “Low Activity Airport with Emergency Use Significance,” Pinehurst State Airport is a Category 5 airport. Seven airplanes are based at the airport, six single-engine and one multi-engine, and 52 aircraft operations occur on average per month. The importance of the airport to the Oregon aviation system is based on its geographical location. The Oregon Department of Aviation identifies it as a “State Warning Airport.” When Ashland and Medford experience fog, Pinehurst is often found to be clear. About 76% of its operations are transient general aviation aircraft, while 24% are local general aviation aircraft.

Oregon Aviation Plan doesn’t identify any deficiencies at the airport.

Prospect State Airport

Also identified in the Oregon Aviation Plan as a “Low Activity Airport with Emergency Use Significance”, Prospect State Airport is a Category 5 airport with one based single-engine airplane and an average of 23 aircraft operations per week. Of these operations, 71% are transient general aviation, 16% are air taxi, and 12% are local general aviation.

Oregon Aviation Plan doesn’t identify any deficiencies at the airport.

Water System

Rogue River runs through Jackson County and does not serve as a major water transportation route. No County plans or projects have been identified for the water system within Jackson County; however, several projects are identified under the roadway element and the bicycle and pedestrian element that will improve access to the water system facilities within Jackson County, which are primarily used for recreational purposes.

Rail

The Central Oregon & Pacific Railroad (CORP) provides freight service along the I-5 corridor, connecting with the Union Pacific Railroad in Black Butte, California and Eugene, Oregon. The CORP operates 389 miles of mainline in this area. Connections are also made with Rouge Valley Terminal Railroad

Corporation (RVT) in Oregon and with Yreka Western in California. Traffic is primarily lumber, logs and plywood that serve national lumber companies at the interchanges mentioned above.

The RVT (previously named White City Terminal Railroad) operates a 14 mile railroad that connects the Medford Industrial Park in White City to a junction north of Medford with the CORP. The major commodities moved by WCTR are lumber, timber products, fly ash, asphalt and industrial chemicals. Superior Lumber Company also operates a small railroad that connects its wood products facility to the CORP main line at Glendale.

There are two yard-engines in Medford, which are used on demand. Most of the traffic originating in Medford heads south to California. The portion of the line south from Ashland to Black Butte has no weight restrictions. However, the tunnels both north and south of Rogue Valley cannot accommodate large containers. As a result, dimensional restrictions are in place.

According to the Oregon Rail Plan, the Federal Railroad Administration (FRA) has established nine track classes, which set maximum speeds for freight and passenger trains, based on the track condition. CORP track is maintained to FRA Class 1 and 2 conditions and with no weight or dimensional restriction except for the section of the line south of Ashland. Class 1 limits freight trains to 10 mph and passenger trains to 15 mph, and Class 2 limits freight trains to 25 mph and passenger trains to 30 mph.

VRT is in FRA excepted track status (lower than Class 1, with a maximum freight speed of 10 mph and restrictions on use), except for certain tracks, which are used to carry hazardous materials, which are maintained in Class 1 condition.

Figure 10 shows the map of the CORP and VRT route and location of at-grade crossings on major roads in Jackson County. At-grade crossings create important safety concerns as they are the locations where interactions with other transportation system users occur. There are 29 at-grade crossings on County roads, 16 on city collector or higher roadways, and three on state highways. Figures 19A through 19E also show the type of control used at these crossings. "Active Control" crossings usually have flashing lights and a gate. The exceptions are the Main Street crossing in Talent, which has flashing lights only; and Oak Street in Ashland and Gold Ray Road at Tolo Station, which are both "wig wag" types. The "Passive Control" crossings are signed only. There are 30 active control crossings and 18 passive control crossings in the County. Currently, a project at the Depot Street crossing in Rogue River is underway which will improve the operation of the crossing.

Passenger Rail

Amtrak has bus stops in Medford, Ashland, White City, and Gold Hill. None of the stops have a ticketing office and are for pick up and drop offs only. The nearest full service station is in Klamath Falls, which has a ticket office, enclosed waiting area, and restrooms. Amtrak Thruway bus service provides service from the stops in Jackson County to the station in Klamath Falls.

No County plans or projects have been identified for the rail system within Jackson County.

Pipeline System

Jackson County has pipelines for water and natural gas.

Water Transmission

The Medford Water Commission (MWC) operates and maintains the water system that delivers drinking water to over 131,000 Rogue Valley residents with approximately 60% of these residents located in the City of Medford. The Medford Water Commission serves customers inside the City of Medford, and some outside customers such as in White City. The Commission's wholesale customers include the cities of Central Point, Jacksonville, Phoenix, and Eagle Point. Other wholesale customers outside Medford include three domestic water districts. The Coker Butte Water Association, which purchases its water from the Medford Water Commission contracts with the Commission to operate and maintain its systems. The City of Talent is not currently a MWC customer, but has entered into a contract with the Commission to facilitate future service. Talent is actively pursuing construction of an intertie to the MWC system.

The Medford Water Commission's principal source of water is Big Butte Springs, located about thirty miles northeast of Medford, Oregon and five miles east of the town of Butte Falls. The Rogue River is used as a supplemental source during the summer months of May through September.

The Water Commission is responsible for the construction and maintenance of more than 490 miles of water mains. The water mains that come from the pumping stations are called feeder mains and vary in size from 24 to 48 inches in diameter. The feeder mains supply water to the service mains, which vary in size from 2 to 24 inches. The service mains carry the water to more than 500,000 service connections throughout the valley. The distribution system consists of these water mains and service lines plus valves, fire hydrants, and meters.

Water flows by gravity from Big Butte Springs to Medford in two transmission lines, with a combined daily capacity of 26.4 million gallons. Both transmission lines are underground throughout their entire 30.5-mile lengths and both terminate at the Capital Hill Reservoirs on the east side of Medford. The Big Butte Springs transmission lines are located on different routes, and each passes over approximately 75 different mountain summits. Pressure in the lower reaches is automatically controlled to maintain a full pipe by means of special backpressure control valves located at the Coal Mine Pressure Control Station near Coker Butte and Foothill Road on Line #1, and Nichols Gap in Eagle Point on Line #2.

The Rogue River supply transmission mains transport water from the Duff Treatment Plant to the City of Medford. The Table Rock Road transmission main consists of five miles of iron pipe. A second transmission main from the Rogue source consists of an iron main on Antelope Road and Crater Lake Highway. The Westside Transmission Main runs from Vilas Road to Stewart Avenue.

No information is currently available on improvement projects.

Natural Gas

Avista Utilities is the natural gas provider serving Jackson County and other neighboring counties. Natural gas is transmitted from the north via the Williams Pipeline, which runs generally along the I-5 corridor. The PG&E Northwest Pipeline runs across Eastern Oregon, connecting Klamath Falls with Medford. A distribution network distributes natural gas throughout Jackson County and neighboring counties. For security reasons, Avista limits public dissemination of detailed information regarding the natural gas distribution system.

No County plans or projects have been identified for the pipeline system within Jackson County.

MAP ATLAS

1. Functional Classification Plan
2. Roadway Improvements
3. Freight Route Designations
4. Freight Improvements
5. Bridge and Culvert Improvements
6. Intersection Improvements
7. Bike Route Designations
8. Bike and Pedestrian Improvements
9. Public Transportation Routes and Stops

ATTACHMENTS

- A. Rural County Typical Cross Sections
- B. Urban County Typical Cross Sections